ABSTRACT OF THE DOCTORAL DISSERTATION

"The right to health from the perspective of the cross-border provision of telemedicine services in the European Union"

This doctoral dissertation proposes an analysis of the right to health from the perspective of the cross-border provision of telemedicine services in the European Union. It sets out, in the first place, to analyse the potential of telemedicine solutions as instruments that - from the point of view of its thesis - support the exercise of the right to health to either a broader or at least the current extent. The research questions dealt with throughout the argument as pertaining to the analysed matter focus on the significance, positioning, taxonomy, role, essence, objectives, features, specific attributes, and functions of telemedicine in the pursuit of the right to health in terms of the cross-border provision of such services in the European Union. As the analysis shows, identifiable risks or issues that the use of telemedicine poses in the exercise of the right to health are also of particular importance. Another important research question raised in the dissertation is whether, at the current stage of civilisation, technical, technological, and legal progress, telemedicine can be treated as a novel and advanced means to secure the right-tohealth guarantees as they stand currently, or perhaps even to extend these. This scientific dilemma, which is the key focus of the thesis, links closely to the core objective of this dissertation. Namely, in view of the above, the entire thesis sets out to scrutinise the truth of the following statement: "Telemedicine should be perceived as a novel and advanced means to support the exercise of the right to health to either a broader or at least the current extent."

A set of subsidiary objectives proposed will assist in arriving to the main conclusion of this dissertation and resolving the core scientific dilemma posed. These objectives include, first of all, a semantic and significative analysis of terminology used in the context of advanced technologies in the practice of healthcare services. The scope and significance of the right to health in the European Union are identified in the next step, which also entails a presentation of the concept of the right to health *in genere*. Thirdly, an analysis is given of the conditions, principles and interpretation of the law in the context of the cross-border provision of healthcare services in the European Union. Here, a basic question that cannot be avoided is whether telemedicine services can be classified as services within the meaning of European Union law. The fourth point covers a discussion of the problem related to the exercise of the right to health

in the European Union during the Covid-19 pandemic and the problem of the actual operation of cross-border healthcare in the European Union under the same conditions, along with a proposal for solutions to these. The fifth focus area of the dissertation is to identify measures to eliminate or mitigate remote healthcare cybercrime, which poses a risk to the effective use of the right to health in telemedicine. The analysis covering the subsidiary objectives provides the necessary input to effectively deal with the core research question that this doctoral dissertation sets out to resolve.

To this end, the thesis employs the formal-legal (linguistic-logical) method as the basic research method to enable a *de lege lata* analysis of the legislation in force based on the exegesis of a legal act. This analysis is further supported through the use of linguistic hermeneutics and a presentation of the views of the doctrine (legal theoretical method). The legal-comparative method is used to complement the thesis.

This doctoral dissertation contains five core chapters that focus on five main research questions, to cover in the order of discussion: advanced technologies in medicine; the concept of the right to health in the European Union; cross-border provision of healthcare services in the European Union; problems in the exercise of the right to health and the operation of cross-border healthcare in the European Union during the Covid-19 pandemic; remote healthcare cybercrime as a risk to the exercise of the right to health in telemedicine.

Chapter one presents, in semantic terms, a set of terminology used in the context of advanced technologies in the practice of healthcare services. Here, a taxonomy of the uses is proposed in the first step. Next, certification of digital medicine solutions is discussed, followed by an analysis of the very concept of telemedicine. The current and foreseeable benefits and risks posed by telemedicine are presented as the fourth aspect. The chapter ends with a brief summary of observations on the issues covered.

Chapter two outlines the scope and significance of the right to health in the European Union, which also entails a presentation of the concept of the right to health *in genere*. The considerations focus first on the objects of the right to health. Secondly, a historical background of the right to health is given as it has existed in the primary law of the European Union, with the point of reference being the legal status both before and after the Maastricht Treaty, along with separate observations on the significance of the Lisbon Treaty, which marked the beginning of another stage in the evolution of European integration. The right to health is then discussed as manifested in the current European Union legal framework. The fourth part covers considerations related to the right to health in telemedicine. The chapter ends with a brief summary of observations on the issues covered.

Chapter three analyses the conditions, principles and interpretation of the law in the context of the cross-border provision of healthcare services in the European Union. Here, a question whether telemedicine services can be classified at all as services within the meaning of European Union law is a fundamental one. Firstly, general considerations are given concerning the internal market in the light of the free movement of services. The second part of the analysis covers the free movement of healthcare services, with a special focus on the concept of healthcare services as such. Patients' rights in cross-border healthcare are the third area of discussion. Further, telemedicine services in cross-border healthcare are analysed, where both the definition of telemedicine services and the eligibility of telemedicine services as services in the internal market of the European Union are considered. The chapter ends with a brief summary of observations on the issues covered.

Chapter four presents the problems in the exercise of the right to health and the operation of cross-border healthcare in the European Union during the Covid-19 pandemic in the context of the existing options to provide telemedical services in the European Union, along with a proposal for solutions to these. This discussion starts with a general description of the Covid-19 pandemic situation. It moves on to present considerations over the impact of the Covid-19 pandemic on the legal system, with a particular focus on the use of law as an instrument to combat the spread of the virus. Next, the problem related to the exercise of the right to health during the Covid-19 pandemic is discussed, along with the problem of the actual operation of cross-border healthcare under the same conditions. As the fourth aspect, proposals are given for solutions to the problems of the right to health and cross-border healthcare in the European Union during the state of pandemic. The chapter ends with a brief summary of observations on the issues covered.

Chapter five identifies measures to eliminate or mitigate remote healthcare cybercrime, which poses a risk to the exercise of the right to health through telemedicine. First, observations are presented for the characteristics of remote healthcare cybercrime from the point of view of the theory. The analysis then proceeds to discuss the categories of remote healthcare cybercrime that can be identified and interpreted based on the relevant norms of public international law. The same legal frame of reference is used next to consider evidence-taking arrangements in prosecuting cybercrime in remote healthcare. Fourthly, a two-component proposal is made for the standardisation of telemedicine systems. On the one hand, it covers the standardisation of IT systems for telemedicine services based on the categories of remote healthcare cybercrime, and on the other, the standardisation of IT systems for telemedicine services based on the

categories of telemedicine evidence-taking procedures. The chapter ends with a brief summary of observations on the issues covered.

The doctoral dissertation ends with final conclusions to provide a comprehensive summary of the research findings and *de lege ferenda* proposals.