Compatibility of Standardization Agreements with EU Competition Law: Legal Insights

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Abstract: *Standardization involves imposing a particular standard or norm on goods or services, playing a crucial role in the modern economy across various sectors. It is closely linked to essential public goods and offers multiple benefits, including fostering innovation, enhancing product quality, increasing safety, ensuring interoperability, and reducing transaction costs.*

However, despite these positive effects, the coordination established between undertakings through standardization can sometimes negatively impact competition in the relevant market. Participants may exploit standardization agreements to restrict competition, drive out competitors, create entry barriers, or reduce market access for other undertakings. As a result, such agreements can sometimes breach competition law requirements. This paper aims to explore these potential conflicts and propose solutions to mitigate the risks, relying on the latest jurisprudence of the European Court of Justice (ECJ) and the evolving practice of the European Commission.

Kewords: *Anti-competitive agreements; Standardization Agreements; Competition Law; Restriction by effect;*

INTRODUCTION

Standardization is imposing a particular standard or norm on individual goods or services. It is a crucial driver of innovation. Standardization (or the establishment of standards) plays an increasingly important role in various areas of the economy in the modern world. There are essential common public goods associated with standardization. It promotes innovation, improvement of product quality, increased security, product interoperability, reduction of transaction implementation costs, etc.[1]

Despite the mentioned positive effects, the coordination established between Undertakings regarding standardization is expected to reduce competition in the relevant market in some cases. This is because Undertakings participating in standardization agreements can use this coordination to restrict the existing competition, exclude competing undertakings from the market, establish entry barriers for potential competitors, etc. Thus, standardization agreements may give rise to compatibility problems with the requirements of competition law. The present paper aims to identify and find ways to solve such problematic issues.

Considering this, the first chapter of this work examines the various dimensions of standardization, highlighting the diverse methodologies employed to establish standards for specific products and services in particular contexts.The second chapter explores economic activity as a fundamental prerequisite for the application of competition law to the standardization process, emphasizing its critical role in shaping regulatory interventions.

The third and fourth chapters analyze the forms of coordination and restrictions on competition that are pertinent to standardization agreements, detailing their implications for market dynamics.

The fifth and sixth chapters focus on the key criteria for evaluating the pro-competitive and anti-competitive effects of standardization agreements, offering a framework for assessing their compliance with competition law principles. Finally, the seventh chapter delves into the application of exemption clauses to standardization agreements, providing a nuanced understanding of when and how such agreements may be justified under the law.

[1] Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 352.

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I. FORMS OF STANDARDIZATION

Establishing a certain standard for individual homogeneous products is usually done using different forms and means.[2] One of the common cases is the establishment of mandatory standards for specific goods or services by public authorities.[3] The mentioned case of standardization may be referred to as public standardization to the extent that the standards are determined unilaterally within the powers of public bodies. To comply with these standards is mandatory for the addressees. Norms of individual goods or services established via public standardization are also called "legal standards" in the literature.[4] A clear example of public standardization is the various standards established by the bodies of the European Union in many areas of the economy. For example, the existing food safety and quality standards, which establish mandatory grocery requirements, can be named. Accordingly, all undertakings operating in the grocery trade must meet the mentioned requirements.

State authorities and specially created national or international organizations may set the standard for individual goods or services.[5] Such an organization may be founded by one or more states, international organizations, or Undertakings. Such organizations, generally, are referred to as standard-setting organizations ("standard-setting organizations—SSO"), which elaborate and develop various procedures or policies according to which the standardization process is carried out in particular cases.[6]

One widespread practice of standardization is when a specific product or a separate feature of this product automatically establishes a de facto standard in the market. For many other market participants, such a standard is a benchmark or an example of the quality of their manufactured product in the production process. It means that Market dynamics naturally create a standard for a particular product or its characteristics in such circumstances.[7]

Standards can also be set by Undertakings operating in various markets. This usually occurs when Undertakings unite within a particular organization or cooperate to agree on common binding standards for a specific product or service. Undertakings agree on certain standards and technical or quality requirements with which current or future products, production processes, services, or methods must comply. Such agreements between undertakings may sometimes raise concerns regarding their potential anti-competitive effects. This is the case when the issue of compatibility of standardization agreements concluded by undertakings with competition law arises.

II. ECONOMIC ACTIVITY AS A PREREQUISITE FOR COMPETITION LAW INTERVENTION IN THE STANDARDIZATION PROCESS

The assessment of the compatibility of standardization agreements with the competition law raises questions about what prerequisites or indicators are necessary to qualify such an agreement as anti-competitive coordination. It is difficult to give an explicit and straightforward answer to this question as long as the European competition legislation contains no direct prohibition regarding the standardization agreement. Therefore, the criteria for assessing the compatibility of standardization

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[2] Imelda Maber, The New Horizontal Guidelines: *In Revista de Concorrência e Regulação (C&R), Vol. IV, No. 13, pp. 19–34,* 20; 11. ECLI:EU:T:2010:189, Case T-432/05, "EMC Development AB v European Commission", Rec. 7.

[3] Maritzen Lars*, Kölner Kommentar zum Kartellrecht*, Band 1, Cologne, 2017, § 1 GWB, Rn. 527.

[4] Bonadio Enrico, "Standardization Agreements, Intellectual Property Rights and Anti-Competitive Concerns," *in 3 Queen Mary J. Intell. Prop. 22, 2013,* 24.

[5] ECLI:EU:T:2010:189, Case T-432/05, "EMC Development AB v European Commission", Rec. 7.

[6] Several such organizations operate at both the European and international levels. Notable examples include the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), and the European Telecommunications Standards Institute (ETSI), among others.

[7] Bonadio Enrico, "Standardization Agreements, Intellectual Property Rights and Anti-Competitive Concerns," *in 3 Queen Mary J. Intell. Prop. 22, 2013,* 24.

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agreements with competition law can be determined based on and following the approaches established by the European Commission and the European Court of Justice. Considering those mentioned above, it can be said that economic activity is the main prerequisite for applying the cartel prohibition provision to the standardization agreement.[8] In particular, according to the ECJ case law, setting certain standards or norms by one specific entity in exercising public authority does not fall within the scope of the competition legislation.[9]

Accordingly, when applying competition law to set specific standards for goods or services, undertakings involved in standardization agreements should define them within the framework of their economic activity. In other words, this action must be part of their economic activity, and they must not act as subjects exercising public authority in this process. Accordingly, the entity or entities establishing a particular standard must be qualified as undertakings in the standardization process.

It should be noted that anti-competitive standardization may also occur in the case of de facto standardization. In such instances, it is also necessary for an undertaking to act within the framework of their economic activity. [10]

This requirement related to economic activity also applies to standard-setting organizations if they meet the criteria of an association of undertakings. In such cases, if the exercise of public authority does not influence their decisions, they may be considered anti-competitive decisions, which fall under the scope of the prohibition of anti-competitive agreements. [11]

III. TYPES OF COORDINATION IN THE STANDARDIZATION PROCESS

Article 101 of the TFEU distinguishes between the various forms of anti-competitive coordination: an agreement, a concerted practice and a decision of an association of undertakings. Accordingly, coordination between undertakings related to the setting of a particular standard will fall within the scope of the prohibition envisaged by Art. 101 TFEU only if it is set using any form of coordination mentioned above. To determine which form of coordination is possible to achieve coordination relevant to 101 TFEU, it is necessary to consider the characteristics of each form of coordination and its content.

According to the ECJ case law and the practice of the European Commission, for the existence of an anti-competitive agreement, it is necessary to have the jointly expressed intention of undertakings to engage in a specific type of market behaviour. [12] In this context, standard setting is a particular market behaviour agreed by the undertakings. In other words, Undertakings directly express their intentions to use the agreed standards concerning the goods or services they provide to the market. Thus, the subject of the agreement is to set a certain standard for certain goods or services and act following this standard in the market. Such an agreement may cover a wide range of product-related matters.[13] In particular, Undertakings may determine the quality, size, and technical characteristics of the product they produce, safety rules for using such a product, specifications related to health protection in the process, etc., by mutual agreement. It should be noted that such an agreement may also refer to the compliance of the individual product or the production process of

[8] Füller Jens Thomas, *in Kölner Kommentar zum Kartellrecht,* Band 3,Cologne, 2017, Rn. 349.
[9] ECLI:EU:C:2009:191, In Case C-113/07 P, *„SELEX Sistemi Integrati SpA"*, §§ 91-93.
[10] Füller Jens Thomas, *in Kölner Kommentar zum Kartellrecht,* Band 3,Cologne, 2017, Rn. 349.
[11] Füller Jens Thomas, *in Kölner Kommentar zum Kartellrecht,* Band 3,Cologne, 2017, Rn. 349.
[12] ECLI:EU:C:1999:356, "Anic Partecipazioni," Case C-49/92 P, 08.07.1999, § 130; ECLI:EU:T:1991:75, "SA Hercules Chemicals NV," Case T-7/89, 17.12.1991, § 256; ECLI:EU:T:2000:242, "Bayer AG," Case T-41/96, 26.10.2000, § 69; OJ L 152/24, CD 07.06.2001, § 185.
[13] Moritz Lorenz, *An Introduction to EU Competition Law,* 2013, 155.

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this product with environmental protection requirements.[14] Hence, if undertakings express a mutual intention to establish specific standards for goods or services, such coordination may qualify as an agreement under Article 101 of the TFEU.

However, in practice, coordination related to standardization between Undertakings may be established through practical cooperation or harmonized market behaviours, regardless of whether there is any expressed mutual will or convergence of wills between the undertakings participating. Considering the above, it is theoretically quite possible that the coordination between undertakings related to the establishment of a certain standard can be established in the form of such a concerted action, which did not take the form of an agreement reached as a result of the mutual expression of intention or will of the parties. [15] Therefore, if undertakings enter into practical cooperation without any expressed mutual intention to establish specific standards for goods or services, such coordination may qualify as concerted practice under Article 101 of the TFEU.

An example of an anti-competitive standardization in the form of a concerted practice can be identified when separate undertakings engage in practical coordination with one another, even without a direct agreement or a mutual explicit declaration of mutual intent. Such a situation constitutes a concerted action if this practical coordination is facilitated by exchanging commercially sensitive information related to standards used or established by the particular undertaking. This information may pertain to specific product specifications, technological approaches, market strategies, and similar subjects. In such cases, coordination can be considered a de facto standardization. However, it is essential to note that de facto standardization only sometimes exhibits the characteristics of concerted action under Article 101 TFEU.[16] It is also possible that de facto standardization is achieved via mere parallel conduct without exchanging commercially sensitive information.

Anti-competitive standardization among market participants can also arise from decisions made by associations of undertakings. Setting a particular standard through such a decision represents one of the simplest forms of coordination under Article 101 of the TFEU. This simplicity stems from the fact that the standard is not established through mutual agreement between undertakings or through de facto coordination but rather through the unilateral decision of the association of undertakings. Such a scenario may occur, for example, when individual producers of a specific product are members of an association that establishes certain standards or specifications for the product. These standards, in turn, coordinate the market behaviour of the undertakings. However, for such a decision to fall within the scope of Article 101 of the TFEU, the association mustn't act as a public authority when making the decision.

IV. STANDARDIZATION IMPOSING RESTRICTIONS BY OBJECT OR EFFECT

Considering the European case law, a standardization agreement may constitute an agreement with restriction by object or effect, depending on the specific circumstances. Standardization agreements, which contain clauses that restrict competition as their object, are considered a violation of competition law from the outset. It should be noted that, in European legal literature and practice, numerous standardization cases qualify as agreements with the restriction by object.[17]

[14] Bonadio Enrico, "Standardization Agreements, Intellectual Property Rights and Anti-Competitive Concerns," *in 3 Queen Mary J. Intell. Prop. 22, 2013,* 23-24.

[15] Beckmann K., Müller U., Hoeren/Sieber/Holznagel, Multimedia-Recht, 2020, Rn. 76; Paschke M., MüKo zum Europäischen und Deutschen Wettbewerbsrecht, Bd. 1, 2007, Art. 81, Rn. 58.

[16] For more on de facto standardization, refer to the first chapter of this paper.

[17] Füller Jens Thomas, *in Kölner Kommentar zum Kartellrecht,* Band 3,Cologne, 2017, Rn. 351; Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 354.

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Standardization agreement, which has as its object the restriction of competition, may arise in cases where the establishment of a standard directly or indirectly leads to the fixing of prices for a particular product or service.[18] Additionally, a standardization agreement between undertakings may establish a standard for a specific product that renders it incompatible with products produced by other undertakings. In such cases, the standardization agreement may have the market sharing effect or foreclose some undertakings from the market, thereby restricting competition. The European guidelines highlight that agreements using standards to exclude actual or potential competitors from the relevant market exhibit the characteristics of agreements that have the restriction of competition as their object.[19]

If the standardization agreement is not an agreement with the objective of restricting competition, then its compatibility with competition law should be assessed based on the restrictive effects of competition derived from it.[20] In such a case, we are talking about standardization with the impact of restricting competition. Determining a standardization agreement with the effect of restricting competition is done in practice by comparing hypothetical situations. According to this method, in the qualification process of undertakings' coordination as a restrictive agreement of competition, the degree of competition generated in the relevant market as a result of the establishment of a separate standard by undertakings should be compared with the situation before the establishment of the said standard. In this process, various parameters or indicators should also be considered, which will be discussed in detail in the following parts of this paper.

Suppose a standardization agreement does not qualify as an agreement with a restriction by object. In that case, its compatibility with competition law should be assessed based on its potential restrictive effects on competition. In such cases, standardization may constitute an agreement with a restriction by effect.[21] Assessment of the possible anti-competitive effects of a particular standardization agreement should be based on comparing different hypothetical scenarios. In particular, the degree of competition in the relevant market resulting from establishing a specific standard by undertakings should be compared to the degree of competition before setting a certain standard. Additionally, various parameters or indicators should be considered, which will be discussed in detail in the subsequent sections of this paper.

[18] Imelda Maber, The New Horizontal Guidelines: Standardisation. *In Revista de Concorrência e Regulação (C&R), Vol. IV, No. 13, pp. 19–34*, 21; Maritzen Lars*, Kölner Kommentar zum Kartellrecht*, Band 1, Cologne, 2017, § 1 GWB, Rn. 530; Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 355.

[19] Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 354; Commission Decision in Case AT.39985, Motorola - Enforcement of GPRS standard essential patents, recitals 221-270; Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01) recital 447.

[20] Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 440; Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01), recital 448; Füller Jens Thomas, *in Kölner Kommentar zum Kartellrecht,* Band 3,Cologne, 2017, Rn. 352.

[21] Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 356.

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V. RELEVANT MARKETS WHERE STANDARDIZATION AGREEMENTS MAY RESTRICT COMPETITION AND ITS ANTI-COMPETITIVE EFFECTS

1. Commencing Remarks

To properly assess the negative impact of a standardization agreement on competition, it is necessary to identify the relevant product or service markets affected by such an agreement. Determining such market segments creates a clearer idea of both the content of the actual standardization agreement and the potential risks of restriction of the dynamic process of competition that may arise from such an agreement. With this in mind, it is possible to identify four potential relevant markets where standardization agreements can restrict competition.[22] Accordingly, when evaluating the effects deriving from the standardization agreement, the degree of competition in the mentioned markets and the impact of establishing a separate standard on the competition in these markets should be considered.

2. Relevant Market for Goods and Services

The relevant product or service market is one of those market segments where competition can be artificially restricted due to the standardization agreement. In this case, it means the market of goods or services about which a specific standardization agreement establishes certain standards.

In circumstances where standardization agreements impose mandatory standards for individual goods or services, these standards may impose entry barriers into the relevant market. This is possible when the standards established as a result of the agreement reached between undertakings are set in an unobjective and biased manner, as a result of which a limited number of undertakings can meet these standards. Consequently, in such a situation, a particular group of undertakings cannot meet the conditions set by the standardization agreement, which forces the existing undertakings to leave the market and restricts the possibility of potential undertakings entering the market. All this ultimately limits the competition in the relevant market.

A clear example of these effects can be seen when, for instance, smartphone manufacturers agree on the type, quality, and other specifications of batteries to be used in their devices. In other words, manufacturers establish standards for battery use in smartphones. Such an agreement may threaten certain smartphone manufacturers if they cannot purchase batteries with these standards or can only obtain them in limited quantities. Furthermore, this agreement may restrict competition in the battery production market, as some manufacturers may not be able to produce products that comply with the established standards. This, in turn, could lead to the foreclosure of these manufacturers from the market for supplying batteries required for smartphones.

3. Relevant Technology Market

Along with the market for relevant goods and services, standardization may also harm the market for the relevant technology. In this case, we are talking about a market where different types of technologies compete with each other so that they are used in relation to a particular product or service. Accordingly, such a market includes any technology suitable for a specific product or service, considering its functionality, purpose and technical capabilities. For example, competing technologies in the commodity market for solar panels for renewable energy production include Crystalline silicon panels and thin-film solar cells.[23] The situation is similar regarding wind turbine manufacturing technologies, where Horizontal-axis technology competes with vertical-axis turbine

[22] Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 353; Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01) recital 438.

[23] https://solarsme.com/thin-film-vs-crystalline-solar-panels/ (30.11.2024).

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technology.[24] In such a case, the market for producing solar panels, on the one hand, and the market for wind turbines, on the other hand, should be considered the relevant commodity market.[25] And the relevant technological market encompasses the technological standards used in the production process of these products.

It should be noted that standardization agreements may negatively affect competition in the relevant market for these technologies. In particular, such an agreement may have the effect of foreclosing existing technologies from the market. Such a case will occur if the relevant undertakings in the standardization agreement choose one particular technology and drive out another existing one from the market. Furthermore, such an agreement also impedes the development of other potential technologies. For example, in the cases discussed above, if the choice is made for the horizontal-axis technology, then the vertical-axis turbine technology can be driven out of the relevant market, eliminating the competition between these two technologies and reducing the incentives to develop other potential new technologies.

In addition, the entity holding the copyright on the selected technology gains significant market power through such an agreement to the extent that the technology in his hands will be the essential prerequisite for the production of a product conforming to this standard. Accordingly, the entity owning such technology can impose conditions for licensing that are not fair, rational, and non-discriminatory and abuse its market power.[26] For example, setting unfairly high prices for the use of technology at such a time will automatically lead to a corresponding increase in the prices of products produced with this technology. Based on all of the above, agreements related to standardization create risks of driving out competitors, imposing unjustified barriers or abusing market power in the relevant technology market.

4. Relevant Standardization Market

The next market where standardization agreements may have restrictive effects on competition is the corresponding standardization market. In this case, we are discussing a market where different standard-setting organizations or groups compete to set various standards for different industries, technologies or products. For example, organizations such as the International Organization for Standardization (ISO),[27] the European Telecommunications Standards Institute (ETSI)[28], the Institute of Electrical and Electronics Engineers (IEEE)[29] etc. Such organizations compete with each other to the extent that they compete for dominance in the standardization market. Consequently, there is a situation where there are different standards in the same industry, and organizations setting these standards compete with each other to spread their standards and gain additional market share. In this case, the main line of competition is to gain market influence, get economic benefits, and raise the company's reputation. This process facilitates the development of new standards and refine existing ones. Therefore, if these organizations or other entities agree on a specific standard, the competition between these standards will be artificially limited. In this case, such an agreement may also impose entry barriers and exclusion from the market.

5. Relevant Certification Market

The relevant certification market refers to that segment of the standard-setting process that includes services to assess whether a particular product, service or process conforms to specific standards. Accordingly, such entities, as a result of individual research, testing, or other types of

[24] https://www.windustry.com/horizontal-axis-vs-vertical-axis.htm (30.11.2024).
[25] For more on reelevant market for Goods and Services, refer to the previous chapter of this paper
[26] Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rec 440.
[27] https://www.iso.org/home.html (30.11.2024).
[28] https://www.etsi.org/ (30.11.2024).
[29] https://www.ieee.org/ (30.11.2024).

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study of relevant circumstances, conclude the compliance of a particular product or service with a specific standard. Therefore, the change of a specific standard directly and immediately impacts the corresponding certification market.

First, it should be noted that setting a new standard always requires research and study of compliance of individual goods or services with this standard. Therefore, the demand for research, testing, and certification processes related to the new standard is increasing. This proportionally reduces the demand for assessing the conformity of individual goods or services with other standards.

It is also necessary to consider that assessing compliance with a separate standard requires special knowledge and qualifications. Individual professionals or organizations may not specialize in assessing conformity to a standard established by a standardization agreement in question. Therefore, the standardization agreement with these entities has the effect of driving them out of the market. In addition, the standardization agreement can also envisage the assessment of compliance with the agreed standard only by a specific organization or organization. Such an agreement directly grants additional market power to particular entities, creating additional risks and limiting competition.

VI. Main Criteria for Assessing the Pro- and Anti-Competitive Effects of Standardization

1. Introductory remarks

In examining the effects of standardization-related agreements in the four relevant markets discussed above, it was found that agreements of such content could cause significant damage to a healthy competitive environment in several relevant markets. Despite those mentioned above, in addition to the anti-competitive effects, standardization agreements, in many cases, have a significant positive impact on promoting competition and increasing consumer welfare. Therefore, assessing the compatibility of standardization agreements with competition law requires carefully analyzing various factors and circumstances. This need for 'cautiousness' arises from the necessity to strike a delicate balance—a 'golden standard'—where the restrictive effects on competition stemming from standardization agreements are addressed through prohibition or sanctioning, but only to the extent that such measures do not disproportionately undermine or negate the positive effects that these agreements may generate.

2. Market Shares

Taking into account the European practice, if the coordination established between undertakings does not have as its object the restriction of competition, the qualification of it as an anti-competitive agreement requires a significant intensity of the restriction of competition, which cannot be outweighed by the pro-competitive effects deriving from the same agreement. [30] This principle also applies to standardization agreements, which do not have the restriction of competition as their object. Therefore, to extend the prohibition envisaged by Article 101 of the TFEU to such an agreement, the restrictive effects of such coordination must have significant intensity. One of the first and most important parameters for measuring the mentioned intensity of the restriction is the market shares of undertakings participating in the agreement.[31]

[30] ECLI:EU:C:2009:215, "Pedro IV Servicios SL," Case C-260/07, 02.04.2009, § 83; ECLI:EU:C:1991:91, "Stergios Delimitis," Case C-234/89, 28.02.1991, §§ 10-13; ECLI:EU:C:2000:679, "Neste Markkinointi", Case C-214/99, 07.12.2000, § 25; ECLI:EU:T:2002:84, "Colin Joynson," Case T-231/99, 21.03.2002, § 48.

[31] Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01), recital 472.

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This is because the market shares of the Undertakings participating in the standardization agreement constitute the exact indicator of their market power and the scope of the market covered by this agreement. The higher the market shares of the Undertakings, the greater will be the restrictive effects of the standardization agreement concluded between them. For example, suppose a specific standardization agreement has foreclosure effects, and the market share of Undertakings participating in this agreement is collectively more than 60 percent. In that case, more than half of the market is foreclosed for other undertakings outside the agreement. Therefore, the restrictive effects of competition arising from this agreement are directly proportional to the total market shares of the undertakings participating in the standardization agreement.

In addition, market shares give rise to certain presumptions when assessing the compatibility of an individual agreement with competition law. In particular, low market shares create a presumption that there is no significant restriction of competition. In contrast, high market shares, on the contrary, indicate a high probability of significant restriction of competition.

It should be noted that European competition law envisages certain limits on market shares. Suppose the joint market share of undertakings participating in a particular agreement does not exceed these limits. In that case, the European Commission considers individual coordination of Undertakings to be an agreement that slightly restricts competition. On this basis, it no longer falls within the scope of the prohibition established by Article 101 of the TFEU ("De Minimis Notice"[32]). According to the De Minimis Notice, the prohibition provided for in Article 101 of the TFEU does not apply to such horizontal coordination established between Undertakings in which the joint market share of the participating Undertakings does not exceed 10 percent. In the case of vertical coordination, the prohibition provided for in Article 101 of the TFEU does not apply if the market share of each party to such coordination does not exceed 15 percent. In this case, the share of the undertaking participating in the vertical agreement should be determined individually in the relevant market in which they operate. However, for an agreement that includes the characteristics of both a horizontal and a vertical agreement, which makes it difficult to classify it as a horizontal or vertical agreement, the prohibition established by Article 101 TFEU does not apply if the market share of each party to the agreement in the relevant market does not exceed 10 percent. Accordingly, the mentioned provisions create a certain minimum threshold; if the market shares of the undertakings to the particular standardization agreement do not exceed this threshold, it is assumed that the agreement only slightly restricts competition and does not fall under the prohibition established by Article 101 of the TFEU.

Considering the above, when assessing the compatibility of standardization agreements that do not constitute an agreement with the restriction by object, one of the first and most important parameters or indicators should be the market shares of the undertakings participating.

3. Non-binding character of the standard

The binding or optional character of the agreed standard is the following parameter to evaluate the compatibility of standardization agreements with the competition law. If compliance with the approved and established standard is optional and not mandatory, then there remains a significant space for competition in the relevant market.[33] In particular, Undertakings are then free to develop alternative standards or products. Therefore, despite establishing a separate standard, the competition process continues to develop dynamically. On the contrary, if compliance with the agreed standard

[32] Communication from the Commission — Notice on agreements of minor importance which do not appreciably restrict competition under Article 101(1) of the Treaty on the Functioning of the European Union (De Minimis Notice), 2014/C 291/01, OJ C 291, 30.8.2014, p. 1–4, recitals 8-9.

[33] ECLI:EU:T:2010:189, Case T-432/05, "EMC Development AB v European Commission", Rec. 105; Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 357.

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is mandatory, it creates entry barriers into the relevant market affected by the agreement. [34] It drives undertakings out of that market and leaves no space for developing alternative standards.

In addition, when the standard is not binding and its implementation is optional, the standardization agreement is less likely to develop into an agreement that restricts competition by its object, such as price fixing or market sharing. This is also emphasized in the Commission's guidelines, where it is indicated that if the standardization agreement binds and forces the undertakings involved in it to use a specific standard in the production of a separate product, the risks of significantly limiting competition increase, and it may turn into a restriction of competition by object. Considering the above, the mandatory or optional nature of the implementation or use of the standard prompted by the agreement is the first indicator of determining the presence or absence of significant effects restricting competition.

Therefore, in determining the standardization agreement's compatibility with competition legislation, it is also essential to consider its binding or non-binding character.

4. Availability and Accessibility of the standard

Evaluation of the restrictive effects of a standardization agreement also requires considering the availability and accessibility of the agreed standard to third parties. If third parties are prevented from using or complying with the agreed standard, a market situation is created in which these entities may be forced to exit the relevant market. Such standardization practices can lead to the exclusion of competitors from the market, creating barriers to entry that effectively make it impossible for third parties to meet the standard. This, in turn, results in their exclusion from the market.

The ability to meet the standard includes having access to the intellectual property or other necessary resources required to comply with it. However, such access can be restricted in several ways. For example, an outright refusal to transfer the means needed to meet the standard or unfairly high prices for transferring these means can make compliance prohibitively expensive.

If a standardization agreement includes provisions that effectively prevent others from freely accessing the standard, this constitutes a significant indicator of restrictive effects on competition. Conversely, suppose the standard and the means to comply with it are available to everyone.[35] In that case, the likelihood of the agreement being deemed restrictive under Article 101 of the TFEU and subject to sanctions is significantly reduced.

5. Contribution to standard development

The following essential aspect of assessing the compatibility of a standardization agreement with competition law is the extent to which the standard-setting process was open to all interested parties.[36] This is because the freedom to participate in the standardization process determines the fairness, non-discrimination, legitimacy, transparency, availability, and other characteristics of the established standard, which are necessary to minimize the risks of restriction of competition to an appreciable extent via the standardization agreement.[37]

The fact that all interested entities are allowed to participate in setting the standard helps prevent the established standard from driving out the undertakings from the market. It precludes a small group of undertakings from getting an unfair benefit from the standardization. In addition, the participation of the broadest possible circle of interested entities in the standardization process

[34] Imelda Maber, The New Horizontal Guidelines: *In Revista de Concorrência e Regulação (C&R), Vol. IV, No. 13, pp. 19–34, 22;* For more on relevant markets related to the standardization agreement, refer to the previous chapter of this paper.
[35] Füller Jens Thomas, *in Kölner Kommentar zum Kartellrecht,* Band 3,Cologne, 2017, Rn. 355.
[36] Maritzen Lars*, Kölner Kommentar zum Kartellrecht*, Band 1, Cologne, 2017, § 1 GWB, Rn. 530; Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 356.
[37] ECLI:EU:T:2010:189, Case T-432/05, "EMC Development AB v European Commission", Rec. 101; Imelda Maber, The New Horizontal Guidelines: *In Revista de Concorrência e Regulação (C&R), Vol. IV, No. 13, pp. 19–34,* 25.

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guarantees the promotion of progress and innovation. This is ensured by the participation of the knowledge and professional experience of as many professionals as possible in the standardization process. It guarantees that the established standard reflects the best possible technologies or approaches among the existing ones. In addition, this also adds additional legitimacy to the established standards. Accordingly, all these points show that the standard-setting process's openness could indicate the compatibility of standardization agreements with competition legislation.

6. Interim Conclusions

Having discussed the main criteria for assessing the pro- and anti-competitive Effects of Standardization, it is to be noted that these criteria are applicable if the standardization agreement concerned does not have the restriction, prevention or distortion of competition as its object. In conclusion, it can be said that in such a case, the pro- and anti-competitive effects of the standardization agreement are evaluated based on the following parameters or indicators, such as Market Shares, Non-binding character of the Standard, Availability and Accessibility of the Standard, and openness of the participation in the standard development. Given the above, if the market share requirements established by the De Minimis Notice are not met, the standardization agreement may still not fall within the scope of the prohibition envisaged by Article 101 of the TFEU if The opportunity to participate in the standard-setting process is open and unrestricted for all interested entities and the agreed and established standard does not create any barrier to enter the relevant market and shall not exclude market participants from the relevant market.[38] To protect the interests of effective and free competition, it is necessary to guarantee the equal opportunity of participation of all interested parties in establishing a particular standard. In addition, it is also essential to ensure that all interested third parties can freely, under non-discriminatory and fair conditions, join this agreement and use or implement the agreed standard in their activities. Furthermore, the standards obtained and established due to such a process should not be binding for participating entities. If the mentioned requirements are met, there is a high probability that the standardization agreement will not be considered anti-competitive, and the prohibition established by Article 101 of the TFEU will not apply to it.

VII. EXEMPTION FROM PROHIBITION

1. Preliminary observations

If the coordination between undertakings related to the establishment of a standard does not constitute the by object restriction but still formally meets the prerequisites provided by the first paragraph of Article 101 of the TFEU, it can still be justified if the efficiency gains deriving from it outweigh the adverse effects on competition arising from this agreement. In particular, Article 101, section 3 of the TFEU, establishes exceptions in which a separate agreement can be compatible with a healthy competitive environment. Hence, for the standardization agreement to be compatible with the competition legislation, it must simultaneously meet the following four prerequisites: efficiency increase, indispensability, pass-on to consumers and no elimination of competition.[39]

2. Efficiency improvements

Thus, the first prerequisite for the spread of the exception to the ban is the increase in efficiency. In other words, this agreement must increase efficiency to extend the exemption to the anti-competitive standardization. As mentioned above, the standardization agreement provides, in

[38] Maritzen Lars*, Kölner Kommentar zum Kartellrecht*, Band 1, Cologne, 2017, § 1 GWB, Rn. 530.

[39] Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01), recitals 475-486.

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particular cases, different positive effects on the relevant markets.[40] One of the most significant efficiencies is the establishment of common approaches and technical standards for individual goods or services, significantly improving product compatibility and interoperability.[41] This, in turn, means improved production processes, cost savings, improved productivity, and easier interoperability across industries or regions. Standardization minimizes the complexities associated with diverse systems and procedures, allowing for the optimization of resources and faster implementation of processes. In addition, it facilitates compliance with regulatory frameworks, reducing administrative burdens and related costs. Harmonization of standards also promotes innovation by providing a common platform for developing and integrating new technologies. In addition, the standards also ensure the creation of various guarantees in the direction of quality, safety, and environmental protection. In addition, it should be noted that according to the practice firmly established by the European Commission, to extend the exemption to the standardization, the information related to the particular standard and its establishment must be widely available to those entities who want to enter the relevant market of the goods or services.

3. Pass-on to Consumers

To extend the exemptions to the particular standardization agreement, the positive effects arising from it must be equally reflected in consumer welfare. In a specific case, a particular anti-competitive standardization agreement, which can achieve one or more of the above-mentioned positive effects, should also be capable of proportionally reflecting these positive effects not only on the welfare of the entities participating in it but also on consumers. For example, reducing production costs for undertakings can be transformed into a decrease in the purchase prices of relevant goods or services for consumers, technological progress - into an increase in quality, etc. According to European practice, 'pass-on to consumers' refers to the distribution of benefits to consumers on a scale sufficient to at least compensate for the actual or potential adverse effects caused by an individual agreement restricting competition.[42] Moreover, if the agreed standard promotes interoperability and compatibility or competition between existing and new products or services, then it is assumed that the benefits caused by this standardization agreement will automatically positively affect the welfare of consumers. In this case, consumer welfare does not mean purely commercial profit, which the consumer should become a sharer of. The term in question includes any economic benefit from a specific anti-competitive standardization agreement. This does not mean only reducing prices for individual goods or services or preventing price increases. Customer welfare and benefits within the framework of the standardization agreement may be expressed in the offer of new, more sophisticated and higher-quality goods or services.[43]

4. Causation, Necessity of Restriction, and the Principle of Proportionality

The following prerequisite for the exemption is a direct causal link between the relevant standardization agreement and consumer welfare. In particular, the increase in consumer welfare

[40] Füller Jens Thomas, *in Kölner Kommentar zum Kartellrecht,* Band 3,Cologne, 2017, Rn. 350; Imelda Maber, The New Horizontal Guidelines: *In Revista de Concorrência e Regulação (C&R), Vol. IV, No. 13, pp. 19–34, 29;* Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 358.

[41] Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 352

[42] Ellger Reinhard, Andreas Fuchs, *in Immenga/Mestmäcker, Wettbewerbsrecht, Band 2, Kommentar Zum deutschen Kartelrecht, 6. Auflage., 2020,* § 2. Rn. 96; CC – G. on the application of Article 81(3) of the Treaty, OJ C 101, 27.4.2004, p. 97–118, § 85.

[43] Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01), recitals 485; Ellger Reinhard, Andreas Fuchs, *in Immenga/Mestmäcker, Wettbewerbsrecht, Band 2, Kommentar Zum deutschen Kartelrecht, 6. Auflage., 2020,*, § 2. Rn. 95.

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should not be due to other factors; its direct cause should be the standardization agreement. In addition, along with the causation, the necessity and proportionality of competition restriction are also the exemption scheme's main elements.

The necessity test must determine to what extent the agreement and the individual restrictions imposed by the agreement provide a more suitable opportunity to achieve positive effects than would be possible without those restrictions.[44] In this case, it should be determined to what extent the restriction of competition caused by standardization is the only appropriate way to achieve the positive effects. For this, it is necessary to exclude the presence of other less harmful means to achieve positive effects of the same scale.

Once the necessity test is met, the proportionality of the restriction imposed by the individual coordination is assessed. According to the ECJ, the restrictive effects of competition resulting from individual coordination established between undertakings must be proportional to the positive impact provided by the first two conditions of the exclusive scheme, which resulted from this agreement. Accordingly, if there is no proportional relationship between the positive effects and the degree of restriction of competition, then the standardization agreement cannot satisfy the requirements of exemption and cannot escape the prohibition envisaged by Article 101 of TFEU.

5. No Elimination of Competition

Finally, anti-competitive standardization must not eliminate competition in the relevant markets. The elimination of competition is usually determined in each particular case. Although standardization agreements often aim to harmonize practices, improve efficiency and provide consumer benefits, they should not lead to the suppression of competitive forces in the relevant market.

This requirement ensures that the standardization agreement does not give undue market power to particular participants or create barriers to entry for others. In this case, an important parameter and prerequisite that should be considered is the market shares of the undertakings participating in the standardization.

CONCLUSION

Considering the discussions developed within the presented research, at the end of the paper, it is possible to formulate the main findings related to the qualification process of standardization agreements as anti-competitive coordination.

First of all, it should be noted that standardization or standard setting may occur in different forms and via various means in practice. Specific standards may be established by undertakings themselves, as well as by other entities or organizations. In this regard, the paper developed a discussion regarding the fact that to evaluate the compliance of the actions related to establishing the Standard with Article 101 of the TFEU, these actions must be carried out within the framework of economic activity. In other words, at such times, it is necessary to refer to the standards established by undertakings. In addition, Article 101 of the TFEU also applies when the standard-setting entity is an association of undertakings, which by its own decision sets specific standards.

The presented paper also discussed that coordination related to standardization may bear the signs of both agreements with the restriction of competition by object and by effect.

In addition, the paper also provides the means and forms by which standardization agreements can be used to limit competition. Moreover, based on existing practice, potential markets were identified where a particular standardization agreement could restrict competition. In particular, such

[44] Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV, Rn. 360.

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a case concerns the relevant market for goods and services, the appropriate technology market, the relevant standardization market, and the relevant certification market.

The 6-th chapter of the paper discusses the main parameters by which the anti-competitive and pro-competitive effects of the standardization agreement are evaluated in individual cases. In particular, the market shares of undertakings involved in the standardization agreement, binding or non-binding character of the standard, availability and accessibility of the standard and contribution to standard development should be considered as the main parameters in this regard. In addition, it should be noted that the analysis of the mentioned parameters is necessary only in cases where the case does not refer to the standardization agreement with the restriction by object.

In the last part of the paper, the necessary preconditions for the applicability of the exemption clauses on standardization agreements were discussed. In this regard, it was noted that one of the main prerequisites for its application is efficiency improvements. It was also pointed out that for exemptions to be granted, these positive effects must also have a positive impact on increasing consumer welfare, and the restriction of competition must be proportionate and necessary to achieve these benefits or positive effects. However, it is also essential that the standardization agreement does not eliminate competition in any of the relevant markets mentioned above.

BIBLIOGRAPHY:

1. Maritzen Lars*, in Kölner Kommentar zum Kartellrecht*, Band 1, Cologne, 2017.
2. Füller Jens Thomas, *in Kölner Kommentar zum Kartellrecht,* Band 3,Cologne, 2017.
3. Florian Wagner-von Papp, *in Münchener Kommentar zum Wettbewerbsrecht,* 4. Auflage, Munich, 2022, Art. 101 AEUV.
4. Immenga/Mestmäcker, Wettbewerbsrecht, Band 2, Kommentar Zum deutschen Kartelrecht, 6. Auflage., 2020.
5. Moritz Lorenz, *An Introduction to EU Competition Law,* 2013.
6. Imelda Maber, The New Horizontal Guidelines: Standardisation. *In Revista de Concorrência e Regulação* (C&R), Vol. IV, No. 13, pp. 19–34.
7. Enrico Bonadio, "Standardization Agreements, Intellectual Property Rights and Anti-Competitive Concerns," *in 3 Queen Mary J. Intell. Prop. 22,* 2013.
8. Communication from the Commission — Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023/C 259/01).
9. Communication from the Commission — Notice on agreements of minor importance which do not appreciably restrict competition under Article 101(1) of the Treaty on the Functioning of the European Union (De Minimis Notice), 2014/C 291/01, OJ C 291, 30.8.2014.
10. ECLI:EU:C:2009:191, In Case C-113/07 P, "SELEX Sistemi Integrati SpA".
11. ECLI:EU:T:2010:189, Case T-432/05, "EMC Development AB v European Commission".

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