Orienteering:

'Unfair skill advantage' can be competition manipulation

In conjunction with the last major international events of the 2019 Orienteering season, suspicions about blatant cheating by some Chinese athletes were made public.¹

There are only a few known doping cases in Orienteering, and they might almost sound harmless. In Orienteering the importance of skills is significant, and these cannot be sustainably improved using forbidden substances or methods. There is also no big money at stake in the sport, or press for success for athletes by authoritarian states, or almost any other side effects of sport. Even though it's a physical endurance sport, Orienteering has long been thought to be safe from the known problems of sport in general.

The events in China are an excellent wake-up call for orienteers who believe in trust and in the sport's own strong culture; technical development, taking the sport into built-up areas, and orienteering spreading to countries with a different kind of sports culture are now forcing orienteers to consider the ethical status of the sport.

In fact, in the inner circle of the sport there have been discussions for at least a couple of decades about a phenomenon for which the term 'unfair skill advantage' is used: improved individual competition performance through better knowledge than other competitors of the terrain, map, control points or even the course.²

For Orienteering as a sport this is an essential matter, possibly even the whole soul of the sport, ³ because an unfair skill advantage can directly influence the basic values of Orienteering, such as the importance of skills, unpredictability and the element of

¹ More precisely, the suspicion rose at the Middle Distance events of the World Summer Games of the International Military Sports Council CISM in Wuhan, China. The jury of the competition disqualified the athletes that had cheated and decided that no Chinese athletes may start in the final competition. However, also in conjunction with the International Orienteering Federation IOF's World Cup round there arose suspicions that the Chinese athletes had better foreknowledge than others. Several internationally unknown Chinese athletes advanced exceptionally well, especially in the technical parts of the courses, compared to the top orienteers in the world. The competitions were however in many ways exceptional, and there was no real evidence presented for suspicions of foreknowledge and cheating. ² In Finland, the term 'skill doping' is widely used, q.v. e.g. Helsingin Sanomat 19.9.2004/Jussi-Pekka Reponen. Skill doping (taitodoping) was proposed as a neologism in the magazine Suomen Kuvalehti already in 2001, when the discussion of ethics in sport spread after the Ski World Championships in Lahti 2001 to other sports such as Orienteering. However skill doping gives the impression that it is always a question of clearly forbidden activities. This is not necessarily the case for unfair skill advantage in orienteering, as the border between forbidden and allowed is unclear, with a so-called grey area between the two. Because of that, it was decided to describe the phenomenon with the term "unfair skill advantage" in this paper, following the example of other sports that use the term 'unfair advantage'.

³ The cheating attempt at the CISM Games was actually extremely sloppy. Trying to cheat in that way possibly told more about a complete lack of understanding of the culture within this sport in a fairly new Orienteering country. Also reconnaissance activities, typical of a military organisation, have been seen as a possible explanation. Q.v. e.g. Helsingin Sanomat 25.10.2019 / Jussi-Pekka Reponen.

surprise. If the character of the sport, the unpredictability, can no longer be trusted, it will cause a credibility problem for the whole sport. According to the description of the sport, the competitors use only a map, control descriptions and a compass, and the location of the control points have not been revealed to them before they start.⁴

Unfair skill advantage is a special feature for Orienteering, and there is no direct equivalent for it in any other sport. The goal with unfair skill advantage is to improve the skill element of the athlete's performance in an unfair way, just as prohibited substances and methods, i.e. doping, are used to try to improve the physical element of the performance.

Currently there is also another side effect discussed in sporting circles: competition manipulation. In competition manipulation, the goal is often the opposite to unfair skill advantage: the goal is often to impair an athlete's or team's performance or part of it, mostly to achieve profit in betting or for laundering money.

Even though the purpose is different, an unfair skill advantage in an Orienteering competition – such as in the extreme case seen at the military championships in China – can be called Orienteering competition manipulation⁵ or even more specifically competition manipulation for sporting purposes. ⁶ The wide definitions of competition manipulation can already now (depending on the country) but especially in the predictable future, affect the sport in many ways: for example when it comes to self-determination of the sport, criminal investigations of the proceedings, extending the police's authority, assessing the participation of people in different roles, and even to their obligation to speak the truth when sorting out the matter.

Orienteering can no longer trust that the phenomenon "unfair skill advantage" will in the future be handled within the sport's own disciplinary bodies,⁷ even if it is the goal

The opinions and proposals are of the writer and this paper is meant as a discussion opener for development work for the sports culture within Orienteering.

⁷ Note: also ne bis in idem principle (nobody should be judged twice for the same offence), which shall not be discussed further here.

⁴ Q.v. IOF Competition Rules for Foot Orienteering events, 1.1. The generic definition leaves many questions unanswered, although many of them are focused on in other paragraphs in the IOF Competition Rules and national rules. For clarity, it is stated that the sole intention of this paper is to discuss issues of Foot Orienteering from the point of view of major events, but the practices work as an example and model for smaller events as well. This paper will not handle specific issues within Ski, Mountain Bike or Trail Orienteering, nor the topic that has been discussed for a long while in Orienteering: following.

⁵ Q.v. Finnish Centre for Integrity in Sports FINCIS definitions in the publication Sopimaton lopputulos? Selvitys urheilukilpailujen manipulation torjunnasta 4/2019 (Report on preventing competition manipulation in sports) Competition manipulation = An intentional arrangement, act or omission aimed at an improper alteration of the result or the course of a sports competition in order to remove all or part of the unpredictable nature of the aforementioned sports competition with a view to obtaining an undue advantage for oneself or for others.

⁶ Above-mentioned publication by FINCIS: Manipulation for sporting purposes is a form of competition manipulation where the goal is to provide sporting advantage *in a dishonest* way. Orienteering competitions have, on a small scale, been targets for betting. The IOF Athlete License conditions forbid the athlete from taking part in betting. Financial gain through betting has for a long time been a significant motive and reason for competition manipulation in other sports, such as the match-fixing scandal in pesäpallo (Finnish baseball) in Finland in 1998.

amongst the people within the sport, and according to the principles of self-determination in sport. In Europe, states are already striving to prevent competition manipulation on a contractual basis, and several European countries already have specific legislation for sport.⁸

Various Orienteering organisations, even at international level, must now wake up and discuss this basic question in the sport, because ultimately the solution must come from Orienteering. Even if it is a question of special features of the sport, preventive solution models can be sought from other sports, such as prohibitions for field and circumstance manipulation, management of the 'unfair advantage' concept in other sports ⁹ and sports ethical fair play instructions in general.

It is not right to expect that the organisations created for sports medical doping issues, such as WADA, could be of decisive help in this matter. The unfair skill advantage in Orienteering has nothing to do with medicine, but with competition manipulation, and therefore it is impossible to prevent this fraudulent phenomenon in conjunction with doping control work. Of course, coordination and education of these problems can be taken care of together. Ultimately, both matters are about securing honesty. ¹⁰

Some history and recent developments

How have we arrived here?

Orienteering as a sport has moved closer to built-up areas than before. Sprint distances in urban areas have been incorporated in the competition programme, and sprint has

⁸ In 2014 the Council of Europe prepared in Macolin/Magglinegn in Switzerland a Convention on the Manipulation of Sports Competitions; see Council of Europe Treaty Series - no. 215. It entered in to force on 1.9.2019, when at least 5 countries had ratified it. The purpose of the treaty is to prevent competition manipulation, for example by calling on governments to adopt measures, including legislation. Finland has signed the treaty, but it has not yet (in 2019) been ratified in Finland. Of the important Orienteering countries, Norway and Switzerland have already ratified the treaty. Amongst the 32 countries that have signed the treaty there are all the significant Orienteering countries, except for Sweden and the Czech Republic.

Competition manipulation that is not for betting purposes is problematic in terms of chapter 36 in the Criminal Code of Finland (Fraud and other dishonesty), because often it is difficult to identify a specific entity that has been deceived. Therefore it is desired that a new statutory definition of sports fraud is created, either parallel with 36:1 § fraud or as a separate section (q.v. FINCIS publication page 18).

⁹ Often the concept relates to sports equipment such as swimwear or shoes.

¹⁰ In Finland, doping matters were assigned to FINCIS in 2016. Preventing competition manipulation and amongst other things denunciation methods is part of FINCIS work, but the unfair skill advantage in Orienteering is ultimately a matter for Orienteering rules, where FINCIS is not the decider nor even the appeal body for decisions by the national federation. As I see it, FINCIS is a cooperation partner of the Finnish Orienteering Federation. C.f. also Lauri Tarasti: Urheilu ja oikeus 2014 (Sports and justice 2014) p. 306: in doping matters the most important cooperation entities are WADA, medicine and doctors; in manipulation, it is police, criminal law and betting companies.

been part of the World Championships programme since 2001. It is more difficult to completely close the competition terrain for sprint before the events. ¹¹

Orienteering was originally created as a sport set in forest and in nature. More recently the sport has been striving to become an attractive arena sport. As a result it is even harder to find completely new and unused terrain close to suitable event centres. It is also easier to guess the course setters' plans for the course. The event and sporting goals of the new sprint distances and the traditional forest distances have not been kept separate, despite the decision to separate forest and sprint World Championships, from 2019 to be organised in alternate years. 12

The International Orienteering Federation IOF has defined that Orienteering wants to and strives to join the Olympic Games. ¹³ For this reason, there are various guidelines for Orienteering's major events. These have had an obvious effect on the development over the last two decades.

Of course, striving to get to the Olympics, and the measures taken because of that, are not the only reason for unfair skill advantage or competition manipulation threats. That would be an all too easy explanation. An even greater explanatory factor is the technical development that has revolutionised the operating environment of the sport.

In the ideal Orienteering world, the athlete gets the competition map only at the moment of start, and knows nothing at all about the map, the terrain, the course or the control points.

Nowadays there is normally a previous map of the competition terrain. And if there is not, it is easy for everyone to make a reasonably good one themselves. Everybody can access public map files, laser scanning files and so called 'pullautus' maps, (pullautus = toolbox/workflow for generating orienteering training maps without field checking). These are being combined together, and satellite imagery, google map street imagery, pictures taken by tourists, etc. are being added. In Finland you can also use the computer to check up-to-date silvicultural activity, such as information on clear-felled segments

¹¹ IOF General Assembly in Leibnitz, Austria decided in 4.8.2000 to strive strongly to spread the sport to new geographical areas (member countries now ~70, active orienteers ~2 million) and at the same time become suitable for the Olympic Games. The same goal is in the IOF strategy for 2019-2022. Leibnitz Convention: We shall aim to increase visibility of our sport by organising our events closer to where people are, improve the event centre atmosphere, and the excitement, by having both start and finish at the centre, increase television and other media coverage by ensuring that our events provide more and better opportunities for producing thrilling sports programmes...we, the Members of the IOF, expect that these measures shall be considered by all future organisers of IOF events. The IOF Competition Rules still refer to the Leibnitz Convention in several sections, regarding major events.

¹² This article does not discuss those sprint competitions that are held in an area where spectators are on the course, where a competitor can easily get help from the spectators or from his/her supporters within the spectators.

¹³ Orienteering applied to be included in the Olympic Games in Tokyo 2020 and Paris 2024, but the applications were not successful. The goal divides opinions within the Orienteering world, but is not a major topic within the sport.

in the competition area, which may also reveal the actual course setting opportunities for the course setter.

And maybe the scariest fact of all is that all data related to competition maps and courses is edited and moved around in electronic form.

Electronic punching systems and especially the satellite-based GPS tracking has made Orienteering into an excellent TV or internet live sport. The development is naturally brilliant for the sport, and a lot more can still be done, but at the same time the development brings with it its own challenges related to fast electronic data transfer.

From coach to scout

The roles of the athletes and their support people have changed. In Orienteering, analysing performance afterwards – for the next competition and for progress – has always been advanced. Now, an Orienteering coach also makes anticipatory terrain and course analysis. Next to the coaches, there are now 'course analysers', in fact a kind of scout/researcher/digital explorer, who handle all the information available to help the athlete.

Urban sprint competitions are taken the furthest with regard to scouting: for a long time there have been rumours of fishing lines tied to gateways, to find out whether the gates have been opened before and might be open during a competition. Now there are talks about flying your own drones over the competition area, if not else so as at least to find out the location of the start, after which it is significantly easier to plan the course on an old map.

When the start, the length of the course, the expected winning time, climb and event centre are known, the scouts can at least sort out the course setters' different possibilities in setting the course, often with fixed models. For example, in the mass relays Jukola and Tiomila the scouts of the top clubs can, based on their experience, tell very accurately where the first controls will be or at least the best route choices for the probable first control.¹⁴

It is in itself completely normal and acceptable that a top orienteer strives to anticipate and eliminate all surprises beforehand.¹⁵ At least in major Orienteering events, all top

¹⁴ The location of the start point is known, the first controls cannot be too close to the start, the number of forked controls is established / can be guessed. It is well-known that the course setter has to take into consideration that the forkings are equally long and that all controls must be located so that the competitor can run through them. It is important for the teams to get the first controls spot on, because after that, by-passing people can be cumbersome and time-consuming due to the huge number of runners. As a good exception and a good surprise we could mention Mikkeli Jukola 2009, where the long leg to the first control, without forking, was a surprise for all.

¹⁵ Examples include the influence of seasons on terrain visibility and undergrowth. The runnability of different substrates such as marshes can vary greatly due to a rainy summer or a drought, etc. Perhaps what matters most, however, is the mapping style of the map-maker: every orienteering map looks ultimately like its mapper and, despite the mapping specifications, there are big differences. Thierry

competitors work to find as much foreknowledge as possible. It is also completely in line with sports ethics to be better trained and better prepared than others, whether it comes to physical form, skills, technics or tactics.

It is often said that prying into the competition terrain or course beforehand does not actually give you an advantage in the competition, or it can even mess the athlete up. ¹⁶ There will anyway be enough orienteering tasks for the athlete in the terrain during the competition. There would only be at most some kind of 'mental benefit' that goes with the preparations, a kind of mental training.

If this is the case, why do athletes then spend so much time and effort on scouting? Could the real reason be that it actually does give the athlete some benefit in competition?

The veil of secrecy swings

Of course, Orienteering people have not followed these developments completely inactively. There have been two ways of solving the issues of competitors' home ground advantage¹⁷, in terms of fairness and fair play: alternately closing and opening the veil of secrecy.

The veil of secrecy is closed by embargoing the whole of a major event terrain in good time and forbidding even visiting the area – if possible. 18

But the veil of secrecy is also being opened. For the World Championships, the most recent old orienteering map of the competition area must be published already in conjunction with the first bulletin. Three months before the competitions the following facts have to be published, amongst others: the exact course lengths, the climb, the

Gueorgiou, for example, spent a long time alone in Sweden in the summer of 2004 when defending his first world championship title. As a young Frenchman, he wanted to take away from his Nordic rivals the 'home-ground advantage', and so he systematically practiced on the other maps of the World Championships mapper, to be sure he understood even the smaller details of the mapper's style. The Swedish Orienteering Federation even produced their own training map in 2013 for the upcoming World Championships in Finland, drawn by *a Finnish mapper*, of a terrain assumed to be similar to Vuokatti terrain. The training map was made in Kilsbergen in Örebro.

¹⁶ It must be remembered that sporting cultures differ: it may also be intentional to upset the mental balance of the 'opponent'. In Orienteering, this can be done by giving them the wrong impression of one's own preparedness, leading the competitor to be misled by irrelevant ideas.

¹⁷ Here, the home ground advantage means knowing the terrain type and the type of mapping better, compared to for example foreign competitors who are used to different kinds of environments.

¹⁸ Especially in urban areas, the organiser needs to leave allowed corridors in the embargoed areas, such as at the World Championships 2020 in Denmark, so that the competitors can visit the railway station if needed. Possible competition areas for the Kuopio World Championships in 2025 were embargoed already in 2019.

number of control points and drinking stations (!) and the exact location of the finish. ¹⁹ In addition, everyone must be given the possibility to train in terrain similar to the terrain at the World Championships. ²⁰

Finally, during the competition the athletes are excluded from the rest of the world, taken to a separate quarantine area, and stripped of all communication media so that they will not receive any information about the ongoing competition, even though it can otherwise be followed via live TV.

The bulletins are the key instruments in moving between secrecy and openness: they are competition instructions in English and in writing to everyone in advance of the competition.²¹

In addition, it is the responsibility of the IOF Event Adviser to ensure fairness. The Adviser must control the organisers' actions and e.g. approve all information given in the bulletins. The final instructions for fair competition at the World Championships are given orally to team officials in a Team Officials Meeting chaired by the IOF Event Adviser. The idea is that if the secret is unlocked, everyone will get the same advance information at the same time. In practice, the IOF Event Adviser plays an important role in organising a successful competition.

The subculture's vicious circle

Orienteering has long been based on mutual trust between people. ²² Within Orienteering, it has been believed that cheating in the sport would be, even when unpunished and without publicity, so shameful that it would prevent any kind of dishonesty or manipulation.

Trust capital is always valuable, but it can look childishly naïve in the eyes of outsiders. China's 2019 events make me ask: Is this kind of "ethical glue" in Orienteering sufficient in the current circumstances?

For decades, events and related rumours, some of which have been publicised, have broken trust. Here are some concrete examples:²³

¹⁹ IOF Competition Rules, 8.5. Bulletin 3 and 8.7. publication schedule.

²⁰ IOF Competition Rules, 11.6. The 'typical' training circumstances have sometimes been criticised e.g. because the mapper has not been the same as at the World Championships.

²¹ Q.v. IOF Competition Rules, chapter 8. For the World Championships there are four bulletins.

²² The history of trust is long. As an example the World Championships in Denmark in 1974: course setter's wife took part and won gold.

²³ The examples are presented here only for the purpose of detecting a self-sustaining problem. They are not claiming that any rules have been violated and it is not the intention to insult or blame anyone. Instead, in the light of the examples, it is essential to ask: what might this event or procedure look like to an outsider? Can anyone feel justified to act in a similar way in the future?

In Finland the top orienteers found out, towards the end of a week in the autumn of 2000, that the first-ever World Championships sprint competition would be held in Kauppi, Tampere, and that the area would be embargoed on Sunday that week. Several potential competitors rushed to Tampere to explore the first World Championships sprint terrain, some even with headlamps when they couldn't make it there during daytime.²⁴ Foreign orienteers did not have the same information, and they would not anyway have been able to take action due to the long distances and tight schedule.

Doubts have arisen even during competitions.²⁵ In the 2004 World Championships in Sweden, in the women's Middle Distance (5.2 km) a Swedish orienteer ended last, no less than 46 minutes after the winner. It was suspected that she had used the time in the forest to explore the following day's Relay terrain, after losing the chance of a medal through a mistake at the third control.²⁶

Also interpretations about the right to take part ²⁷ vary even in the interpretations of the competition rules of neighbouring countries: orienteering clubs in Gothenburg organised Tiomila 2017 in the terrain of Partille, which is the most well-known orienteering terrain around Gothenburg. ²⁸ IFK Göteborg took part in the relay, even though it was known that the club's top orienteers live in the city. The same year, Kalevan Rasti organised the Jukola relay, but was not allowed to participate. ²⁹

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²⁴ No one broke the embargo, because it had not been officially published. The example shows how a top orienteer can find himself unable to take ethically sustainable decisions. Athletes from other countries soon learned about the visits to the terrain. In order to be fair, the Kauppi area had as a compromise to be opened for all, but only one day before the World Championships. When exploring the terrain then, the competitors had a two-year-old map with them. Sprint orienteering was in this way off to a bad start at World Championships level. Was it still a valuable major event according to the basic definition of the sport, or just a showcase for Sprint?

²⁵ Obvious fraudulent attempts are extremely rare in orienteering. As a curiosity: in 2016, a master orienteer used two identities in the Swedish Orienteering Week M55-Short class. In this class, the competitor was able to choose his starting time in a six-hour window. He first ran the course with a wrong name and did not finish, and then in the afternoon he ran again under his own name, and won overwhelmingly. About 20,000 orienteers took part in the orienteering week.

²⁶ E.g. Helsingin Sanomat 20.9.2004 and Skogssport 8/2004, p. 34. GPS tracking was not used, so there is only the athlete's own story about her route and some sightings of other competitors. The 'second worst' in the competition was 19 minutes behind the winner. The athlete herself said that she had suffered from health problems before the competition, and that her compass had broken in the competition. She was chosen for the Relay team the following day, and Sweden won the relay. Similar kinds of cases of 'getting lost' have taken place in other World Championships as well, e.g. in the World Championships 2011 in France, where some of the favourites never found the first control on the Long Distance, and in the Women's Relay all top teams made big mistakes. The World Championships 2004 terrain Västerås, in Sweden, was however not especially difficult for top orienteers.

²⁷ There are some competitors who have only realised during the competition that they know the terrain 'too well' and have then not punched at the last control. In that way they have disqualified themselves. In major events athletes cannot be expected to disqualify themselves, but the question of foreknowledge must be solved in some other way.

²⁸ Partille has hosted e.g. Swedish Orienteering Week 1990 and Junior World Championships 2008.

²⁹ IFK Göteborg won both relays. Before 2017 Tiomila, competitors and teams "who are affected by the terrain knowledge matter" were asked in the competition instructions to fill in and send a form by the Swedish Orienteering Federation 'Fair orienteering' scheme to the organising club. We do not know whether and how a form by the organising club itself has been handled. Kalevan Rasti could easily have

A TV commentator for orienteering can get to know a World Championships course the day before, and even visit control points in the terrain – even if he is a coach to an athlete that would take part in the competition or even if his wife is the coach of a national team. ³⁰ Even at World Championships level the course setters and mappers can be close club-mates of the competitors or even of the favourite to win. ³¹

The World Championships 2011 in France were held in an area very close to a summer cottage owned by the favourite's father. ³² In the World Championships 2010 in Norway the Event Centre was Granåsen ski stadium in Trondheim, which had for long been a training terrain for the orienteers in the area. ³³ The Middle Distance was won by an athlete who used to live in Trondheim.

These kinds of events and the rumours associated with them give rise to a self-nourishing 'ethical vicious circle': it is unclear where the border between the forbidden and the so-called grey area is.

At the same time the truth can become secondary, and an initially honest athlete can believe in the rumours - and soon cross the line of what is appropriate. For example, he can easily imagine his competitors being even more advanced in their field knowledge and reconnaissance activities, and therefore go even further.³⁴

It should be remembered that the field of vision of a top athlete is narrow: the focus is on one's own goals and one's own success. And a top athlete thinks that everything is

built a team of runners who had never been even close to the competition terrain in Eno nor were in any way involved in course setting or any other planning, and that team could have fought for Jukola victory in 2017. However, there are clear instructions that the organising club of Jukola may not take part in the relay.

³⁰ The reference is made to Janne Salmi. There are only a few suitable top experts of orienteering. This way the TV broadcast gets more expertise and depth. Finnish broadcasting and its different approaches (such as the whole-night broadcasting of Jukola) are considered as pioneering in the sport, and Salmi has made a significant contribution in this.

³¹ Compare World Championships 2013 in Sotkamo, Finland: course setters Börje Vartiainen and Jussi Silvennoinen from Kalevan Rasti.

³² Only a small part of the World Championships terrain had previously been mapped for Orienteering, but on the area there was a dense path network suitable for jogging. Thierry Gueorgiou won all forest distances and France won the Men's Relay. That his father had a cottage close to the area, and Gueorgiou possible better foreknowledge of the area than the rest, was pointed out at least by the newspaper Iltalehti in Finland. It was not widely discussed among the orienteers because the winner was no surprise, considering the character of the races.

³³ Due to the choice of event centre, the course setter had to make up a forbidden area in the forest so that the level of difficulty, element of surprise, and availability of route choices could be enhanced on the Middle Distance. This decision known from the Sprint puzzled the orienteering people. The competitors also had an arena passage in the ski stadium, but the spectators there stared more at the screen, the GPS tracking on it and the video pictures from the forest.

³⁴ This can also be seen in doping use: An athlete who has used a prohibited drug or method often justifies his actions by saying that he is merely catching up with his competitors, thus reaching only the 'same line'. Drug police officers are also suspected of feeling powerless with the investigative and other methods given to them against organised crime, and therefore they may create a secret subculture, which in itself is also a criminal activity.

allowed in principle, unless it is specifically forbidden, ³⁵ which in Western society seems to be a legitimate thought. It is often said that money ruins a sportsman, but a top athlete's own competitive drive can be an even bigger influence than money.

This is where the core of the problem lies: the ethics of top Orienteering disintegrate, and quietly a new sub-culture is born, a kind of 'new normal'. Athletes and their support personnel no longer perceive or care about what is forbidden and what is allowed, let alone what is right according to the fundamental ethical values of sport.

The consequence of such a sub-culture is that somebody eventually gets or acquires a major event competition map and its course information. And uses or allow someone else to use them to get advantage in the competition. ³⁶

It would undoubtedly be competition manipulation in Orienteering and cause long-term damage to the sport's credibility and reputation.

Rules and regulations:

In the light of the law and the Rules, the starting point is of course clear: the system, its rules and regulations should be able to tell the athlete clearly and accurately where the boundaries of what is prohibited and allowed in terms of skill advantage lie. And there would be no ambiguous grey area and no risk of jeopardising the athlete's legal protection.

This is however not realistic for Orienteering. ³⁷ Unlike many other sports, Orienteering does not have well-established conditions, and unfortunately we therefore need to operate with some kind of blanket regulations and interpretation recommendations for them. ³⁸

³⁵ Q.v. Halila-Norros: Urheiluoikeus 2017 (Sports Justice) p. 41: "In isolated cases it normally depends on the rules of the sport and the competition rules whether or not it is cheating in sport. When not everything that is not explicitly forbidden is allowed, it is in cheating situations that there is room for ethical consideration. This may also apply to rules trickery, where the way in which rules are interpreted while respecting the ethical principles of sport may be decisive."

³⁶ It is quite possible that a competition map and course will be acquired by cyber men or women or otherwise spread, even accidentally, to the wrong people. At the European Championships 2014 in Portugal, the Long Distance Final map was accidentally published online the night before the competition. The problem was solved by making new courses overnight, cf. YLE / Nina Vanhatalo April 15, 2014. Even in this area of society, cyber and security threats need to be taken seriously.

³⁷ It would be tempting to claim zero tolerance for skill doping, but it would easily remain a mere declaration because of the complexity and multi-dimensionality of the matter.

³⁸ The situation as such is well known in law and well described in the interpretation guidelines for Swedish Competition Rules, paragraph 16.1.: Many rules do not have clear-cut boundaries for what is a rule violation and what isn't. Concepts such as..."competitor who is considered to have an advantage" etc. are judged on a case-by-case basis, as there is an almost infinite number of potential scenarios. A

Orienteering differs from many sports in that it involves an age range from young children to the elderly. Even if the rules of the sport are the same for all, it may be worthwhile in any interpretation of them to distinguish between the elite classes and the rest. Otherwise, the sport could easily end up with over-regulation of competition and widespread interpretation problems. ³⁹

The issue of skill advantage has been addressed in the various rules, at least as follows:

IOF Competition Rules:

The competition terrain shall not have been used for Orienteering for as long as possible prior to the competition, so that no competitor has an unfair advantage. (14.2.)

The competition terrain shall normally be embargoed as soon as it is decided. If that is not possible, then arrangements for access to the terrain must be published as soon as possible. (14.3.)

Permission for access into embargoed terrain shall be requested from the organiser if needed. (14.4.)

If a previous orienteering map of the competition area exists, high-resolution colour copies of the most recent edition must be made available for all competitors prior to the competition. (15.5.)

On the day of competition, the use of any map of the competition area by competitors or team officials is prohibited until permitted by the organiser. (15.6.)

All officials shall maintain strict secrecy about the competition area and terrain before they are published. Strict secrecy about the courses must be maintained. (26.4.)

Any attempt to survey or train in the competition terrain is forbidden, unless explicitly permitted by the organiser. Attempts to gain any information related to the courses, beyond that provided by the organiser, is forbidden before and during the competition. (26.5.)

The organiser shall bar from the competition any competitor who is so well acquainted with the terrain or the map, that the competitor would have a substantial advantage over other competitors. Such cases shall be discussed and decided after consultation with the IOF Event Adviser. (26.6.)

description of all these would be nearly impossible to formulate in a single rule framework. Nevertheless, these type of rules are extremely important to keep in order to achieve fair and equitable competitions. ³⁹ Rules can become unnecessarily serious. This distinction has been used in the interpretation guidelines for the Swedish competition rules, paragraph 16.1.:"Regarding rules related to competing on equal terms, it is reasonable to take action only in case of complaint in D/H18-21 classes. Competitors in other classes are also required to comply with the rules, but judgement should not be as severe as for the elites.

Finnish Competition rules:

Major events organised in Finland follow the IOF Competition Rules. If there are deficiencies in the IOF rules, the Finnish competition rules apply (1.45). Jukola, for example, follows the Finnish competition rules and instructions given by the organisers, even though the competition is mostly international.

A competitor may not benefit from better knowledge of the competition terrain or map compared to their competitors. (2.62).

If a competitor is found to have the above-mentioned advantage, the Adviser must deny him/her the right to participate. (2.621).

The decision to exclude the competitor on the basis of local knowledge must be communicated to the competitor at least 24 hours before the start (2.622).

The competitor must not get acquainted with the terrain before the competition when the terrain is embargoed...(2.63).

A competitor with knowledge of the terrain should assess whether they have an advantage over their competitors and consider their participation. (3.26).

Before the competition, every official of the organising team, and the Adviser, must keep the competition courses secret (10.21).

It is the duty of the Adviser to ensure that there is a level playing field and to ensure that the competition is organised in accordance with the rules of the sport. His role is also to advise and guide the organiser (attachment D 2.21).

Where appropriate, the Adviser must deny the right to participate for a competitor who, based on his or her terrain knowledge, has an obvious advantage over other competitors (attachment D, 2.23 g).

Swedish Competition rules:

In this context, it is necessary to highlight a few points of the revised competition rules of an important orienteering country, Sweden, which are substantially different from the IOF and the Finnish ones. Obviously, these rules are intended to prevent the problem presented in this paper:

Competitors may not attempt to obtain an unauthorized advantage (6.2.1.).40

⁴⁰ "Tävlande *får inte försöka skaffa sig* otillåten fördel." In the interpretation guidelines for Swedish competition rules (16.2) this is stated clearly: There are many examples of what constitutes "unauthorized advantage", for example, seeing the courses ahead of time; getting information about courses from

It is essential to note that in competitions using the Swedish competition rules (such as Tiomila) it is forbidden to merely *attempt* to get an advantage, even if no benefit is actually obtained. The rule is clearly intended to limit reconnaissance activities as a phenomenon and to ensure fair competition.

Competitors may not, through intentional reconnaissance, acquire advance knowledge of the competition area, unless it has been clearly permitted by the organiser (6.2.3.).

A competitor who has such good familiarity with the competition area that he or she may be viewed to be advantaged by it, may not participate in competition classes at level 1 and 2 events. This prohibition also applies to rankable classes at level 3 events. $(6.2.4.)^{41}$

What can be done?

In top Orienteering we should make a move in the right direction to recognise, admit the existence of and prevent the unfair skill advantage phenomenon, by some kind of restriction of reconnaissance before competitions. Priority should be given to measures preventing the problem.

Some measures to be considered:

- 1. During an event application period, at least for forest formats, one should favour applications that can offer a terrain and a map that have never, or at least not for one generation, been used in orienteering competitions. ⁴²
- 2. Preliminary *direct* information about the competition (start place, length, climb, number of controls, water stations, arena passages) should be limited to minimum: a top orienteer does not need to know more than the expected winning time given in the rules.
- 3. The course setters should always be able to plan the courses such that they can use local circumstances in the best way possible, such as the best parts of the terrains. Unpredictability and the element of surprise, which are typical for the sport, should get the appropriate attention.

already finished competitors; asking for help in the forest, etc. Note that it is forbidden to attempt to gain such an advantage, even if the attempt does not yield any benefit to the competitor.

⁴¹ Section 16.2 of the interpretation guidelines strongly encourages considering whether to participate even if the knowledge of the terrain is not substantial, but the competitor represents the organising club or otherwise knows the terrain or the map.

⁴² This avoids doubts about someone's local knowledge. The federations should even consider "freezing" appropriate terrains for major events, for example, over one generation. A top athlete should be able to participate in World Championships throughout his career without having to justify his possible local knowledge after living on the area.

- 4. On forest formats the start does not need to be in the Event Centre. 43
- 5. Arena passages should be abolished, because they make reconnaissance substantially easier. Forest orienteering will never become an arena sport. 44 Instead, one should invest in GPS tracking, TV production and new ways of filming (cameras fixed to competitors, cameramen running in front of and behind the competitor, drones, etc.)
- 6. The rules for the sport should be revised so that they follow the requirements of the Convention on the *Manipulation of Sports Competitions* by the Council of Europe: for example, clear guidelines for using inside information and for whistle-blowing must be established to prevent competition manipulation. ⁴⁵ Not reporting cases as 'intentional omission' also requires sports-specific clarification. ⁴⁶
- 7. Competition rules and the interpretation of them should be harmonised so that the grey area of reconnaissance is narrower and as uniform as possible across countries. Here are some examples of anomalies now: *attempting* to obtain information and *denying* participation right. For the sake of legal protection of athletes and their support personnel, it is also important to define indirect evidence of an acquired advantage. ⁴⁷
- 8. The ethical basis of the sport should be strengthened, in particular through training and information for young athletes and new orienteering countries.
- 9. The practices of sprint formats and forest formats should when necessary be separated, so that unfair skill advantage is interpreted more strictly in forest formats.
- 10. Cyber threats related to competition courses and maps should be considered as a serious threat at all levels.
- 11. There must be clear guidelines and firewall practices for the organisers of major events for all information that is handled before the competition. In addition, a separate project-specific insider register must be created which will be extended, on a contractual

⁴⁴ At the same time we should get rid of the course instructions that officials shout to the competitors. There are some examples of good arena passages too, though, for example on Middle Distance and Relay at WOC 2016 in Vitipalu, Estonia.

⁴⁶ Guidelines for action to prevent competitive manipulation and case by case measures q.v. FINCIS above-mentioned publication p. 24.

⁴³ Cf. IOF Leibnitz Convention from 2000. It makes reconnaissance far too easy. This instruction to have the start at the Event Centre has not always been followed. When it comes to the forest formats, several of the goals mentioned in the Convention should be abolished. A lot has changed since 2000, including development of GPS tracking and TV production.

⁴⁵ A confidential whistle-blower system needs to be created by every country. In Finland either related to the existing FINCIS system, or separately to the Finnish Orienteering Federation. Cf. Red Button app for football players.

⁴⁷ Cf. Halila-Norros p. 356. and the revised practices of "sufficient evidence". The aftermath of China's 2019 World Cup is just about indirect evidence: the competitors' split times have been compared by breaking down the more demanding legs and asking, "Too good to be true?". In tennis, for example, separate observers have been introduced to prevent competition manipulation. It is about deliberately lowering one's skill level for betting profits or bribery.

and sanctioned basis, to the media who receive prior information on television and the like.

12. The role and skills of the IOF Adviser and the national controllers need to be developed. More former top orienteers should be included in the IOF Adviser pool, as they understand the deep nature of the sport and can detect potential hazards in time.

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