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# THE ALGORITHM AND SOURCE CODE – THE LEGAL CHALLENGES OF INTERNATIONAL TRADE

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#### Abstract

Artificial intelligence has been attracting the attention of legal experts since its commercialisation began. As AI (Artificial Intelligence) systems have a huge impact on society as a whole and alter the functioning of nearly all types of relationships, the need for legal regulation has emerged. Although some countries and international organisations have already made a step forward in this regard, certain components of artificial intelligence remain difficult to integrate into the legal system. The algorithm is such a component. Algorithms appear in various forms and differ depending on the systems that apply them. This fact makes their regulation even more difficult. Their use today is widespread in decision-making processes, and as such, they have a significant impact on individuals and society as a whole. This paper addresses the issue of the influence of national regulations and measures in this area on international trade flows.

Key words: Artificial Intelligence, Algorithm, Forced Disclosure of Source Code, Free Trade Agreements.

# АЛГОРИТАМ И ИЗВОРНИ КОД – ПРАВНИ ИЗАЗОВИ МЕЂУНАРОДНЕ ТРГОВИНЕ

#### Апстракт

Од момента када је кренула њена комерцијализација, вештачка интелигенција привлачи пажњу правника. Како системи вештачке интелигенције утичу на целокупно друштво и мењају начин функционисања скоро свих односа, појавила се потреба да се они правно регулишу. Иако су поједине земље и међународне организације већ учиниле искорак у том погледу, поједине компоненте вештачке интелигенције и даље су тешко уклопљиве у правни систем. Управо је ал-

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горитам таква компонента. Алгоритми се појављују у различитим видовима и разликују се од система до система који их примењују. Та чињеница још више отежава њихово регулисање. Њихова примена данас је широко заступљена приликом доношења одлука, и као такви имају велики утицај на појединца и друштво у целини. Рад се бави питањем утицаја националних регулатива и мера из ове области на међународне трговинске токове.

**Кључне речи**: Вештачка интелигенција, алгоритам, принудно откривање изворног кода, споразуми о слободној трговини.

#### **INTRODUCTION**

Artificial intelligence represents one of the innovations that, by its very existence, changes all aspects of social life. It has the power to modify and accelerate existing social and legal relations, as well as to shape and create new ones. The development of artificial intelligence is closely connected to the development of computer science and robotics. We are witnessing an increased use of smart robots and machines, self-driving (autonomous) vehicles, and unmanned aerial vehicles (drones). A significant application also requires a significant legal response, in order to enable a safe and secure application of artificial intelligence. The European Union is leading the way in this regard, but individual countries are not lagging behind either.

Artificial intelligence systems operate and function based on algorithms. For a set of input data, there must be an algorithm for the artificial intelligence to solve the given problem. In addition to the fact that artificial intelligence is widely used today, algorithms remain a kind of mystery. One of the more prominent dilemmas is how self-learning technology makes decisions and solves assigned tasks, and to what extent humans can control this process. Consequently, the risk of negative consequences for individuals, society, and the legal system is high.

Considering the fact that machine learning aims to improve the algorithm and the performance of AI systems through interaction and access to large amounts of data, it is clear why we understand less about how algorithms function. Therefore, the existence of regulation that provides security and reliability to stakeholders is extremely important. As the international community became aware of this fact, some countries began to act proactively to pass their own regulations related to the source code and algorithm. However, excessive regulation could affect access to the markets of these countries, thereby creating a trade barrier. This paper will address the impact of national measures and regulations in this area on international trade flows.

# THE ALGORITHM AS A COMPONENT OF ARTIFICIAL INTELLIGENCE

Algorithms are not a new phenomenon. They have been the most important part of any software for decades. Broadly speaking, algorithms can be specified as sets of predefined moves that process input data to produce output. This definition suggests that every part of a software is compounded of algorithms. This conceptual definition is both overly broad and overly narrow because viewing algorithms solely as computer code does not capture their full scope or complexity (Ebers, 2019, p. 41). According to this, no conclusions can be drawn about the legal and social implications of algorithms and source code. These phenomena cannot be isolated from the legal, political, and economic conditions in which they are developed and used.

# The Concept of Machine Learning Algorithm

Artificial intelligence has long been described as a new digital technology that changes most legal relationships, particularly commercial relations. It is debatable whether the term 'new' truly applies, as it was first conceptualised in the 1950s (Delipetrev et al., 2020, p. 4). The process of creating artificial intelligence must have included the following stages: first, understanding the principles; then, using human intelligence to design a system based on those principles; and, finally, building a system according to that design (Spector, 2006, p. 1251). However, today, when artificial intelligence systems are in widespread use, fundamental questions and dilemmas are again relevant. How does one define artificial intelligence and what are its basic principles?

There are numerous definitions that attempt to clarify the essential characteristics and components of this phenomenon. Originally, the term artificial intelligence was defined as human intelligence manifested through machines (Helm et al., 2020, p. 69). This definition, in a simple and general way, points to the purpose of the existence and operation of this technology, which is the imitation of human intelligence. However, such a conceptual definition does not tell us anything about the elements that make artificial intelligence different from other advanced technologies.

The European Commission defines artificial intelligence as a set of technologies that combine data, algorithms, and computing power, which actually represents hardware capability (EC, 2020). In Article 3 (1) of the EU AI Act, artificial intelligence systems are defined. According to the European Commission, artificial intelligence systems are software developed using specific techniques and approaches (e.g., machine learning, statistical methods, symbolic reasoning and expert systems) and, for a given set of human objectives, they can generate outputs such as deci-

sions, recommendations, or predictions that influence the environment with which the systems interact (EU 2024/1689).

The general definition of an algorithm is a step-by-step process or technique for solving a mathematical problem in a limited number of steps, typically involving the repeated execution of specific operations.<sup>1</sup> It is a set of mathematical instructions or rules, which, particularly when provided to a computer, help in finding the solution to a given problem.<sup>2</sup>

Machine learning, which is considered a subset of artificial intelligence, refers to the learning of systems based on experience. It is used to teach machines how to process data more efficiently (Mahesh, 2020, p. 381). Artificial intelligence systems have the ability to learn and improve their analyses using algorithms. These algorithms use large sets of input and output data to recognise patterns and to train, in this way, the machine to make autonomous decisions or recommendations. After a sufficient number of repetitions and modifications of the algorithm, the machine becomes capable of taking an input and predicting the output. The results are compared to a set of known outcomes to evaluate the algorithm's accuracy, after which the algorithm is iteratively modified to improve its ability to predict future results (Helm et al., 2020, p. 70). Before machine learning algorithms are applied, raw data must be pre-processed using filtering algorithms (such as those for feature extraction and dimensionality reduction) (Haddadin & Knobbe, 2020, p. 21).

## The Algorithm and Decision-making

Machine learning algorithms today play a crucial role in automated decision-making. They are used for profiling individuals and making decisions based on those profiles (Sancho, 2020, p. 136). To understand how an algorithm functions in decision-making, it is necessary to highlight the differences between the terms automated processing, profiling, and automated decision-making. These are distinct legal classifications and categories.

Processing is a broad and inclusive term, referring to any action or series of operations performed on personal data or data sets, regardless of whether automated methods and tools are used. Therefore, the basic inputs are personal data. The term 'automated' is generally used to describe the processing of information in a systematic, non-manual manner (Sancho, 2020, p. 138).

<sup>&</sup>lt;sup>1</sup> Merriam-Webster.com, 'Algorithm', available at: https://www.merriam-webster.com/ dictionary/algorithm, accessed: 14.10.2024.

<sup>&</sup>lt;sup>2</sup> Cambridge Dictionary.org, 'Algorithm', available at: https://dictionary.cambridge.org/ dictionary/english/algorithm, accessed: 14.10.2024.

Profiling is considered a preceding step that enables automated decision-making (Rajić Ćalić & Tošić, 2023, p. 574). According to the EU rules contained in the GDPR, profiling refers to any type of automated processing of personal data that is used to evaluate specific aspects of an individual, particularly to analyse or predict things like their work performance, financial situation, health, preferences, interests, reliability, behaviour, location, or movement (EU 2016/679). Profiling can be an extremely useful practice in the domain of efficient use of time and resources by public and private entities. With this technology, they can personalise their products and services and make optimal decisions more effectively. However, profiling can also have negative effects, such as discrimination and impact on consumers or service users. Therefore, legal mechanisms have been developed to neutralise these undesirable phenomena. The presented legal framework, established by GDPR, reflects the European Union's commitment to adapt its legal system to modern challenges and address contemporary issues in data protection.

In the available literature, three phases of processing are mentioned: data collection, data analysis and application (Sancho, 2020, p. 139).

The first phase is characterised by the collection of personal data by the controller from various sources. At this point, it is important to clarify the terms controller and data subject. The data subject is the person to whom the data relates, while the controller is the entity that determines the purposes and methods of personal data processing (EC 95/46). Data collection can be direct or indirect. Direct collection involves gathering data directly from the data subject. Indirect collection involves gathering personal data from other sources. This is most often done via the internet, mobile devices, and various applications, as well as through artificial intelligence systems integrated into household appliances, clothing, or vehicles.

The next phase is the analysis of the collected data. Computer hardware stores, links, and analyses large volumes of data in order to generate new information. The method by which new information is derived depends on the algorithm used. Machine learning algorithms are used to create profiles of individuals by analysing large datasets and the connections between those data.

In the final phase – the application phase – controllers implement the outcomes of automated processing, including profiling, and use these results to make decisions (e.g., issuing ratings, determining recommendations, or predicting trends). At this stage, there is a possibility that the controller directly applies the algorithm's output, or that a human - such as an analyst - makes the final decision.

Based on the above, we can conclude that automated decisionmaking is essentially the application of algorithms to make various types of decisions, whether those decisions require human intervention to be made or are made independently by the algorithm. Automated decisionmaking systems use complex mathematical algorithms to identify relationships within big datasets and, using this information, detect relevant trends and patterns (Waldman, 2019, p. 616). Profiling and automated decision-making also have negative implications for society. These primarily include discrimination, threats to privacy, the lack of objectivity when an individual is viewed as a member of a group, and to whom a decision is applied based on the probability assessment of the entire group (Hänold, 2018, pp. 129-132). Therefore, the presence of regulation and legal norms is crucial to neutralise these negative effects and create a favourable environment for the further development of advanced technologies.

#### LEGALLY SIGNIFICANT CHARACTERISTICS OF ALGORITHMS

Large amounts of collected data, which are somewhat chaotic and unstructured, are processed and systematised by algorithms, thereby interacting with their environment. Through this interaction, they make predictions and draw certain conclusions and decisions. This is why artificial intelligence systems can learn from their previous interactions and actions, allowing artificial intelligence to be both self-sustaining and self-improving (Haddadin & Knobbe, 2020, p. 16). In this section, we will present certain characteristics of algorithms, which are significant for the position and treatment of algorithms in the context of international trade law.

#### Data as the Foundation

In international trade law, data is often defined as information in digital form. Information is, in fact, data that has been presented in a meaningful or useful way. The existing literature typically distinguishes between data, which refers to raw facts, and information, which is data that has been processed, structured, and organised (Soprana, 2022, p. 48).

Big datasets form the foundation of algorithms. Algorithms are provided with data. With increased access to various types of personal and other data, algorithms can be more easily tested and improved (Aaronson & Leblond, 2018, p. 247). The expansion of artificial intelligence systems is primarily based on the availability of large amounts of data. In the past, easily accessible microprocessors and sophisticated algorithms played a significant role, but today, the focus is on the different types of data. The more data available to a learning algorithm, the more it can learn. Therefore, for the accuracy of output data (predictions, conclusions, decisions), the quantity of data used for training the algorithm is of crucial importance, rather than the type and characteristics of the algorithm itself. This is also the reason why many global struggles are centred on these data resources (Ebers, 2019, p. 62). Today, the most successful entities in the global market are the ones with the largest amount of data, on the basis of which they train their algorithms. The Algorithm and Source Code – the Legal Challenges of International Trade

As we live in the era of data, which is all around us and easily accessible, it has become a key resource driving innovation across all fields and economic growth. However, the increasing reliance on algorithms and artificial intelligence in various sectors raises significant concerns regarding privacy and data protection. The modern regulatory framework focuses on issues such as cross-border data flows, consent and transparency in data processing, compliance, and the effectiveness of existing data protection regulations. One of the main challenges in data protection and privacy is the proliferation of cross-border data flows, where data travels across national borders for processing, storage, or analysis. In the context of artificial intelligence, cross-border data flows are widespread, as these advanced systems often require access to big datasets from various sources in order to train algorithms and make decisions. However, the free flow of data across borders raises concerns regarding data sovereignty, jurisdictional conflicts in case of disputes, and the risk of unauthorised access or misuse of personal information (Igbinenikaro & Adewusi, 2024, p. 495).

Based on the above, the importance of cross-border data flows and preventing discriminatory measures, such as data localisation requirements, is rightly emphasised. Data localisation measures are among the most common regulatory tools used to block or hinder the free crossborder data flow. Any barrier to the free flow of data negatively affects the market and competition, and consumers bear the ultimate cost. The legal framework of international trade should aim to counter such discriminatory barriers by protecting data flows, with reasonable safeguards in the form of personal data protection (Mitchell & Mishra, 2017, p. 1112).

At this point, it is important to note that promoting transparency and accountability in data processing practices is desirable. This would allow for the responsible use of artificial intelligence and ensure that, in the context of international trade, individuals' rights to data protection are fully respected (Khan, 2024, p. 112). The issue of transparency regarding how machine learning algorithms function is not straightforward. We cannot explain how an algorithm works if we do not know how it was trained. Most often, the only ones who can answer this question and explain how algorithms process data are the engineers who designed them. However, even this is not always possible, as certain scientific questions remain open-such as how deep artificial neural networks function. Additionally, even if algorithms could be explained, the explanation would most likely not be useful or understandable to those who are not engineers. On top of this, there are also challenges in the legal domain, including significant resistance from companies to disclose how their algorithms work due to the protection of business secrets and intellectual property rights (Battaglini & Rasmussen, 2019, p. 339).

## Causality and Correlation

Most data collection methods depend on identifying correlations within a dataset. Getting valid results depends on correlation. Instead of looking for causality between relevant parameters, advanced algorithms are used to detect patterns and statistical correlations. Leveraging correlations, when statistical analysis indicates a significant relationship between factors, provides clear benefits in terms of speed and cost-efficiency. However, there is a danger that the result will be undesirable when correlation is increasingly seen as a sufficient basis for directing actions without first establishing causality between the data points.

Data analysis, actions, and far-reaching decisions based solely on correlations in probabilities can be seriously compromised by errors. First, relying on correlations without exploring causal effects carries the risk of making incorrect or contradictory decisions. The existence of a correlation in big datasets tells us nothing about which correlations are meaningful and which are not. If a strong statistical correlation is proven, it still does not speak about an individual within a certain group. The statistical correlation can lead to decisions or conclusions that are unjust for the individual. Identifying causality among data points in big datasets can be crucial for improving the quality of decisions, predictions, and conclusions (Ebers, 2019, p. 45).

As the available literature points out, it has recently been proven that, with the increase in the amount of data, the number of correlations that are not relevant and objective also increases. Distinguishing between relevant correlations and those that have no legal or social significance is becoming increasingly challenging (Zenil, 2017, p. 16). In the era of complex algorithms and big data, it is essential to develop the ability of those who analyse correlations in order to recognise causality and interpret the resulting outputs in accordance with the overall social environment.

#### Autonomy

The OECD Expert Group on Artificial Intelligence defines AI systems as machines capable of making predictions, recommendations, or decisions that affect real or virtual environments. These systems are guided by human-defined objectives and are designed to function with varying degrees of autonomy (OECD, 2019, p. 15). From this definition, we can see that this technology functions, to some extent, independently of the human factor that defined the input data. In the field of artificial intelligence, the term 'autonomy' is typically used to describe the ability of a machine to operate independently of human guidance. Algorithm autonomy is the feature that most worries scientists in the field of artificial intelligence. When these machines are described as autonomous, it means they can independently determine the appropriate course of action in various situations, without human input (Totschnig, 2020, p. 2474).

This characteristic of artificial intelligence is probably one of the greatest challenges for humanity. Systems that learn by themselves are not explicitly programmed. Instead, they are trained through millions of input parameters, allowing the systems to evolve by learning from experience. The increased use of artificial intelligence systems and algorithms presents significant challenges for legal frameworks. One of the key issues is the institute of responsibility for possible damage. When a system operates with a certain degree of autonomy, it becomes difficult to clearly assign responsibility for its actions—whether that responsibility lies with the developer, the service provider, or the seller (Ebers, 2019, p. 47).

Autonomy means that algorithms can behave in unpredictable ways, as they may arrive at solutions that humans may not have considered or have dismissed, realising there are better options. This becomes especially significant when AI systems cause harm to individuals. The situation is further complicated when the artificial intelligence system learns not only during the initial phase in which it is created, but also after it is released to the market. AI systems have this ability to learn throughout their existence. In such cases, even the most careful designers and developers will not be able to control or predict how the algorithm will behave in its environment.

For all these reasons, self-learning systems with a high degree of autonomy present a major challenge for legal systems (Ebers, 2019, p. 47).

The autonomous actions of artificial intelligence systems are not limited to their physical interaction with the world. As an increasing number of commercial and governmental activities take place in cyberspace, vast amounts of routine tasks can be performed without human involvement. A growing number of decisions is now being made by algorithms, which either make final decisions or provide decision proposals that are later subject to approval by the person nominally responsible for the decision (Chesterman, 2020, p. 239). In this way, the decision-making process by the authorised person becomes faster and more productive.

In addition to efficiency, automated processing can help ensure consistency and predictability. In some situations, algorithms are preferred to avoid the arbitrariness that often characterises human decisionmaking—due to carelessness, corruption, or other inherent human limitations. At the same time, shifting responsibility for decisions to machines introduces other problems, such as the possibility of discrimination or decisions that fall outside the current social and political context. It seems that relying solely on the actions of the machine and the algorithm is not enough to make the right decisions. This raises the dilemma of whether there are certain decisions that should not be made entirely by machines (Chesterman, 2020, p. 241). This raises many new social issues that should be analysed specifically from a legal perspective.

# THE DISCLOSURE OF SOURCE CODE – BETWEEN PROTECTION AND TRADE LIBERALISATION

Source code refers to the set of instructions written by programmers to direct a machine to carry out a specific task. The source code is typically written in a text file and is human-readable. The source code is written in one of the programming languages. It utilises programming languages such as Python, Java, R, or C++ (Dorobantu et al., 2021, p. 107). This section will analyse the impact of national regulations concerning source code on international trade and the position of source code in preferential trade agreements, which are significant sources of international trade law.

## Forced Disclosure of Source Code as a Measure to Protect the National Market

As the role of algorithms in the trade of goods and services increases, so does the number of national measures and policies related to their functioning and the execution of code. While the motivations of governments are primarily security-oriented, these measures can significantly impact the trade of products and services that rely on artificial intelligence. Mandatory source code disclosure measures act as trade restrictions. Several countries have already implemented laws that mandate access to, disclosure of, or transfer of source code as a requirement for market access. Source code creators use programming languages to translate the algorithm into source code, thus instructing the machine to perform a specific task. The core value of any AI system is the algorithm. In this context, mandatory disclosure of source code can be equated to a requirement for programmers to disclose the instructions included in the algorithm. Thus, the economic motive for creating these advanced systems can be lost. These elements are currently protected only as trade secrets (Soprana, 2022, p. 86).

Russia and China are among the first countries to adopt laws in this area. These countries are the first to implement mandatory requirements for the disclosure, granting access to, or transfer source code as a condition for market access. China passed the Cyber Security Law in 2017, which mandates that companies reveal proprietary formulas or designs in order to gain approval from regulatory authorities, putting them in a challenging and difficult situation. Companies must choose between the enticing opportunity to access the Chinese market and protecting their intellectual property from potential misuse (Cybersecurity Law of China, 2017). Similarly, companies that wish to operate in Russia must comply with

stringent requirements to share algorithms and source code with public authorities. Failure to do so will prevent them from offering their services in the country, in line with Federal Law No. 374 of 2016, which amends the Federal Law on Combating Terrorism and certain legislative acts of the Russian Federation related to the implementation of additional measures to counter terrorism and protect public safety (Soprana, 2022, p. 87).

Governments are motivated by various reasons to mandate the transfer, access, or disclosure of source code. Primarily, these can include legitimate political reasons to ensure the high quality of digital products and services, prevent the abuse of the dominant position, preserve market competition, ensure compliance with tax obligations, and cyber security. National laws may also require access to source code to increase transparency and provide mechanisms to protect national security as a whole. In addition to political reasons, governments may have protectionist motives. Through mandatory disclosure of source code, countries may seek to protect domestic companies and favour them over foreign ones. In such cases, these measures are discriminatory and clearly represent non-tariff trade barriers. Requirements for the disclosure of source code could be used to prevent foreign companies from exporting their products and services to the territory of the country enforcing such measures. The aforementioned requirements have a negative impact on market conditions. They could restrict trade to the extent that it affects the core interests of companies, which, by entering those markets, would risk losing the exclusive right to their algorithms and codes (Soprana, 2022, p. 88).

#### Provisions on Source Code in Certain Trade Agreements

In the absence of a universal agreement regulating the issue of international trade in goods and services supported by artificial intelligence, the subjects of international trade law have resorted to regulation within free trade agreements. Few of these agreements address artificial intelligence or its specific components. Below are those that include source code provisions.

More recent trade agreements include specific provisions concerning source code. The provisions of these agreements prohibit governments and their agencies from requiring the transfer or access to the source code of software owned by the other party. This is very important from the aspect of competition protection. The above mentioned general prohibition against public authorities demanding the transfer or access to source code is of significant importance. On the one hand, it promotes international trade by guaranteeing to code creators that their code will not be disclosed or transferred. On the other hand, even when exceptions exist, it restricts governments and their agencies from inspecting the source code (Dorobantu et al., 2021, p. 106). It is also desirable for trade agreements to foresee exceptions that reflect real needs and contribute to more secure international trade flows.

The USMCA Agreement (The United States-Mexico-Canada Agreement) contains a specific chapter titled Digital Trade. Article 19.1 defines an algorithm as a sequence of steps taken to solve a problem or achieve a result. Article 19.12 establishes a ban on data localisation, clearly promoting the fundamental rule of the free flow of information and thus supporting the development of algorithms. Article 19.11 states that the parties may implement measures that deviate from the free flow of data if required to pursue a legitimate public policy goal, as long as there is no unjustified or arbitrary discrimination or hidden trade restrictions. Data transfer restrictions cannot be more restrictive than necessary to achieve a legitimate objective. Article 19.16(1) states that neither party may require the transfer of or access to the source code of software owned by the other party, nor the algorithm expressed in that source code, as a condition for importing, distributing, selling, or using that software, or products containing that software, within its territory. Article 19.16(2) states that this article does not exclude the possibility that the regulatory body or the judicial authority of one party requires the person of the other party to save and make available the source code of the software, or the algorithm expressed in that source code, to the regulatory body for a specific investigation, inspection, law enforcement or legal proceedings, with protection against unauthorised disclosure (USMCA Agreement, 2020).

The United States–Japan Digital Trade Agreement, which was signed in 2019 and entered into force in 2020, in Article 17 similarly determines the protection of source code.

The European Union and Japan signed an agreement on economic partnership, which in the section F contains provisions related to electronic commerce. Article 8.73(1) addresses the issue of voluntary transfer of source code. A party may not require the transfer or access to the source code of software owned by a person from the other party. Nothing in this paragraph prevents the transfer or grant of access to source code in commercial contracts, or the voluntary transfer or grant of access to source code, for example, in the context of public procurement. Article 8.83 refers to the free flow of data. The parties have agreed that, within three years from this agreement's entry into force, they will reassess the need to include a provision on the free flow of data in this agreement (EU-Japan EP Agreement, 2019).

Provisions on source code present challenges for protecting the public interest, not only because of their content but also because of the possible ways in which they are formulated. The way in which key terminology is used and the logic behind the provisions directly impact legal certainty and the scope of protection, both for national markets and for global flows of international trade (Nikaj et al., 2024, p. 16).

## CONCLUSION

Algorithms and source code are key components of artificial intelligence. The source code, written in a programming language, instructs the machine on what tasks to perform and how to execute them. Provisions related to these categories remain relatively limited in number. These provisions can be found in the national legislation of certain countries as well as in more recent free trade agreements. From the point of view of individual countries, the existence of legislation that will require a forced disclosure of source code is a way to instil security in domestic entities and to not lose a comparative advantage in their own market. From the perspective of international trade, such provisions act as trade barriers that complicate commerce and threaten healthy competition. Consequently, trade agreements aim to maintain a balance by promoting the prohibition of forced source code disclosure, with certain exceptions for the protection of the public interest of states. It is essential to analyse how legal regulations follow the rapid development of artificial intelligence and the ubiquitous presence of algorithms, and to develop an appropriate system of regulations that will properly respond to the aforementioned phenomena.

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# АЛГОРИТАМ И ИЗВОРНИ КОД – ПРАВНИ ИЗАЗОВИ МЕЂУНАРОДНЕ ТРГОВИНЕ

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#### Резиме

Од свог настанка, вештачка интелигенција окупира пажњу научника. Паралелно са њеним развојем, развијала се и међународна трговина. Токови робе, услуга и капитала добили су нову димензију. Размена сада укључује размену производа који у себи садрже вештачку интелигенцију, и услуга које пружају системи вештачке интелигенције. Једна од три градивне компоненте вештачке интелигенције јесте алгоритам. Дефинисан као скуп унапред предвиђених корака како би се дошло до резултата на бази одређених улазних величина, представља својеврсну енигму за правну науку. Иако је досадашња регулатива из ове области скромна, позитивни импулси су присутни. У доношењу првих норми које се тичу података, вештачке интелигенције и алгоритма свакако предњачи Европска унија. Оно што је значајно, са аспекта права међународне трговине, јесте чињеница да се последњих година закључује све већи број споразума о слободној трговини који садрже посебне одредбе које се тичу алгоритама. Ове одредбе налазе се у деловима споразума који се односе на регулисање дигиталне трговине. Поред тога што су поједине државе протекционистички настројене према свом тржишту, наведени споразуми се залажу за слободан прекогранични ток података и неутралисање негативних ефеката принудног откривања изворног кода као услова за приступ тржишту. Од изузетног је значаја постићи баланс између либерализације и протекционизма у контексту откривања и преноса изворног кода. Остаје нам да анализирамо како ће се регулатива из ове области развијати и на који ће начин то утицати на међународну трговину робом и услугама.