



ELECTRONIC TECHNOLOGIES (SPORTS AND LAW) - CURRENT TRENDS

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ABSTRACT

The relevance and introduction of new electronic technologies in sports and training related to sports disciplines is becoming more and more intense. Through them, new standards and correspondingly new specifics of legal relations in sports are set.

The research problem is related to the study of digital innovations in the sports industry related to sports-technical and legal-social control, which will inevitably affect sports legal relations.

The purpose of the study is to investigate and analyse the characteristics related to the regulations and management of electronic technologies in the sports industry in Bulgaria and the European Union.

The research methods include analysis of specialized literature, normative documents, and case law.

The analysis of the results reflects the current trends in the regulatory framework related to digital transformations in sports. The case law in Bulgaria and the EU has been analysed in this regard.

Aspects of competence and the challenges facing the countries have been outlined.

In conclusion, we believe that the legal regulations in the field of electronic technologies in sports are insufficient, as their development lags behind the intensive advancement of these technologies and eSports. The introduction of eSports in universities and education is a creative way to motivate students to pursue future careers in this field, which would support fair play in sports.

Key words: Sports law, digital transformations, education.

INTRODUCTION

The introduction of electronic technologies into sports is becoming increasingly intense. Through them, new standards are being set, which in turn lead to the development and creation of specific legal relations in sports. In fact, sports are one of the driving forces behind the adoption of various new technologies, including plasma screens and broadcasts in HD and 4K quality.

The implementation of electronic technologies in sports can be conditionally analysed in two dimensions – **organizational and procedural-**

legal. The organizational aspect is related to the specifics of the particular sport, often focusing on technical safety requirements, as well as other characteristics that are legislatively regulated. In most cases, these are related to the competencies of sports authorities and primarily address technical support. The procedural-legal dimension involves the application of the law when electronic methods of declaration are used. Analysing these two dimensions is important for optimizing justice in sports as conditions for digitization and the use of artificial intelligence.

At the core of legal disputes in this area, there is not always a specific violation. There is not always reluctance to comply with legal norms. However, in every case, there is "...an externally manifested contradiction of the legal beliefs of

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the opposing subjects of the legal relationship" (1).

METHODOLOGY

Our hypothesis is based on the assumption that this research can uncover some specifics related to the regulations governing electronic technologies in sports, which will enhance the legal awareness (theoretical knowledge and practical skills) of citizens and officials involved, either directly or indirectly, in various sports events.

The main **aim** of the research is to reveal some specifics related to the regulations and management of electronic technologies in sports.

The research **tasks** are:

1. To reveal certain interconnections in the regulations and related intellectual property rights of electronic technologies in the sports industry in Bulgaria and the European Union.
2. To analyze normative documents and case law dealing with electronic technologies in sports.
3. To draw conclusions and make recommendations for reducing regulatory uncertainty regarding the distribution of computer games with inappropriate content, sports betting, and other electronic technologies in sports.

The subject of the research includes issues related to the Bulgarian and European regulations in managing electronic technologies in sports.

The object of the research includes normative documents and case law related to this matter.

The research methods include analysis of specialized literature, normative documents, and case law. The research was conducted between January and July 2024.

RESULTS

The economic impact of sports, as a result of the intensive introduction of electronic technologies, is becoming increasingly significant for modern society, triggering a wave of regulatory changes worldwide due to its specificity. One of these areas is related to intellectual property rights and violations in this domain, which intertwine with cybercrimes and illegal betting conducted through unlicensed websites. According to Bulgarian legislation,

any reproduction of a program in the form of a video game, and any use that is not explicitly (in written form) permitted by the author, is illegal. In a study focused on the main characteristics of eSports, Iv. Slavchev and V. Dimitrov state that the development of communication technologies and the global internet network has led to a new boom in the software entertainment industry (2). Supporting this is V. Dimitrov's research, where he analyzes the legal framework for eSports and some current problematic areas related to the legislation governing issues regarding video game copyrights and sports betting (3, 4).

The recognition of electronic game competitions as a sporting activity (eSports) and their professionalization are tied to their perception beyond the pure entertainment industry. Standardization of these sports and the technologies associated with them is actually one of the main obstacles to their development as a sport. For instance, there are views that video games can be protected as trade secrets. The question arises: does a game cease to be a trade secret once it is released to the market? Most commonly, such products are registered under trademark protection. In the sports game "FIFA," there was a case regarding the use of player images. For example, Zlatan Ibrahimović did not permit his self to be used in the game.

Competence

Regarding the cases mentioned so far, it is logical to assume that matters in which the European Union has no competence do not fall within the scope of its law. In the case *Conseil de l'Union européenne et Commission*, attorney Nils Wahl points out the deliberate choice of the treaty drafters not to grant the Council of the European Union general and absolute competence concerning the objectives in the treaties. "Therefore, the Court cannot interpret the rules established in the treaties to extend its competence beyond the text of these rules, nor to create new means of protection that are not provided for within them. Like any other EU institution, the Court must also respect the principle of conferred competence" (5).

Let us also consider the procedural aspects related to betting servers based in Asia and other locations outside the European Union, which operate through various cryptocurrencies. At present, insufficient regulation is reported in this area.

Unfortunately, the Court of Justice of the European Union not only does not reproduce this view anywhere but also deviates from it and actually offers a variety of, sometimes contradictory, perspectives. That is why it is important to note that:

- The law of the European Union is interpreted only within the framework of the competences conferred upon the Union.
- For a situation to fall within the scope of EU law, it must be within the scope of one of the Union's competences.
- The EU's competence must be exercised (a Union legal act must be adopted).
- Union legal norms in the subject matter must impose obligations (at least on the member states).
- Within the scope of European Union law, there will also be situations that are outside the Union's competencies, even those that are expressly reserved as exclusive competencies of the member states."

This raises many questions, and the assessment cannot be formal. It will not be sufficient for a subject to "fall within the areas of conferred competence of the European Union," nor even to be "formally regulated by a Union legal act/norm." Similarly, it is not enough to establish simply that in a given matter the European Union does not have competence in order to accept that this matter has no connection with European Union law (6).

Let us point out one example! The interpretative decision No. 3/2022 (Sofia) from 01.08.2024 of the Supreme Court of Cassation of the Republic of Bulgaria provides answers to questions related to copyright infringements. One of them fundamentally concerns cases in which the state where the copyright infringement occurred is different from the state of residence of the author. Another question relates to which is the leading market for pricing when determining the amount of damages suffered in the form of missed licensing fees, which are subject to compensation under Article 95 of the Copyright and Related Rights Act?" (7).

The detailed regulation of copyright in international treaties is a consequence of the specific characteristics of copyright objects, which are intangible and without territorial limitation, possessing the quality of reproducibility, which necessitates the protection of copyright beyond the territory of the individual state. Generally, the perpetrator

of the infringement of intellectual property rights must bear the full financial consequences of their behaviour (8). In cases where the state where the copyright infringement occurred is different from the state of residence of the author, when determining the amount of damages suffered in the form of missed licensing fees, the compensable amount is based on the market of the state where the infringement took place, as well as on all circumstances surrounding the infringement.

Since 2016, the European Online Dispute Resolution Platform (ODR) has been operational, provided by the European Commission, to ensure safer and fairer online shopping through access to quality dispute resolution tools (9).

If there is correspondence with a registered company and corresponding legal correspondence in the establishment of various legal relationships, the so-called electronic signature may be used in our country, regulated by Decision No. 4138/19.04.2023 on Administrative Case No. 4137/2021. The Supreme Administrative Court provides a detailed interpretation of the applicability of the types of electronic signatures regulated in our legislation (10).

Various specific computer systems are used in different sports. The main arguments of critics, such as Gary King from Harvard University, are that automated legal forecasting is based on a snapshot of statistics and cannot encompass the changes and diversity of the human factor that determines such changes (11). The debate regarding the criminal liability of artificial intelligence, for example, ranges from scientific innovations that could recently be likened to science fiction to legal-social control, which will inevitably affect sports legal relations and the entire sports industry. An important challenge is determining whose responsibility it is for damages caused by devices with artificial intelligence. Bulgarian criminal law theory and practice do not accept any entity other than a natural person as a valid bearer of criminal responsibility. Only against them, the goals of punishment could be achieved. Analysing these persistent views, artificial intelligence, which does not even possess legal personality at this stage of legal development, would find it very difficult to be regarded as criminally responsible in the near future. However, as science, technology, and the social relations

associated with them develop, the law will undergo transformations.

Opinions are already emerging that any legal entity may be held criminally liable. The criminal law regime for artificial intelligence may represent a combination of three models, which according to Gabriel Halavi are not mutually exclusive (12):

- Model of intermediary perpetration.
- Model of natural and foreseeable consequences.
- Model of direct responsibility.

"It should not be forgotten that the skills and habits acquired in sports, the relationships and norms of behaviour in sports, are used as tools of socialization to achieve social goals through schools and other organizations," states A. Dimitrova (13).

Attention must also be paid to sports-technical issues, such as the application of the VAR (Video Assistant Referee) system, which is a proper means of preventing not only refereeing errors but also opportunities for deliberate manipulation of the sporting event through the behaviour of its participants.

Although the integration of technology into sports, and in particular technology designed to assist referees in decision-making, is justified, it seems that sports have taken on a dual role concerning technologies (14).

Challenges

Video games, whether competitive or not, can pose inherent risks, especially for young people. They should be part of a lifestyle that includes physical exercise, social interaction, and school or work activities. In this regard, regulatory authorities must ensure that games with sensitive content do not remain uncontrolled in the hands of inappropriate audiences, or that player behaviour does not undermine the values upheld by the European Union. Although increasingly more risks are related not to the content of the game but to the context in which it is used, mechanisms for self-regulation in the sector, such as the **PEGI** (Pan European Game Information) system, are welcomed. This is a pan-European age rating system for games that has become a standard recognized across Europe, including by two-thirds of parents, and plays a crucial role in educating people to play video games in a healthy way (15). Such education can be successfully implemented through various programs, including

"Erasmus+," which "supports activities in the fields of school education, vocational education and training, adult education, and the youth sector (16).

CONCLUSION

Electronic technologies in sports, including so-called esports, are developing at an exceptionally rapid pace, often outpacing the evolution of regulatory frameworks. In this sense, these electronic technologies and sports cannot receive adequate protection that corresponds to their complexity. Therefore, it is advisable to involve legal expertise in their creation, as well as in any software product related to sports and sports activities. This would greatly benefit the countries of the European Union, considering the lack of coherence in the regulation of this area, which to some extent stems from frequent amendments to the regulatory acts of the individual national legal systems of the member states.

REFERENCES

1. Yonkova, N., Mediation and Artificial Intelligence. The Mediation in the Different Public Spheres Conference Proceedings, 38-54, 2021.
2. Slavchev, I. Dimitrov, V., Osnovni Karakteristiki na Elektornite Sportove. Sport, Nauka, menodzhmant – garantsia za uspeh. *NSA Press*, Sofia, 119-127, 2017.
3. Dimitrov, V., Osobenosti v pravната uredba na elektronnite sportive. *Proceedings of university of Ruse*, 56(7):66-70, 2017.
4. Dimitrov, V., Opasnostite v internet prostranstvoto-kompyutarni prestaplenia. Nauchno-prilozhni izsledvania vav fizicheskoto vazpitanie i sporta, *NSA Press*, Sofia, 115-120, 2015.
5. Conclusions Nils Wahl, 7. 4. 2016, H c/ Conseil de l'Union européenne et Commission européenne, C-455/14 P, t. 49.
6. Semov A. Rezhimat na kompetentnost na ES kato orientir za prilozhnoto pole na Pravoto na ES. www.lex.bg, Electronic edition ISSN 2682-9606, (accessed 25 September 2024).
7. Interpretative decision No. 3/2022, Sofia, 01.08.2024. The Supreme Court of Cassation of the Republic of Bulgaria, General Assembly of the Civil and Commercial College, in a court session on June 20, 2024.
8. Collection of judicial practice. Koch Media GmbH (C-559/20), ECLI:EU:C:2022:317).

- [https://eur-lex.europa.eu/legal-content/BG/Judgment of 28.4.2022 — Case p-559/20.](https://eur-lex.europa.eu/legal-content/BG/Judgment_of_28.4.2022---Case_p-559/20)
9. European Platform for Online Dispute Resolution (ODR) <https://ec.europa.eu/consumers/> (accessed on 25 September 2024).
 10. Supreme administrative court. Decision No. 4138 of 19.04.2023 by Adm. d. No. 4137/2021.
 11. Yonkova, N., Vaprosi na talkuvaneto, svarzano s elektronnoto administrativno pravosadie. www.lex.bg, Electronic edition ISSN 2682-9606, (accessed 25 September 2024).
 12. Hallevey, G., The Criminal Liability of Artificial Intelligence Entities - from Science Fiction to Legal Social Control, *Akron Intellectual Property Journal*, 4(2):171-201, 2010.
 13. Dimitrova, A. Sociologia na sporta (pp. 154) Universitetski uchebnik. Sofia: NSA PRESS
 - (2017). Dimitrova, A., Sociologia na sporta. *NSA Press*, Sofia, 154, 2017.
 14. Tamir, I., Digital Video Recorder Dodgers – Sport-Viewing Habits in the Face of Changing Media Reality. *Time & Society*, 28(4), 1319-1332, 2019.
 15. Report on eSports and video games A9-0244/2022., Own-initiative procedure: 2022/2027(INI) - 12/10/2022, Legislative Observatory, European Parliament, https://www.europarl.europa.eu/doceo/document/A-9-2022-0244_BG.html (accessed 25 September 2024).
 16. Gencheva, A., Spetsialnostta "sporten menidzhmant" v usloviyata na mobilnost po programa "Erazam+". Osnovni Karakteristiki na Elektornnite Sportove. Sport, Nauka, menodzhmant – garantsia za uspeh. *NSA Press*, Sofia, 92-100, 2017.