

## **Manipulation of Sports Competitions: Investigation and Prevention**

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### **Abstract**

The aim of the work is to formulate proposals for improving the investigation of manipulation of the results of expected results in sports, taking into account the existing gaps in the Macolin Convention. The research employed formal-legal method, logical-legal method and descriptive method. The main obstacles to implementing the Convention of the Council of Europe on the Manipulation of Sports Competitions were identified. There are legislative, cultural, and economic differences between countries, which do not allow for its implementation in a single way for everyone. The study determined that combating the manipulation of sports competitions is impossible without the proper cooperation of countries and interested participants, aimed at increasing the transparency of the flow of funds in sports, improving sports management and legal framework, etc. The significance of the latest technologies in the fight against threats generated by the growth of the online betting market is noted. The importance of cooperation with the media in the course of investigations of manipulations was emphasised. The practical significance of the results is the possibility of their application to overcome existing obstacles in the fight against manipulation in sports and use the proposed methods of countering and investigating such manipulations.

**Keywords:** manipulations, expected results in sports, the Macolin Convention, bets, methods of investigation, corruption, examination.

### **Introduction**

Sport performs educational, cultural and collective functions, always having significantly impacted society's development (Gemar, 2020; Gorczynski et

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al., 2021; Dorsch et al., 2022). It unites people with different abilities and different experiences in a collective spirit based on honesty, discipline, equality, diligence and respect for each other (Ordway & Lucas, 2021). However, the benefit to society can be neutralised by phenomena threatening sports competitions' integrity (Marjanovic, 2023).

Sport performs not only social functions – it is a business sphere that is in constant development, attracting more and more funds (Ratten & Thompson, 2020; Hammerschmidt et al., 2022). The growth of cash flows into the sports field causes various dysfunctions in the industry and encourages manipulation and corruption (Tak et al., 2020; Philippou, 2022). Corruption, as one of the most apparent ways of illegally influencing results in sports, is considered an illegal or unethical activity aimed at deliberately distorting sports results to obtain benefits for an interested party (parties). Corruption belongs to sports manipulations, but their list is not exhausted by it, including other ways of evading sports rules (through doping, technology, match-fixing, betting fraud, etc.) (Shchokin et al., 2023). Sports manipulation should be distinguished from sports dysfunctions, which cover such areas as the salaries of athletes, various types of discrimination in sports, management aspects, etc. (Andreff, 2018). Sports manipulation is generally voluntary behaviour aimed at hindering fair sports competitions by violating one or more rules of the game, rules of the organisation, conduct, establishment of sports classification, technical and other sports rules (Collon, 2021). The Council of Europe Convention on the Manipulation of Sports Competitions (hereinafter referred to as the Macolin Convention) defines manipulation in sports competitions as an intentional arrangement, act or omission aimed at an improper alteration of the result or the course of a sports competition to remove all or part of the unpredictable nature of the aforementioned sports competition to obtain an undue advantage for oneself or others (Council of Europe, 2014). Interpol uses this definition when conducting relevant investigations (Interpol and IOC, 2016).

Given the national differences between countries and the complex nature of the crime of manipulating sports competitions (Serby, 2015; Krieger, 2020), the search for the best ways to investigate these offences remains relevant. An important task is identifying gaps in the existing legislative framework, which will help increase the proposals' thoroughness.

### **Literature Review**

Many studies focus on the problem of manipulations in sports, including manipulations with the expected results. They deal with the legal, cultural,

organisational, moral, technological and other aspects of the problem, and a single goal unites them — identify the most effective ways to prevent manipulation.

Giandomenico (2018) examines the effectiveness of the Macolin Convention over time. The researcher noted that, despite the advantages and disadvantages characteristic of international conventions, the Macolin Convention is an important step in combating sports manipulation.

Andreff (2018) revealed the essence of small manipulations in sports related to ethical aspects and not threatening the existence of sports and also identified particularly serious manipulations involving a corruption component. Kuwelker et al. (2022) examine manipulation in sports competitions from the perspective of their regulation by various international sports federations.

Vanwersch et al. (2022) find that sport is generally vulnerable to fraud because of motivated offenders, appropriate “targets”, and lack of effective countermeasures. Leheza (2022) reveals an extremely high level of latency of corruption-related crimes in sports.

Spapens (2021) examines match-fixing and observes that this problem is usually considered one dominated by “outsider” influence. At the same time, the researcher found that fixed matches initiated by insiders are no less common. Constandt and Manoli (2022) also studied the problem of fixed matches and noted that elite sports are always associated with betting. The development of online betting significantly impacts the manipulation of sports bets. Moriconi and De Cima (2020) examine the risks associated with the growth of the sports betting market, especially online.

The study by Hessert (2020) is one of the few studies that note the importance of internal sports investigations. Mikhailov and Klimchuk (2020) also investigate illegal influences on the results of official sports competitions. The researchers note that corruption is the most obvious way of exercising such influence.

Therefore, researchers most often analyse the impact of the Macolin Convention on the effectiveness of combating manipulations in sports, study the content and classification of sports manipulations, problems and barriers in combating manipulations. A much smaller number of works deal with conducting investigations of manipulations of sports competitions (Kyslenko et al., 2019).

## **Objectives**

The purpose of the study is to formulate proposals for improving the investigation of manipulation of expected results in sports, taking into account the existing gaps in the Macaulay Convention.

Objectives of the study:

- to Identify gaps in the provisions of the Macaulay Convention;
- to identify areas of counteracting manipulation of expected results in sports;
- to provide proposals for optimising the investigation of manipulation of expected results in sport.

## **Methodology**

### **Research Design**

The first stage of the research provides an analysis of the advantages and disadvantages of the Council of Europe Convention on the Manipulation of Sports Competitions — the Macolin Convention. At this stage, the significance of the Macolin Convention in combating the manipulation of the results of sports competitions was determined. The factors that prevent its use as a single way for all countries to combat such manipulation were also identified. The provisions of the document that are directly related to bets on sports competitions, the understanding of which is important because of the subject of the study, were noted.

The second stage identifies ways of combating manipulation of the results of sports competitions. At this stage, the main subjects of the fight against the manipulation of sports competitions were covered in general terms. The main tasks for these subjects during their cooperation and cooperation are described. The possibilities of using modern technologies in countering the manipulation of the results of sports competitions were noted.

The third stage deals with aspects of investigating the manipulation of sports competitions. The main difficulties that arise in such an investigation are identified at this stage. Some methods of investigation that can be effective during the investigation of the manipulation of sports competitions are indicated. Possibilities of cooperation with mass media in the course of investigations were noted.

### **Methods**

The main research method is the formal legal method. The benefit of this method was that it made it possible to trace the relationship between the internal content of regulatory documents and the external expression of legal phenomena related to the problem under study. This method was used to analyse in detail the provisions of the Council of Europe Convention on the Manipulation of Sports Competitions and related documents, in particular:

- Identify the main methods of manipulating sports competitions, as well as types of illegal bets on sports competitions;

- Determine the measures to combat manipulation in sports by the bodies responsible for the regulation of rates;
- Describe the aspects related to the activity of betting operators in the field of combating the manipulation of sports competitions;
- Identify the subjects of the fight against the manipulation of sports competitions;
- Describe the measures to combat illegal rates;
- Make a list of factors complicating the investigation of sports manipulation and related to the lack of specific knowledge about the crime.

The logical and legal method allowed us to identify the shortcomings of the Council of Europe Convention on the Manipulation of Sports Competitions. The method was also useful for drawing conclusions on how the identified shortcomings manifest themselves in practice, i.e. what are the consequences of the identified gaps. For example, the Convention's focus on strengthening the regulation of the legal betting market may lead to the growth of the illegal betting market. In addition, applying the method helped identify areas for counteracting manipulation of expected outcomes in sports based on the identified gaps.

A descriptive method was applied to describe some methods used to investigate the manipulation of sports competitions. This method made it possible to outline the scope of application and the main capabilities of such methods, що зрештою дозволило сформулювати пропозиції з оптимізації розслідування маніпуляцій з результатами очікуваних результатів в спорті.

## **Results**

### **The Council of Europe Convention on the Manipulation of Sports Competitions: International Cooperation in Investigating and Preventing Manipulation; Problematic Aspects**

The Macolin Convention defines the following types of illicit bets in sports competitions: - illegal bets (the type/operator of such bets is not allowed according to the law);

- non-standard bets (those that contradict the generally accepted models in the market);

- suspicious bets (probably related to the manipulation of competitions).

An important contribution of the Macolin Convention is an attempt to improve cooperation between stakeholders in combating manipulation in sports.

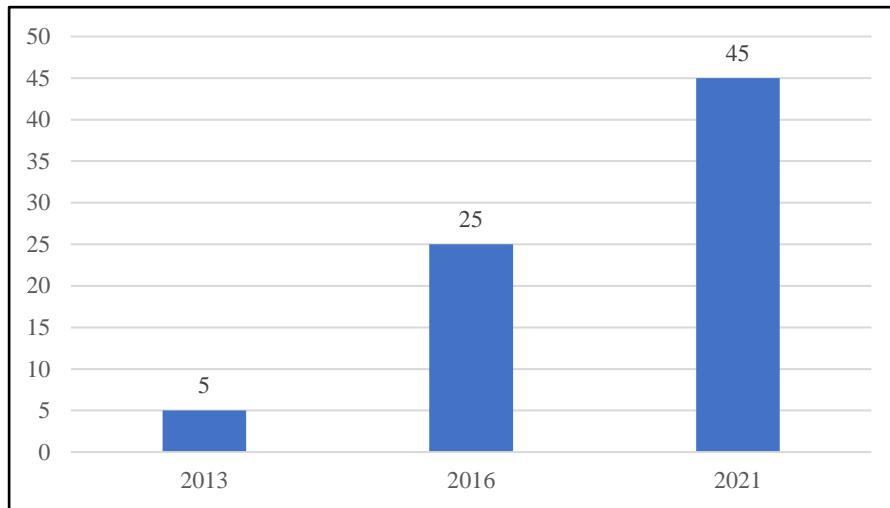
However, the recommendations contained in it have certain limitations. First, this is determined by the impossibility of developing a single international convention for all countries with extremely different attitudes to sports betting from legal, cultural, religious, and other perspectives. In addition, one of the limitations of the Macolin Convention is its focus on strengthening the regulation of the legal betting market, one of the possible consequences is the transition of those who organise fixed matches to the illegal betting market. The Convention will not significantly affect the situation because the lion's share of betting is carried out through illegal operators established in a low-tax regime in regions with a low level of regulation.

The strategy of coordinated monitoring used in the Convention may also not contribute to the increase in the number of detected crimes because fraudsters may be aware of the use of monitoring systems by individual operators and avoid them by addressing other organisations. Recognising the importance of the Macolin Convention in drawing attention to the problem as a whole and defining the main concepts and relationships, it should also be concluded that the manipulation problem in sports is not finally solved with its adoption. Therefore, it is urgent to search for further ways to prevent the phenomenon of manipulating sports competitions.

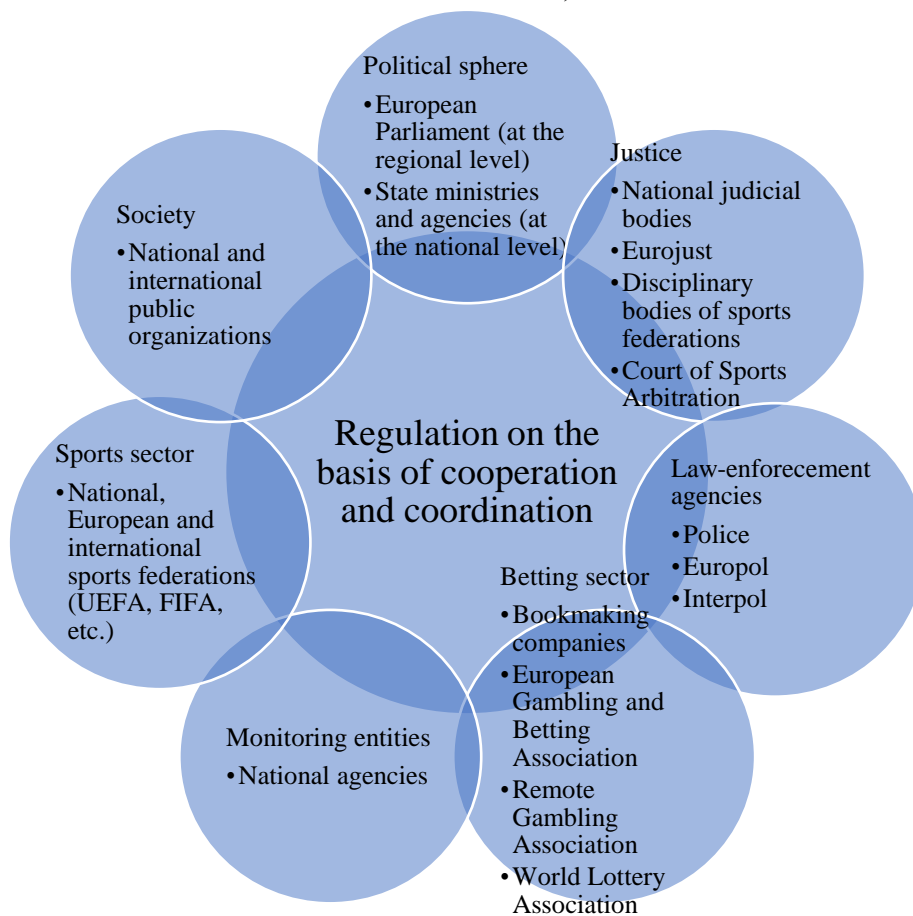
### **Prevention of Manipulation of Sports Competitions**

The statistics show that more and more countries are showing a serious attitude toward the problem of manipulation of sports competitions. Figure 1 shows the change in the number of countries with specific anti-match-fixing laws from 2013 to 2021.

The fight against manipulation of sports competitions involves a wide range of participants, which can be divided into international and national groups. The main participants are summarised in Figure 2, and their full list is provided in the document created by the Secretariat of the Macolin Convention in the Council of Europe (2017).



**Figure 1.** Change in the number of countries with special laws to combat manipulation in competitions from 2013 to 2021 (built by the author based on UNODC, 2021)



**Figure 2.** Entities engaged in the fight against the manipulation of sports competitions (compiled by the author based on (Council of Europe, 2017)

*Note: UEFA – Union of European Football Associations; FIFA - International Federation of Football Associations*

The specified participants perform different functions and have different tasks in the field of combating manipulation in sports competitions. Their coordinated activity should be aimed at increasing the transparency of financial transactions in the sports field, improving sports management, developing and implementing the necessary changes in the legislative framework, implementing clear sports rules, monitoring, determining sanctions, etc. Cooperation with informants is a valuable source of information about suspicious activity, and the involvement of experts may be distinguished among the individual tasks. Educational campaigns and events aimed at raising sports consciousness and improving awareness of the consequences of manipulating sports competitions are also important.

The role of modern technologies should also not be underestimated because of the increasing threat caused by the growth of the online betting market. The fact that attackers use innovation for their purposes and their own benefit must find a response in the counter-application of the latest technologies to combat manipulation. Technologies that can be used to combat manipulation in sports include online platforms, big data, artificial intelligence, coding, information security technologies, and others. An example of the successful use of technology in the fight against manipulation in sports competitions is that the Court of Arbitration for Sport (2016), which often receives cases of sports manipulation, has begun to accept betting monitoring reports as adequate evidence of match-fixing. The UEFA Betting Fraud Detection System (BFDS) plays an important role here, which aims to detect irregular bets before and during the match in key betting markets through monitoring. BFDS uses complex algorithms and mathematical models to compare the calculated coefficients with the actual indicators of bookmakers. This makes it possible to detect whether such indicators were irregular — once or over a certain period (Garcia, 2017). Therefore, modern technologies allow effective countermeasures against manipulation in sports competitions by performing complex calculations and processing and analysing large volumes of information in a minimal time, which is impossible to do through a manual approach only.

### **Investigation of the Manipulation of Sports Competitions**

As world practice shows, even the most effective prevention of manipulation in sports competitions, although it minimises, does not exclude the possibility of committing offences. This urges the task of conducting proper investigations of manipulation. At the same time, the investigation of sports manipulation is complicated by several factors related to the lack of specific knowledge about the crime.



Furthermore, the legislation of different countries does not always classify manipulation in sports competitions as a criminal offence. Disciplinary action may be taken against athletes, but the perpetrators are often outside the sporting sphere, which requires further consideration. In cases where it is impossible to apply criminal procedures, administrative sanctions may be applied, or measures may be taken to bring corporate responsibility. Turning to the problem of the development of technologies that can be used for criminal purposes and cross-border services, we can conclude that the investigation of cases related to manipulation in sports should be a matter that requires proper international cooperation to identify and prosecute criminals (Council of Europe, 2018).

Studying specific methods of investigation, the significance of conducting various examinations can be noted. For example, forensic, in particular, biological examinations, examinations of materials, substances and products, as well as economic, commodity, engineering and technical examinations, examinations of property rights and property value are carried out to investigate corruption as one of the common offences in the context of manipulation of sports competition (Verkhovna Rada of Ukraine, 2023). A separate place is occupied by computer and technical examination, which is used to obtain actual data from digital equipment and software. Cooperation with the relevant national anti-corruption bodies must be established where the matter is about the corruption component in manipulating sports competitions.

In the context of the great importance of cooperation and collaboration in countering and investigating manipulations in sports, it is also worth noting that the role of mass media (mass media) in this process is not often noticed. At the same time, this may be a significant omission because of the role of mass media in modern life, their significant influence on public opinion and attitude. The development of digital media extended the possibilities of receiving feedback from users (in particular, spectators and visitors to sports events). At the same time, the latest technologies make it possible to accumulate, process, and analyse this feedback, for example, comments on sports news, results of competitions and discussions in sports blogs. Based on the results of the analysis, it is possible to obtain preliminary evidence regarding possible manipulations, as well as their influence on the attitude of the viewers, which may indicate the need for increased attention to certain aspects.

## **Discussion**

The conducted research gives grounds to conclude that international cooperation and collaboration, the use of the latest technologies in response to the increased threat generated by the growth of the online betting market, the

involvement of the public and mass media, as well as awareness and sports awareness campaigns, are important during the development of international and national mechanisms for combating manipulation in sports.

### **International Measures to Address the Problem of Manipulation in Sport**

Giandomenico (2018) observes that the approval of the Macolin Convention is the final step in the long journey of combating manipulation in sports. The researcher also notes significant shortcomings, such as the fact that sports are not always within the regulatory competence of state bodies. Andreff (2018) sees a solution to the problem of manipulation in sports competitions through the development of an effective international complex, which includes economic regulation, taxation and sanctions. At the same time, the researcher noted that this process is extremely difficult to implement. We can agree with this because this study noted the impossibility of developing a single international mechanism because of the differences in culture, legislation of different countries, tax legislation and economic regulation.

### **Criminalising the Manipulation of Sports Competitions**

Another important issue discussed in the works of researchers regarding legislative norms is whether it is worth criminalising the manipulation of sports competitions. Leheza (2022) notes the approach of the Republic of Azerbaijan. Their Criminal Code provides for criminal liability for manipulating sports competitions in general. At the same time, the researcher notes that in other countries, for example, in Ukraine, the criminalisation of this phenomenon does not correspond to the principles of social conditioning. In the author's opinion, this issue needs increased attention from national governments and determining the cases in which the manipulation of sports competitions should be criminalised (Tavolzhanskyi et al., 2023; Pilyukov & Shramko, 2018). Spapens (2021) notes that when match-fixing is defined as organised crime, the problem becomes the responsibility of law enforcement. If the match-fixing occurred due to the athlete's fault, it is often the responsibility of the sports associations, which requires a disciplinary approach. This approach attracts less attention than criminal prosecution, although the detrimental effect on competition may be the same.

### **Rights and Responsibilities of Athletes**

Individual cases where manipulation of sports competitions is carried out directly by athletes are related to sportsmen's bets on their competitions. Moriconi and De Cima (2020) conclude that there is a direct relationship between athletes' bets on their own competitions and competition manipulation. The legislations of many countries prohibit betting on their own competitions.

Some studies consider problems related to differences in regulation by sports federations. Kuwelker et al. (2022) find that the key differences in regulating manipulation in different sports by international sports federations are in the definition of the offence and the variety and severity of sanctions.

The issue of athletes' sanctions, rights and obligations is studied by Hessert (2020), who considers it unjustified to apply the obligations of athletes to provide evidence during internal sports investigations. This means that athletes have to testify against themselves, which violates the rights defined in the European Convention on Human Rights.

### **Optimisation of Approaches to Investigating and Combating Offences in Sport**

Vanwersch et al. (2022) insist on an interdisciplinary approach to effectively combat cheating in sports. The work also notes that cheating in sports does not significantly affect people's desire to participate in sports events, which is an important achievement and requires the determination of the causes of such a phenomenon. For example, the author proposes to analyse the reactions of viewers to digital media using modern technologies, which can reveal the nature of this phenomenon.

Constandt and Manoli (2022) consider it effective to study the history of match-fixing to identify ways to combat this phenomenon now. The issue of whether past events influence current trends in the context of technology development remains unsolved, so this can become a promising direction for further research.

Studying various methods of investigating illegal influence on the results of sports competitions Mikhailov and Klimchuk (2020) distinguish a method of forensic computer-technical examination. The author also noted that the use of technologies by criminals requires appropriate use of technologies in response.

### **Conclusions**

The study analysed the main aspects of the Macolin Convention regarding sports betting. Betting is an area where various manipulations of the results of competitions often occur, especially with the growth of the online betting market. The study emphasised the importance of the Macolin Convention as a tool for improving international cooperation and a way to draw attention to the problem of manipulating the results of sports competitions. At the same time, the shortcomings of the Convention were emphasised, particularly the impossibility of its full implementation in the same way in all countries with different cultural, economic, and legislative features.

The identified ways of preventing the manipulation of sports competitions are based, first of all, on the need to strengthen cooperation between countries and entities fighting against manipulation. Because of the increased threats associated with the growth of the online betting market, it is noted that criminals' use of digital technologies for manipulation must find a response in using such technologies to counter criminal schemes. Today, such technologies include big data, artificial intelligence, coding, etc. The use of technologies makes it possible to analyse large volumes of information in the shortest possible time, detect abnormal rates, suspicious activity, etc.

The research identified the difficulties that arise while investigating the manipulation of sports competitions. The significance of various examinations for a successful investigation was noted. A combination of cooperation with the mass media and new technologies in investigations is also proposed. This can be implemented by analysing the viewers' comments on sports news, sports blogs, etc., with the help of advanced data processing technologies.

To improve the process of preventing and investigating manipulation in sports competitions, the following recommendations should be made:

- eliminate gaps in the legislative framework at the international and national levels;
- focus efforts on strengthening the cooperation of actors involved in the fight against the manipulation of sports competitions;
- to study the possibilities of the latest technologies in combating manipulation in sports competitions;
- to organise training of experts in the field of specialised examinations and to provide the examination process with appropriate conditions and resources.

The practical significance of the work is to formulate proposals for optimising the investigation of crimes related to manipulating sports competitions. The study's limitations include the fact that it mainly considered one international document - the Macaulay Convention. The study could have been improved by including examples from the national legislation of individual countries.

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