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OBLIGATION TO UPDATE DIGITAL PRODUCTS IN DELIVERY AGREEMENTS

ABSTRACT: The aim of this paper is to analyze the legal obligations to update digital products within the context of contracts for the supply of digital content and digital services. Through a legal analysis of the provisions of the German Civil Code relevant to this obligation, the study explores the specificities that make this requirement distinctive for digital products. The research methodology includes a qualitative analysis of legal texts and relevant literature to identify key elements and challenges in the implementation of the obligation to update. The findings reveal that suppliers are legally obliged to provide updates for digital products even when such an obligation is not explicitly stipulated in the contract. This research contributes to a better understanding of the legal aspects of updating digital products and provides a foundation for future legislative initiatives and practical guidelines for suppliers.

Keywords: *delivery agreement, digital products, updating obligation, consumer, supplier*

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1. Introduction

Today's society cannot be imagined without digital products, which encompass both digital content and digital services. Digital content includes data produced and delivered in digital form, such as computer programs and applications, while digital services allow consumers to create, process, and store data in digital format, as well as interact with that data via online platforms and other tools (Article 3 of the Act on Certain Aspects of Contracts for the Supply of Digital Content and Digital Services of the Republic of Croatia, 2021). With the emergence of digital products, a new form of contract has also emerged, known as the contract for the supply of digital products. This contract obligates the supplier to deliver the digital product to the consumer, while the consumer agrees to pay the agreed price. Although it can be argued that there is no special type of contract such as the contract for the supply of digital products, and that digital content can be sold, rented, or given as a gift, while digital services are provided, hence they correspond to named contracts such as sales, lease, gift, or service contracts, the contract for the supply of digital products still has its unique legal nature. This contract, in addition to elements of named contracts, also has *sui generis* elements arising from the specifics of digital products as the subject of the supplier's obligation under that contract. One of these *sui generis* elements is the supplier's obligation to update, which has the potential to transform a one-time exchange between the supplier and the consumer into a long-term contractual relationship. The interest of the author of this paper focuses precisely on this supplier's obligation. The legal analysis of this obligation is based on the relevant provisions of the German Civil Code that regulate contracts for the supply of digital products (Articles 327 – 327u of the German Civil Code, 1896), which became part of that code by the adoption of Directive (EU) 2019/770. Given that the supplier's obligation to update can only be excluded under very strict conditions, such as the obligation to inform the consumer about any deviations of the digital product from objective requirements before concluding the contract (Article 327h of the German Civil Code, 1896), and the fact that the supplier is usually not the manufacturer of the digital product, but will have to ensure updates through contracts with suppliers or manufacturers, it becomes clear what challenges suppliers face due to this obligation (Lunk & Meurer, 2022, p. 393).

The analysis of the obligation to update digital products is crucial for identifying the legal and practical challenges suppliers face and contributes to the improvement of the legal framework and consumer protection in the digital age. Understanding the legal basis and specifics of this obligation contributes

to better regulation and market alignment of digital products, which in the long run increases consumer trust and market stability.

2. Theoretical Framework and Methodology

Following the introductory section that lays the foundation for understanding the obligation to update digital products, this chapter describes the research methods used in this study, as well as the materials that formed the basis for the narrative. The qualitative research methodology employed in this study encompasses several key steps, allowing for a deep understanding of the legal framework and practical implications of the obligation to update digital products.

Analysis of Legal Texts

The first phase of the research involved the analysis of legal texts, where the primary research method focused on analyzing relevant legal documents, with a particular emphasis on the provisions of the German Civil Code (BGB) that regulate the obligation to update digital products. Specifically, Articles 327 to 327u of the BGB, which became part of the Code through the implementation of Directive (EU) 2019/770, were used. This analysis provided a deep understanding of the legal framework governing the obligation to update digital products in Germany, laying the groundwork for further research and analysis.

Analysis Technique: A content analysis methodology was used to identify key provisions and their significance in the context of the updating obligation. The analysis included decomposing legal texts into their basic elements and evaluating each element in relation to the supplier's obligation to provide updates. Steps in the analysis included:

- Identification of relevant legal documents and articles within the German Civil Code.
- Decomposition of legal texts into individual provisions.
- Evaluation of legal provisions through comparison with EU practice and international standards.
- Synthesis of findings to formulate implications for suppliers and consumers.

Literature Review

The second phase of the research included a literature review, where the secondary method involved reviewing and analyzing existing literature

in the field of digital product law. In this phase, the works of legal experts and commentaries on legal provisions, such as the studies by Buchmann & Panfili (2022), Mayasilci (2022), and other authors who have written about the obligation to update digital products, were analyzed. This literature provided additional insights and perspectives that were crucial for forming a comprehensive understanding of the topic.

Materials Used for Forming the Narrative of the Study

The materials used for forming the narrative of the study include the following sources: legal texts, legal literature and commentaries, legislative documents and explanations, as well as practical examples and case studies. The main legal document used for analyzing the obligation to update digital products was the German Civil Code (BGB), with a special focus on Articles 327–327u which regulate this obligation. Additionally, a key source was Directive (EU) 2019/770, which deals with certain aspects of contracts for the supply of digital content and digital services, and which has been implemented in the BGB. The legal literature used in the study includes works such as Buchmann & Panfili (2022), which provide a detailed analysis of the new rules for digital products in the German Civil Code, and Mayasilci (2022), which focuses on the content and significance of the update obligation introduced into civil law. The works of authors like Klinik-Straub (2022), who examines the reform of obligation law in the context of contracts for digital products, were also utilized.

Additionally, legislative documents and explanations were used, including the "Rationale of the Draft Law for the Implementation of Directive (EU) 2019/770", which provides the rationale for the draft law implementing Directive (EU) 2019/770 into the German Civil Code. Finally, practical examples from the practice of digital product suppliers, including case studies illustrating the implementation of the update obligation, were essential for understanding how this obligation is carried out in the real world and what challenges the relevant actors face. In addition to the analyzed legal texts and legal literature, considerations were made regarding how the future legislative framework in Serbia might be shaped under the influence of European standards, with a special focus on regulating the obligations for updating digital products. It is expected that the adoption of such regulations could significantly enhance consumer protection and ensure legal certainty in Serbia's digital economy.

3. The Necessity of Software Updates

Software represents a special type of digital product that requires regular updates to remain functional and secure. Due to rapid technological development, software becomes obsolete within a few years if not updated. The main reasons for software updates are:

- Correction of errors and bugs that affect the functionality and stability of the software
- Improvement of performance and speed of the software
- Ensuring compatibility with new hardware and other software
- Fixing security vulnerabilities and protecting against cyber threats
- Adding new features and enhancing user experience

Software suppliers have a legal obligation to provide regular updates for their products within a certain period. However, in practice, they may stop providing support and updates after some time. The digital transformation of business models, including aspects such as updates and upgrades of digital products, is thoroughly analyzed in the work of Schallmo, Williams, and Boardman (2017).

The consequences of outdated, non-updated software can be serious, ranging from loss of functionality and inability to access data to compromising system security. Therefore, users must be aware of the importance of regular software updates and demand that manufacturers fulfill their legal obligations. In the future, regulations on the mandatory minimum support and updates that software manufacturers must provide will likely need to be tightened. This is necessary to protect the interests and rights of software users.

Regular software updates are imperative for maintaining its functionality and security. Just as a car owner expects the manufacturer to fix safety defects for free, even if the vehicle is new, software users have the right to receive updates that fix identified errors and omissions. Unfortunately, software code, as a product of human creation, can never reach perfection. Despite the utmost dedication, programming teams cannot foresee all potential problems. Therefore, the process of improving software is continuous and necessary. New security holes, interoperability issues, and opportunities for performance and user experience improvements are discovered daily. Updates provide remedies for these issues. If users ignore them, the software becomes increasingly insecure and less usable. Operating systems like Windows require regular installation of security patches. Failing to do so makes the computer vulnerable to hacking and data loss. Similarly, applications like Zoom or

Facebook require the latest versions to provide access to new features and maintain compatibility. Although every update carries the risk of regression, experts agree that the benefits far outweigh the risks. Updating or not is a false dilemma—it is an imperative for maintaining software functionality. Continuous software development is analogous to regular car maintenance. Without it, the system inevitably becomes unsafe and unusable. While software maintenance reduces the number of bugs, software will never be perfect, hence its constant maintenance is necessary (Pfleeger, & Atlee, 2010). Without regular maintenance, although the number of bugs initially decreases, software enters a phase of so-called software aging. Software aging refers to the situation when, despite maintenance, software becomes too complex and difficult to further improve. This occurs due to several factors:

- Accumulation of technical debt. Although developers continuously fix bugs, they often introduce new bugs or temporary patches that later become problematic. Over time, a growing mass of poor code is created, which is hard to maintain.
- Erosion of architecture. Over time, deviations from the original software design occur, introducing changes that compromise the integrity of the architecture. The software becomes an incoherent patched structure.
- Obsolescence of technology. Technologies used for the original software become legacy and harder to integrate with newer solutions. Old software becomes incompatible.
- Lack of documentation. Knowledge about how the software works fades over time. Programming teams change and lose the institutional knowledge needed to maintain the system.
- Increasing complexity. Larger and more complex software is harder to maintain and debug. Even small changes can cause unforeseen consequences.

To avoid software aging, sometimes it is necessary to redesign or rewrite the software from scratch on a new platform. This allows resetting errors and technical debt, restoring the architecture, and utilizing modern technologies. Of course, this is an expensive and risky endeavor but sometimes necessary to extend the lifespan of a valuable software system.

Strategies such as agile development, continuous integration, automated testing, and better documentation can slow down the process of software aging. But in the end, most software requires redesign if it is to survive the test of time. Software maintenance is a dynamic process of adaptation, not a one-time effort.

4. Provisions of the German Civil Code Relevant to the Obligation to Update

For a digital product to be in conformity with the contract (simply put, conforming or compliant), it must be delivered to the consumer without material and legal defects (Article 327d of the German Civil Code, amended in 2021, in accordance with Directive (EU) 2019/770). The provisions relevant to the obligation to update concern material defects. A digital product has no material defects if it meets the so-called subjective and objective requirements, as well as the requirements regarding integration, all three of which must be cumulatively fulfilled (Article 327e para.1 of the German Civil Code, amended in 2021, in accordance with Directive (EU) 2019/770). Of these requirements, the subjective and objective requirements are relevant for the obligation to update. Specifically, a digital product meets the subjective requirements if the supplier, among other things, makes updates available to the consumer for the period specified in the contract between the supplier and the consumer (Article 327e para.2 no. 3 of the German Civil Code, amended in 2021, in accordance with Directive (EU) 2019/770). Thus, it is an expressly agreed obligation of the supplier to make updates available to the consumer, the type, frequency, scope, and duration of which are determined by the supplier and the consumer (Buchmann & Panfili, 2022, p. 162; Mayasilci, 2022, p. 12). However, even if the obligation to update is not expressly agreed upon in the contract for the supply of the digital product between the supplier and the consumer, the supplier still has such an obligation. Specifically, a digital product meets the objective requirements if the supplier, among other things, makes updates available to the consumer and informs them about them in accordance with the rules of Article 327f of the German Civil Code (Article 327e para.3 no. 5 of the German Civil Code, amended in 2021, in accordance with Directive (EU) 2019/770), which thoroughly regulates the supplier's obligation to update.

Article 327f of the German Civil Code stipulates that the supplier must ensure that, during the relevant period, updates necessary to maintain the conformity of the digital product are made available to the consumer, and that the consumer is informed about these updates. Necessary updates include security updates. Regarding the relevant period for which updates must be available, a distinction is made between contracts for the continuous supply of a digital product and contracts that provide for a one-time supply of a digital product or a series of individual supplies of a digital product. In the case of contracts for the continuous supply of a digital product, the relevant period is the entire agreed period of supply, while in the case of a one-time supply

of a digital product or a series of individual supplies, it is the time interval that the consumer can expect, taking into account the type and purpose of the digital product, as well as the circumstances under which the contract was concluded, and the type of contract (Article 327f para. 1 of the German Civil Code, amended 2021, in accordance with Directive (EU) 2019/770). However, the installation of updates is not the obligation of the supplier but is left to the will of the consumer. Thus, the consumer may or may not install the updates, which will have certain consequences. Specifically, if the consumer fails to install the updates within a reasonable period, the supplier is released from liability for a material defect based solely on the missing update, provided that the supplier informed the consumer about the availability of the updates and the consequences of failing to install them, and that the reason the consumer did not install or did not properly install the updates was not due to incorrect installation instructions provided by the supplier (Article 327f para. 2 of the German Civil Code, amended 2021, in accordance with Directive (EU) 2019/770).

The provisions of the German Civil Code (Bürgerliches Gesetzbuch, BGB) that regulate the obligation to update digital products provide a significant legal framework for analyzing this obligation in the legislative context of the Republic of Serbia. Namely, Article 327e BGB stipulates that digital products must meet subjective and objective requirements, including the obligation of suppliers to provide updates necessary to maintain product conformity (Buchmann & Panfili, 2022, p. 162). The importance of intellectual property protection in the context of digital products is further emphasized in the works of Bently and Sherman, who provide a comprehensive overview of key aspects of intellectual property (Bently & Sherman, 2021). This principle is also relevant to Serbian legislation, where the need to regulate continuous support and updates of digital products is recognized to protect consumer rights and ensure the long-term functionality and security of software (Mayasilci, 2022, p. 12). Introducing similar legal provisions into Serbia's legal system could significantly contribute to legal certainty and better consumer protection in the digital environment, which is especially important given the increasing number of digital products and services on the market (Klinik-Straub, 2022, p. 6). Moreover, the relevance of German provisions lies in their detailed guidelines for suppliers about their obligations, which can serve as a model for formulating specific legal solutions in Serbia that will be in line with European standards and practices (Lunk & Meurer, 2022, p. 393).

In the context of the legislation of the Republic of Serbia, the relevant legal provisions currently do not comprehensively cover the obligation to

update digital products, but existing laws, such as the Law on Obligations and the Consumer Protection Law, provide a basis for further regulation. The Law on Obligations, in Article 478, stipulates the seller's liability for material defects in goods, which could be extended to digital products through a more precise definition of the suppliers' obligations regarding updates (Law on Obligations, 1978). Additionally, the Consumer Protection Law contains provisions that protect consumers from unfair business practices and ensure the right to information, which includes the obligation of suppliers to provide clear information about updates and their consequences (Consumer Protection Law, 2014). Implementing specific provisions on the obligation to update digital products in these laws would contribute to better consumer protection and alignment with European legal standards, especially given the growing importance of digital technologies in everyday life (Directive (EU) 2019/770, 2019). By introducing such legal solutions, Serbia would ensure that its legislation keeps pace with contemporary legal challenges and technological development.

5. Specification of the Obligation to Update

As mentioned in the introduction, the supplier often will not be the manufacturer of the digital product and therefore will not be able to produce the necessary updates themselves. However, this is not expected of them (Mayasilci, 2022, p. 10). The supplier is obligated to ensure that the necessary updates are available to the consumer. From this formulation, it follows that the supplier does not need to personally fulfill the obligation to update but can use assistants to fulfill this obligation (Mayasilci, 2022, p. 10), for example, by involving the manufacturer in the process of fulfilling this obligation.

A frequently asked question regarding the obligation to update is what exactly this obligation entails: does it only refer to so-called Updates, or does it also include Upgrades? According to one view in German literature, given that the supplier is only required to provide updates necessary to maintain the conformity of the digital product, this refers exclusively to Updates, which ensure the compatibility and security of the digital product, while Upgrades, or enhancements to the digital product, are not required to be provided by the supplier (Klinik-Straub, 2022, p. 6). Conversely, another view holds that the term update as a collective term encompasses both Updates and Upgrades, but the supplier is not obligated to provide improvements to the digital product beyond what is necessary to maintain its conformity (Lunk & Meurer, 2022, p. 393). The Rationale of the Draft Law for the Implementation

of Directive 2019/770 (hereinafter referred to as the Rationale of the Law) states that precisely distinguishing between the terms Update and Upgrade in this context is not necessary, and the term update is used as a superior term that encompasses both types of improvements or changes. The focus should be on the key feature of the obligation to update, which is to provide updates necessary to maintain the conformity of the digital product (Rationale of the Law, p. 58). However, some authors believe that the legislator's interpretation is incorrect and that the term update cannot encompass both Update and Upgrade. Namely, Directive 2019/770 clearly distinguishes between changes such as updates (Update) and improvements (Upgrade). Accordingly, Upgrade cannot be treated as a subtype of update but represents a synonym for the term improvement. Therefore, updates and improvements should be distinguished, as Upgrades involve changes to the digital product that are subject to the strict requirements of Article 327r of the German Civil Code. This article addresses the issue of changes to the digital product that go beyond what is necessary to maintain the product's conformity. During the duration of the contract for the supply of a digital product, the supplier may make such changes only if the possibility of changes and the serious reasons for the change are provided for in the contract, without additional costs to the consumer, and with clear and understandable consumer notification about the changes. Thus, the terms Update and Upgrade, which require interpretation anyway, should be abandoned, and the essence of the obligation to update should be emphasized, which is the maintenance of the conformity of the digital product (Buchmann & Panfili, 2022, p. 160).

The problem arises from the fact that precisely defining and distinguishing the terms Update and Upgrade is not always possible. In the Serbian language, the terms “ažuriranje” and “Update” are often used as synonyms and denote changes made within the existing version of the software, while “Upgrade” refers to an upgrade, i.e., transitioning from an old version to a new version of the software. However, in practice, all three terms are often used interchangeably. Accordingly, attempts to distinguish between them may seem unnecessary and ineffective for specifying the obligation to update. Therefore, to specify the obligation to update, one should rely on the legal text, according to which the supplier owes updates necessary to maintain the conformity of the digital product. This includes all updates necessary to maintain the functionality, compatibility, and security of the digital product. The functionality of the digital product refers to its ability to perform its functions according to its purpose, while compatibility refers to the ability to operate with appropriate hardware and software without the need for conversion (Article 327e para. 2

of the German Civil Code, amended 2021, in accordance with Directive (EU) 2019/770). The supplier must make security updates available to the consumer regardless of the fact that security defects, so-called software vulnerabilities, do not affect the functionality of the digital product. Security defects create the possibility for so-called cybercrime, and thus, security updates aim not only to prevent material damage but also to protect the consumer's personal rights (Mayasilci, 2022, p. 14). The importance of protecting user privacy in the context of digital products is highlighted in the research by Bourreau and Gaudin, which shows consumers' willingness to pay for privacy protection on mobile applications (Bourreau & Gaudin, 2018).

6. Duration and Timing of the Obligation to Update

As already mentioned, the period during which the supplier is legally obliged to ensure the availability of updates to maintain the conformity of the digital product in contracts for the supply of digital products that provide for continuous supply coincides with the entire agreed supply period. This is clear and does not require further explanation. The problematic cases are the remaining ones, such as contracts that provide for a series of individual deliveries or a one-time delivery of a digital product. In these cases, the period during which the supplier is obliged to provide updates depends on the type and purpose of the digital product, as well as the circumstances under which the contract was concluded. For contracts that are exhausted in a one-time exchange of performances, the supplier's obligation lasts for a certain period after the exchange (Lunk & Meurer, 2022, p. 394). A one-time exchange of performances takes on the character of a continuous contractual relationship (Buchmann & Panfili, 2022, p. 159). This imprecision and abstraction of the solution pose a difficult task for the supplier (Buchmann & Panfili, 2022, p. 163). The rationale of the law explains that this period is determined based on the justified expectations of the average consumer, considering the type and purpose of the digital product, as well as the circumstances of concluding the contract and the type of contract. For example, operating software for an internet-connected device can be expected to be provided with updates for a longer period than application software that does not require an internet connection. The regular release of new versions of the digital product by the supplier does not affect the justified expectations of the average consumer, unless the regular release is objectively necessary due to external factors, as is the case with tax advisory software. The rationale of the law also suggests considering criteria such as the resale of the digital product and the risks posed

without updates (Rationale of the Law, 2022, p. 59). Literature indicates that the justified expectations of the average consumer are higher for more expensive digital products than for more affordable alternatives (Buchmann & Panfili, 2022, p. 163).

An important issue that the law does not explicitly address is the timing when updates should be made available to the consumer. The rationale of the law states that, for the practical efficiency of the obligation to update, updates must be made available to the consumer within a reasonable timeframe after the digital product becomes non-conforming. However, the legal text does not refer to updates necessary to rectify non-conformity, but rather to updates necessary to maintain the conformity of the digital product. This suggests that updates should prevent the digital product from becoming non-conforming. Updates must be made available to the consumer at the time necessary to avoid the non-conformity of the digital product, i.e., disruptions in functionality, compatibility, or security of the digital product. The practical feasibility of this requirement remains unclear, but it is evident that the legislator did not consider this aspect. If updates are not made available to the consumer in a timely manner and there are disruptions in functionality, compatibility, or security of the digital product, the product has a material defect. In such a case, the consumer has the right to request the rectification of the defect, which may include repairing the product, providing the necessary updates to rectify the defect, or replacing the digital product (Articles 327i and 327l of the German Civil Code, 1896). However, the choice of the method of rectifying the defect does not belong to the consumer but to the supplier (Klinik-Straub, 2022, p. 6). This means that the supplier can decide to replace the digital product instead of providing the necessary updates, which further supports the thesis about the contradiction between the rationale of the law and the legal text (Buchmann & Panfili, 2022, p. 163).

The new European Union initiative called the Digital Product Passport (DPP) represents a significant step towards improving the tracking, identification, and transparency of digital products on the EU market (Worldfavor, 2023). The Digital Product Passport allows for detailed tracking of the entire life cycle of a product, from production to recycling, thereby increasing the accountability of manufacturers and suppliers. This initiative aims to enhance sustainability, reduce the ecological footprint, and improve consumer protection by providing clear information about the composition, origin, and environmental impact of products. The implementation of the DPP enables consumers to make informed decisions, while legislators and suppliers gain a tool for monitoring compliance with legal regulations.

Additionally, the Digital Product Passport encourages innovations in the field of the circular economy, as it facilitates the identification and reuse of materials. This initiative, which is part of the broader European Union strategy for digital transformation and sustainable development, can serve as a model for legislative reform in Serbia, particularly in the context of regulating the obligation to update digital products. Integrating similar solutions into Serbian legislation would contribute to improving legal certainty and consumer protection, as well as enhancing environmental standards at the national level. Within the DPP framework, there is also an obligation to update the information contained in the passport throughout the entire life cycle of the product. This means that manufacturers and suppliers must regularly provide updates that reflect changes in the product's composition, performance, safety features, and environmental impact. This obligation to update ensures that the information in the digital passport is always accurate and relevant, thereby further increasing transparency and consumer trust. The implementation of such obligations in Serbia could significantly contribute to better information management practices for digital products and ensure that consumers are adequately informed throughout the entire product life cycle.

7. Installing Updates

The German Civil Code (Bürgerliches Gesetzbuch, BGB) stipulates that the supplier is not liable for a material defect in the digital product if the consumer fails to install updates within a reasonable time, provided that the supplier has informed the consumer about the availability of the updates and the consequences of failing to install them, and that the failure to install or improper installation is not caused by incorrect instructions from the supplier (Article 327f para. 2 of the German Civil Code, amended 2021, in accordance with Directive (EU) 2019/770). The term “installing” refers to the measures the consumer must undertake, which include copying the content of the updates and executing other necessary steps specified by the supplier (Rationale of the Law, p. 60). The consumer should install the updates within a reasonable period, and the determination of this period is left to judicial practice. The rationale of the law provides guidelines for determining a reasonable period, taking into account the risks to the consumer’s digital environment in case of non-installation (especially for security updates), the time required for installation, and the impact of updates on other hardware and software (Rationale of the Law, p. 60). The supplier is only obligated to ensure the availability of updates to the consumer. The decision to install updates lies

with the consumer. If the consumer decides not to install the available updates, they cannot expect the digital product to remain compliant, nor can they hold the supplier liable for a material defect (Buchmann & Panfili, 2022, p. 164).

The supplier is legally obligated to inform the consumer about the availability of a new update. However, this obligation does not end with this act. For each update, the supplier must clearly outline the consequences of failing to install the update. The more serious the consequences, the more clearly the consumer must be warned (Rationale of the Law, p. 60). Informing the consumer primarily relates to the consequences of missing the installation on the functionality and security of the digital product. The consumer must also be informed about the impact of their decision not to install updates on the supplier's liability for material defects (Buchmann & Panfili, 2022, p. 164). Thus, the consumer must be informed about the availability of updates as well as the actual and legal consequences of failing to install them. This enables the consumer to make an informed decision about installing updates (Buchmann & Panfili, 2022, p. 164).

8. Conclusion

The analysis of the supplier's obligation to update digital products, based on the provisions of the German Civil Code and applied in the context of Serbian legislation, leads to several key conclusions. Digital products, due to their specific nature, require continuous updates to maintain essential functionalities and security, which is crucial for consumer protection. This obligation arises from the need to maintain the compatibility and security of products, ensuring their long-term usability and user satisfaction. The legal basis for the obligation to update is not limited to explicitly agreed conditions, as the legal framework, particularly the German Civil Code, provides for it even when not expressly stated in the contract. This implicit obligation is significant for legal certainty and consumer protection, ensuring the responsibility of manufacturers and suppliers to maintain digital products. The provisions of the German Civil Code serve as a foundation for analysis, but their relevance to Serbian legislation is especially important in recognizing the need for similar legislative solutions. Tightening regulations on the mandatory minimum support and updates that software manufacturers must provide could significantly contribute to consumer protection and maintaining high-quality standards for digital products in the Serbian market. Suppliers face significant legal and practical challenges regarding the obligation to update. These challenges include coordinating with digital product manufacturers

and informing consumers about the availability and consequences of updates. Effective communication and transparency with consumers are key to successfully fulfilling these obligations and avoiding potential legal issues.

Further regulation and clear definition of the obligations to update digital products in Serbian legislation are necessary. Additional regulation would provide better consumer protection and ensure that digital products remain reliable and safe throughout their lifecycle. Suppliers should adopt proactive strategies to fulfill their obligations, thereby increasing consumer trust and the long-term value of digital products.

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OBAVEZA AŽURIRANJA IZ UGOVORA O ISPORUCI DIGITALNIH PROIZVODA

APSTRAKT: Cilj ovog rada je analiza pravne obaveze ažuriranja digitalnih proizvoda u kontekstu ugovora o isporuci digitalnih sadržaja i digitalnih usluga. Kroz pravnu analizu odredbi Nemačkog građanskog zakonika, koje su relevantne za ovu obavezu, istražuju se specifičnosti koje ovu obavezu čine karakterističnom za digitalne proizvode. Metodologija istraživanja uključuje kvalitativnu analizu zakonskih tekstova i relevantne literature kako bi se identifikovali ključni elementi i izazovi u implementaciji obaveze ažuriranja. Rezultati istraživanja pokazuju da trgovci imaju zakonsku obavezu da obezbede ažuriranja digitalnih proizvoda čak i kada takva obaveza nije izričito ugovorenata. Ovo istraživanje doprinosi boljem razumevanju pravnih aspekata ažuriranja digitalnih proizvoda i pruža osnovu za buduće zakonodavne inicijative i praktične smernice za trgovce.

Ključne reči: ugovor o isporuci digitalnih proizvoda, obaveza ažuriranja, trgovac, potrošač.

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