

Review

written by a member of a scientific jury,

for obtaining the educational and scientific degree "Doctor"

Doctoral Programme "Organisation and Management beyond the Sphere of Material

Production (Public Administration)"

at D. A. Tsenov Academy of Economics – Svishtov,

Department of Strategic Planning

Reviewer: Assoc. Prof. Gergana Slavcheva Dimcheva, PhD

University of Telecommunications and Posts - Sofia

Author of the thesis: Raphael Roettinger

Dissertation topic: SECURITY MANAGEMENT OF PUBLIC SPORT EVENTS: A CASE STUDY ON FOOTBALL STADIUMS IN GERMANY

Basis for writing the review: Order No. 259/20.03.2025 issued by the Rector of D. A. Tsenov Academy of Economics – Svishtov, the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the Implementation of the Law on the Development of the Academic Staff at D. A. Tsenov Academy of Economics – Svishtov, and the decision from the first meeting of the Scientific Jury held on March 28, 2025.

I. General presentation of the thesis:

The dissertation of the PhD student Rafael Roettinger submitted to me for review has been developed in accordance with the statutory requirements. The 337-page thesis is structured as follows: table of contents, list of figures, list of tables, list of abbreviations used, introduction, four chapters, conclusion, bibliography, appendices, declaration of originality of the thesis. The structure is logical and in accordance with the topic of the dissertation research. 321 literature sources have been used. 11 figures and 5 tables are included in the text. The appendices total 17 pages and include an interview questionnaire and a questionnaire survey.

The content of the individual parts of the dissertation is presented with the necessary logical sequence. The overall structure is subordinated to the proof of the research thesis by solving the tasks arising from the stated goal

The author knows literature well. Issues related to the security management of public sporting events in Germany are competently and reasonably brought out and analysed.

1. Relevance and significance of the developed scientific problem. Formulated object, subject, aim and tasks.

Public sporting events bring thousands of people together, creating a dynamic and multilayered environment where security is paramount. Managing security at such events requires an integrated approach that includes coordination between different public and private sector institutions, the integration of security frameworks and management methodologies, and effective risk management

This dissertation presents the growing importance of security management in contemporary society in the public and private sectors, with a particular focus on public events, specifically those at football stadiums. The study characterizes stadium security in Germany from the beginning of the National Concept for Sport and Safety in 1992 to the period of Euro 2024. It documents how past and possible future threats have revealed or could reveal gaps in existing security frameworks. It is also argued that unclear lines of authority between public and private security actors have been the cause of delayed or uncoordinated responses to security incidents.

In this regard, it can be said that the topic is extremely topical and has practical relevance. The doctoral candidate has well justified this relevance and topicality in the introduction of the dissertation research.

On the basis of an in-depth literature review, the degree of elaboration of the studied issues is determined, the unsolved and incompletely solved problems are clearly identified. Based on this, the thesis advocates and scientifically substantiates **the thesis** that "...stadium security is successful or unsuccessful depending on the institutional mechanisms governing public-private cooperation". The argument is based on data from Euro 2024, where venues with clear operational protocols between security contractors and police recorded fewer incidents than venues without standardised procedures.

The aim of this study is to determine optimal frameworks for public-private cooperation in the field of security and its enhancement in the organization of sporting events with a mass public character. As a result, the dissertation objectives have been formulated and fulfilled, which fully correspond to the aim and the main research thesis.

The object of the dissertation research covers the institutional frameworks that regulate the security of German football stadiums in the period 2022-2024. This includes the National Concept for Sport and Safety, state-level security regulations in 16 federal states, and venue-specific protocols for 10 Euro 2024 stadiums. The subject of the study is the coordination of activities between public authorities and private contractors responsible for the security of

sports events in Germany. For this purpose, between 800-1300 security personnel at each stadium and their coordination with municipal services, emergency services and law enforcement agencies were investigated. The study included communication patterns between the International Police Coordination Center in Neuss and security contractors, as well as the analysis of operational decisions regarding resource allocation and response to threats.

In order to achieve the goal and solve the set tasks, the PhD student has combined the use of different scientific and research methods, which complement each other: systematic literature review; method of analysis and synthesis; descriptive (descriptive) analysis; graphical methods, interviews with experts, quantitative research and case studies. The applied research approaches and methods were successfully selected and applied effectively, which contributed to the successful completion of the dissertation research.

The PhD student has also formulated restrictive conditions, providing the reasoning for each of them. This contributes to the clear definition of the scope of the study and its precision.

In **chapter one**, based on an in-depth literature study on the subject, the author of the dissertation research highlights the growing interdependence between the public and private sectors in the security sector. This in turn leads to the emergence of hybrid security models where private firms directly complement law enforcement agencies. Strategies for managing security through collaboration between the public and private sectors are explored. Security risks and their impact on society are highlighted in a separate paragraph. Particular attention is given to large-scale emergencies, such as terrorist attacks, natural disasters and industrial accidents, as well as attack situations and their impact on society.

The second chapter discusses practical and applied aspects of security management, focusing on the unique framework and strategies used in football stadiums in Germany. It begins with an in-depth exploration of the National Concept for Sport and Safety, highlighting its development, key principles and importance as a unique approach to security at public sporting events. The following paragraphs analyse the preventive and retributive measures set out within the National Concept for Sport and Safety and their legal context. In addition, the roles and responsibilities of security personnel are discussed in detail, including the reforms introduced in 2012 and their long-term impact on safety standards. Building on the exposition, Chapter Two outlines key factors for security management at public sporting events.

The third chapter of the dissertation is devoted to an empirical study of the practice of providing security at public sporting events. Based on a multi-methodological approach, four research methodologies are integrated, namely: a systematic literature review; qualitative interviews representing different expert perspectives; a quantitative study that analyses the experiences of security officers at UEFA EURO 2024; four case studies that historically

represent major security failures but partially adaptive response strategies, and provide depth and contextual specificity, compensating for the limitations of generalising n

Based on a literature review of existing research on stadium security and best practices for its management, the PhD student identifies gaps in security policies, crisis response frameworks and public-private coordination. It integrates empirical findings from security research, criminology and legal analysis.

The interviews, conducted in a semi-structured format, reflect the perspectives of experts from different hierarchical levels - security officers and event organisers. All interviewees confirmed that they complied with the requirements of the National Sport and Safety Concept regarding dedicated facilities for security personnel - a preparation and debriefing centre, a staff break room, a central operations centre, shared space with other service providers. The importance of the shared nature of these spaces is emphasised, with a focus on their role in fostering inter-agency communication and coordination, particularly during rapid and security-significant incidents. According to those surveyed, security operations need well-functioning internal briefing structures that use a variety of methods.

As a result of the quantitative research conducted, the PhD student concludes that effective security management in football stadiums requires: strategic alignment between stakeholders; the ability to adapt to emerging threats; effective partnership building; and optimised resource allocation.

In **chapter four**, the author addresses applied aspects of security management in the public sector. Specific cases of crises are evaluated, providing a deeper insight into specific challenges that football matches and stadiums pose for security management. Based on the results of the research and the theoretical rationale, recommendations for action in security provision are made in the following directions: building modular training programmes, technology integration, public-private collaboration, contingency plans. In a separate paragraph, critical success factors for security management are highlighted.

In the **Conclusion** the author summarizes the results of the studies on the research problem. He concludes that effective security management of stadiums requires frameworks for optimization of large-scale events similar to Euro 2024. Stresses the importance of continuous professional development of security personnel, enhanced communication networks and effective application of lessons learned from the past to contemporary challenges.

2. Expression of own opinion, length of elaboration, use of illustrated material, correctness of citation

Through a combination of theoretical analysis and empirical research, the PhD student very clearly expresses his own opinion on the issues under consideration, demonstrating a thorough understanding of the topic under study.

The dissertation is of sufficient length, has logical coherence and depth, and meets established academic standards

The included graphs and tables are clearly linked to the exposition and assist in understanding the main theses and arguments. The PhD student has followed the rules of citation, and the results and contributions obtained from other authors are duly and fully indicated in the bibliography. There are no signs of plagiarism.

There are no repetitions or digressions in the presentation of the dissertation research that would hinder the comprehension of the content. The dissertation demonstrates originality through research approaches and results that are reflected in the publications presented.

The dissertation complies with ethical standards

3. Abstract and publications on the topic

An abstract with a total length of 49 pages has been submitted with the dissertation research. In it, an outline is made with all the main highlights of the dissertation. It also includes a reference to the scientific and applied contributions, a list of publications, a reference to compliance with the national requirements under the regulations for the application of the Law on the Development of Academic Staff in the Republic of Bulgaria. Bulgaria and Declaration of originality of the dissertation. The abstract fully meets the requirements for its preparation, as well as the content of the dissertation. The doctoral candidate has published the key results of the dissertation research in 6 independent publications.

III. Scientific and applied contributions of the thesis.

The PhD student has brought out 4, fully adequate in nature and in essence, contributions of his work. They are defined as scientific and scientifically applied.

1) This dissertation offers a detailed analysis of security during Euro 2024, documenting the failures of the security framework. Empirical data on over 2,300 criminal incidents is included, with a particular focus on issues such as jurisdictional confusion, breakdowns in communication between law enforcement and private security. Operational gaps revealed by emerging threats such as the use of drones are highlighted. On this basis, a framework has been developed that integrates new security technologies with the requirements of legislation, ensuring better coordination and interoperability between the public and private sectors. Empirical validation through Euro 2024 data shows that structured technology integration

improves coordination. This finding is supported by a quantitative study that identifies gaps in inter-agency communication, perceptions of role risk and challenges to collaboration. Conducting frequent exercises and technological innovation are the key areas for improvement identified by experienced officers.

- 2) The dissertation research highlights how ill-defined boundaries of authority between public and private security actors lead to delayed and uncoordinated action. Supported by data on policing during Euro 2024, it reveals jurisdictional confusion between private security contractors operating in stadiums and police forces responsible for surrounding areas. This scholarly contribution also covers exemplary information on how emerging threats reveal gaps in existing security frameworks.
- 3) This dissertation offers a methodological contribution through a validated security analysis framework that uses mixed methods and is applicable to other large-scale events. The framework integrates a systematic literature review, structured interviews, quantitative studies and case study comparisons, successfully identifying gaps, communication barriers and patterns in security. The literature review identified gaps in research on security policies, crisis response frameworks, and public-private coordination. The interviews document communication barriers and regulatory blind spots, and include managing directors, security officers, Bundesliga security managers, and IT operations managers. Structured interviews with security professionals provide a basis for analyzing the operational reality behind the statistics gathered through the survey. The survey component, among employees in various security positions, provides statistical evidence that supports the conclusions drawn.
- 4) This dissertation develops an evidence-based framework for integrating public and private security at major sporting events. It has been empirically confirmed that venues with standardised security cooperation experienced significantly fewer incidents. Comparative analysis of venues following the National Sport and Safety Concept versus those with venue-specific protocols highlights the structural factors influencing outcomes. The study examines the command structures in Cologne, looking at the interaction between the five coordination centres and the flow of security information between 580 international police forces and 22,000 security officers.

The scientific and applied contributions in this dissertation are distinguished by their novelty and significance, offering innovative frameworks for security integration based on empirical data and real case studies. They contribute significantly to improving collaboration between public and private actors, as well as to the optimization of security at large-scale events.

I accept the contributions formulated by the PhD student, which are of high significance for science and practice.

IV. Critical notes, questions and recommendations on the dissertation.

The dissertation research is distinguished by a high degree of thoroughness achieved through detailed empirical and theoretical analysis, but the following remarks and recommendations can be made:

- > It would be good to use more visual elements to illustrate more clearly the methodology and the results of the studies.
 - > The subject of the thesis could be defined a little more concretely.
- > I recommend the PhD student to continue publishing in various international journals to promote his research by engaging more in collaborative work
- > I would take the liberty of recommending that the PhD student consider publishing the thesis as a book.

The remarks made do not diminish the quality of the results obtained and of the contributions made in the thesis.

V. Summary conclusion and opinion.

Considering the positive aspects of the dissertation research, the conclusions and generalizations drawn, the methodological approaches developed and the contributions made are fully adequate. The research tasks have been successfully fulfilled and the main objective has been achieved. The dissertation work **meets** the requirements of the Law for the Development of Academic Staff in the Republic of Bulgaria and the Regulations for its implementation, and the internal regulations of the D. A. Tsenov Academy of Economics - Svishtov for awarding the degree of Doctor of Philosophy. This gives me grounds for a **positive assessment of** the dissertation and **I propose to the Scientific Jury to award Rafael Roettinger the educational and scientific degree "Doctor", doctoral program "Organization and management outside the sphere of material production (Public Administration)".**

Date: 03.04.2025

Reviewer:

(Assoc. Prof. Gergana Dimcheva)