REVIEW OF COMPARATIVE LAW
VOLUME XXIII
YEAR 2015

DETERMINING THE RELEVANT PRODUCT MARKET AS PART OF DEFINING TELECOMMUNICATIONS MARKETS.

*Renata Maria Pal**

ABSTRACT

The purpose of this article is to conduct a detailed analysis of the definition and methods of determining the relevant product market in the telecommunications sector. Establishing a catalogue of relevant markets is the first stage of the procedure of regulating the telecommunications market. Market defining is not a goal in itself, but it is a sine qua non condition for conducting subsequent phases of regulation. The relevant market definition has many aspects, therefore it can be considered in terms of: products, geographical location, entities and time.

The methods used in the analysis will be: interpretation of legal texts, legal-economic analysis and the analysis of crucial EU case law.

Relevant product market (product market), is a market of goods (infrastructure in case of telecommunications) and services that can be considered by a reasonable buyer as interchangeable or substitutable. Thus, the defining of the relevant product market requires the classification of goods and services. The criterion on which such grouping is based is undoubtedly the purpose for which, from the point of view of the purchasers, certain goods and services are used.

The key to qualifying individual goods and services as belonging to appropriate product markets is the proper understanding of the concept of substitution. At the same time one should take into account the substitution occurring on the side of the buyers and producers, i.e. substitution of both demand and supply. One must also take into consideration the issue connected with the substitution

* Associate Professor, PhD, the John Paul II Catholic University of Lublin, Faculty of Law, Canon Law and Administration, Institute of European Studies, Department of European Union Law.

of supply, i.e. the problem of potential competition. All of them are the source of constraints on competitive market in the area of price fixing or the prevailing conditions of the market. The substitution on the demand side is undoubtedly the most important, while the two other factors play a supporting role.

GENERAL REMARKS

Establishing a catalogue of relevant markets is the first stage of the procedure of regulating the telecommunications market. Market defining is not a goal in itself, but it is a sine qua non condition for conducting subsequent phases of regulation. This is done to determine the object of analysis, which consists of the relevant markets defined at this stage. This in turn allows one to assess the competitiveness of these markets, identifying businesses with significant position and, where necessary, imposing on those companies adequate responsibilities in order to restore the proper level of competition in the market.

The starting point for the establishment of a catalogue of telecommunications markets is answering the question what the relevant market is, as only understanding the concept and methodology of its determining, both in general and sectoral terms, allows for an accurate analysis of the ex ante regulation. Both the EU law on electronic communications and the Polish Act on Telecommunications refer in this regard to the definition and method of determining the relevant market established in the general competition law[1].

The relevant market definition has many aspects, therefore it can be considered in terms of: products, geographical location, entities and time. Only integration of all these planes allows for determining it fully and correctly.[2] The purpose of this article is to conduct a detailed analysis of the

[1] Journal of Laws of 2004 no. 171 pos. 1800.

[2] On determining the relevant market, see: K. Kowalik-Bańczyk, *Internet a problematyka wspólnotowego prawa konkurencji* (*The Internet and the Issues of the Community Competition Law*), Studia Europejskie (European Studies) 2/2005, pp. 96-102. On tel-

definition and methods of determining the relevant product market in the telecommunications sector.

THE DEFINITION

Relevant product market (product market), is a market of goods (infrastructure in case of telecommunications) and services that can be considered by a reasonable buyer as interchangeable or substitutable.[3] Thus, the defining of the relevant product market requires the classification of goods and services. The criterion on which such grouping is based is undoubtedly the purpose for which, from the point of view of the purchasers, certain goods and services are used.[4] In the study one should take into consideration not only the physical characteristics of goods and services, but also a certain subjective attitude of buyers who may recognize some goods as substitutable, but some other may not be seen as such. The example often given in this case is the the situation when consumers recognize dissimilar services of cable and satellite connections as interchangeable, as both enable them to achieve the goal of accessing the Internet. Therefore, from this point of view, it is possible to classify both of these services as belonging to the same product market.[5] In this case the decisive factor is not

ecommunications markets see:Henryk Babis, Kinga Flaga-Gieruszyńska, *Rynek usług telekomunikacyjnych (Telecommunications Services Market)*, Warszawa 2011.

[3] Sufficient substitutability was first used by the ECJ in Case 6 / 72 Europemballage and Continental Can v Commission, ECR. ECR. 1973 p.215 paragraph 32, and Case 85/76 Hoffmann La-Roche v Commission, ECR. ECR. 1979 p.461, paragraph 23. Kulińska Emilia, *Rynek relewantny w postępowaniu antymonopolowym w orzecznictwie europejskim* (Relevant Market in the Anti-Trust Procedure in the European Case Law), Gloss 2004/5/17-22. Wyrok Sądu Apelacyjnego w Warszawie (Judgement of the Court of Appeal in Warsaw) of 15 May 2014, VI ACa 1260/13.

[4] A.J. Piotrowski, *Co z tym rynkiem?* (*What about the market?*), PiEwT 4/2004 r., pp. 35-37.

[5] Cf.: Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (Text with EEA relevance) Official Journal C 165 , 11/07/2002 P. 0006 – 0031, § 45 (hereinafter Guidelines).

their physical characteristics, but the subjective belief of buyers, because what matters for them is the specific objective that they want to pursue through these services, and not the differences between them. For the same reasons users did not recognize pager and mobile telephony services as substitutable, although both can be used for bi-directional transmission of short text messages. The reason for such attitude of buyers may surely be the fact that mobile telephony services are much more complex, which offers more opportunities. Thus, in contrast to pager services, aside from messaging they are used for many other purposes, such as transmission of voice signals, which gives the user of such services the opportunity to call from all places within the coverage of the network, which, given current technology, means almost any place in the world.

Subjective equivalence, manifestations of which are illustrated by the examples, is one of the basic elements to which the European Commission paid attention while determining the definition of the product market. This means that the goods and services that should belong to the market are those regarded by consumers as equivalent. However, such an approach would be difficult to determine in practice, therefore this equivalence should be somewhat objectified by reference to specific determinants, such as price, purpose and characteristics of the goods or services. The Court of Justice of the European Union, although it has not attempted to formulate a full and condensed definition of the product market, has repeatedly described it with reference to various cases. In the case of Michelin, for example, it stated that the market must include all products that are suitable for satisfying constant needs and are interchangeable with others only to a limited extent. The criterion for distinction, as stated by the CJEU (then ECJ), was to be the characteristics of those products.[6]

When defining the relevant product market, it is not enough just follow only the objective characteristics of goods and services, but also environmental factors concerning their existence, i.e. the structure of supply and demand and the conditions of competition should also be taken into

[6] See: Case 322/81, *Michalin vs. The Commission*, European Court Reports 1983, p. 3461, item 37.

account.[7] One can not limit oneself only to the price, intended purpose or other characteristics inherent to the goods and services that cause their recognition by the buyers as appropriate in achieving specific goals.[8] Only such comprehensive analysis, covering both groups of factors, is able to provide result in the form of a properly defined market, which will only include those goods that are recognized by the buyers as substitutes.

The key to qualifying individual goods and services as belonging to appropriate product markets is the proper understanding of the concept of substitution. At the same time one should take into account the substitution occurring on the side of the buyers and producers, i.e. substitution of both demand and supply. One must also take into consideration the issue connected with the substitution of supply, i.e. the problem of potential competition. All of them are the source of constraints on competitive market in the area of price fixing or the prevailing conditions of the market. The substitution on the demand side is undoubtedly the most important, while the two other factors play a supporting role.

DEMAND SUBSTITUTION

Demand substitution involves analysis of consumer readiness to substitute a given product with another. The scope of this readiness can be defined as the degree of demand substitution and it is determined with

[7] Cf.: Commission Notice on the definition of the relevant market for the purposes of Community competition law (97 / C 372/03), item, 7, Official Journal C 372, 09/12/1997 pp. 0005 - 0013.

[8] See: Case C-333/94 P, *Tetra Pak vs. The Commission*, European Court Reports 1996, pp. I-5951, item 13, case 31/80 *L'Oréal*, European Court Reports 1980, pp. 3775, item 25, case C-62/86, *AkzoChemie vs. The Commission*, European Court Reports 1991, pp. I-3359, case T-504/93, *TiercéLadbroke vs. The Commission*, European Court Reports 1997, pp. II-923, item 81, T-65/96 available in: Jurkowska A., Skoczny T., *Prawo konkurencji Wspólnoty Europejskiej* (*Competition Law of the European Community*), Volume 2, part 1, Warsaw 2004, pp. 319-321. Also see: Case *Kish Glass vs. The Commission*, European Court Reports 2000, pp. II-1885, item 62, case C-475/99, *Ambulanz Glöckner and Landkreis Südwestpfalz*, European Court Reports 2001, pp. I-0000, item 33.

the use of the so-called cross-price elasticity of demand.[9] It shows a relationship between the rise in prices for certain goods and services and the propensity of consumers to replace them with others. Therefore, a relative change in the scale of demand for given goods occurs due to changes in prices of other goods.[10] In other words, e.g. with the increase in prices of telephone calls provided by traditional networks the demand for the Internet telephony can increase, which is also starting to happen in practice on the Polish market.

While analysing the sole volume of demand, it should be assumed that the change takes place on the side of both the enterprise that increases the price in the form of demand decline, and the enterprise being a producer of goods selected by consumers as a result of the increase in the form of higher demand.[11] There may also be a situation when the demand for goods subject to an increase does not change, but will grow on the substitutable goods. This will take place when potential customers who have the intention of using the goods and services before the increase, decide to look for substitutes after the increase. In this case, the manufacturer who increases the price in fact loses the opportunity for a potential increase in demand, while the producer of goods that are considered interchangeable gains such opportunity. Thus, the cross-price elasticity of demand allows one to determine which goods and services are treated by buyers as interchangeable and can form a specific product market as a result.

As emphasized in the literature, however, this method is not foolproof and does not provide a hundred per cent correct results, particularly with

---

[9] Pure price elasticity of demand refers in fact to the relationship between the rise of specific goods and services and the demand for them. In contrast, the cross elasticity, also called mixed substitution elasticity of demand, is the relationship between the price of one good and the demand for some other good. In a situation where with the increase in the price of one good the demand for some other good decreases we are dealing with so-called complementary mixed elasticity of demand. Cf.: S. Laskowski, *On the elasticity of demand for telecommunications services*, http://www.ia.pw.edu.pl/~slaskows/doktorat/artykuly/elast.doc of 05.05.2006 r.

[10] Cf.: B. Majewska-Jurczyk, *Dominacja w polityce konkurencji Unii Europejskiej* (*The Dominance in the Competition Policy of the European Union*), Wrocław 1998, pp. 31-38.

[11] S. Laskowski, *Modelowanie popytu na usługi telekomunikacyjne* (*Modelling Demand for Telecommunications Services*), Telekomunikacja i Techniki Informacyjne, 1-2/2003, Instytut Łączności - Warsaw 2003.

regard to the determination of the so-called closeness of substitutes.[12] In fact, it is rare for goods or services to have only one substitute or substitutes only with an equivalent degree of closeness. From the economic point of view, the closer substitute will be the one with higher cross-price elasticity of demand coefficient. Such an analysis, however, is fully representative only in a theoretical mathematical equation, and not in the practice of setting the range of the product market, where multi-faceted market dependencies and a multitude of products are involved and significantly alter the final outcome of such a study. This thesis is also reflected in the jurisprudence of the CJEU (then ECJ), of which the best example might be a ruling on the case Hoffmann La-Roche vs. the Commission, where the CJEU (then ECJ) stated that: "if a product could be used for different purposes and if these different uses are in accordance with economic needs, which are themselves also different, there are good grounds for accepting that this product may, according to the circumstances, belong to separate markets which may present specific features which differ from the standpoint both of the structure and of the conditions of competition. However this finding does not justify the conclusion that such a product together with all the other products which can replace it as far as concerns the various uses to which it may be put and with which it may compete, forms one single market. The concept of the relevant market in fact implies that there can be effective competition between the products which form part of it and this presupposes that there is a sufficient degree of interchangeability between all the products forming part of the same market in so far as a specific use of such products is concerned."[13] There is no doubt, however, that this method should be and is used widely to determine the catalogue of goods showing substitutable features.

However, when considering the demand substitution, apart from the emphasis put on cross-price elasticity, one should also take into account a set of regularities resulting from market behaviour that have occurred in the past. The point is to assess and draw conclusions, as if ex-post, concerning the users, manufacturers and the mechanisms of the market. This

[12] Ibidem, pp. 32-34.

[13] See: Case 85/76 Hoffmann La-Roche vs. The Commission, Court Reports 1979 ECR 461.

in turn will allow to indicate the preferences of buyers and the period of time since the price increase of goods or services in which they replaced some goods with other. For this purpose on may surely use the analyses of the price movement of potentially competing products, price fluctuations or tariffs.[14] In the absence of such data, which is possible even in relation to the relatively young telecommunications markets, it may be measured by presumable reaction of buyers to price increase.

It should be noted, however, that there is a whole range of factors that can effectively inhibit demand substitution. Among them the most important seem to be two types of factors:

– legal restrictions,
– significant costs of replacing a given good with a substitute.

It often happens, especially in a sector like telecommunications, that in a given situation both groups of the above factors occur, and because of them the consumer faces double barriers to the free formation of his or her market share, both in subjective and objective terms. The subjective aspect refers, of course, to telecommunications companies, while the objective aspect refers to the goods and services they provide. The willingness to change may refer to both planes or only the objective plane. In the latter case, the customer is willing to change services without wanting to change the telecommunications company. In most cases, however, a good substitution also entails the substitution of the subject.

Legal incentives that constitute the first type of inhibitors to the demand substitution relate in particular to long-term contracts that bind consumers to particular suppliers. That timeliness prevents them from fully independent adaptation to changes taking place in the market. On the other hand, it should be seen as a result of every buyer's agreement, based on the attribute of autonomy, expressed by signing the contract. What happens in such case is a voluntary renouncement of opportunities to respond freely to the movement of prices and offers on the relevant market in exchange for certain goods or services. One should not forget, however, that such an on-term or long-term structure is in fact beneficial for suppliers rather than buyers. Of course, through such scheme the latter gain confidence that within the deadline specified in the agreement they will

[14] Cf.: Guidelines § 41

receive certain goods, but the former, apart from certainty that their products will be collected, at the same time exclude the threat from the outside entities offering substitutable goods, though only temporarily. However, this situation will change alongside the progress of liberalization and convergence of the telecommunications sector, as in order to stay in business telecommunications companies will have to resign from their own benefit and to introduce new competitive models of offers, for instance in relation to shortening the time of that loyalty of their subscribers. Thus, the border will gradually move and expand the field of the buyers' benefits, which ultimately should lead to the state when they will respond freely to any changes in the market, even in the plane of price or range of services offered within the specified settlement rates. Such process has already been initiated in Poland. This phenomenon is most welcome, not only from the point of view of consumers, but also the market itself, as its mechanisms are being distorted by the practices mentioned above.

The second group of incentives that inhibit the demand substitution are the cost incentives. They refer to difficulties in replacing a certain good with its substitute related to the financial ailment that would follow from such replacement. In fact, it very often happens that the use of certain technologies or services gives rise to the necessity to make appropriate investments, e.g. by purchasing suitable equipment. Thus, in such cases any substitution would also necessitate the change of the technical facilities. This in turn would result in a double inconvenience on the side of the user. First, it would expose him to losing the resources he had already invested, and second, it would force him to make further investments. Undoubtedly such system of dependencies inhibits demand substitution and by this it limits the possibility of free choice, this time due to financial reasons. However, compared to the legal constraints, this group of incentives is more subjective in character. This is due to the fact that in the case of cost incentives the decision to choose a different good is subject to sanctions only in the form of economic problems. The decision depends on the will of the buyer, or rather on his willingness to incur additional costs. In this situation a specific entity makes a subjective assessment whether replacing one good with another is more important and generally more advantageous, in which case they will be ready to incur additional costs, or whether the costs are so big that after the overall assessment they will choose to keep the good that was their primary choice. While considering the importance mentioned above, one should take into account not only the economic reasons, but also the psychological factors. In fact, it often happens that a buyer, dissatisfied with a particular service of a particular telecommunications company, in order to ensure their own welfare, will bear additional, often high costs and choose a substitution service offered by some other company. Therefore the decisive element in such case is not pure economic calculation, but the psychological aspect associated with the need for certainty and confidence in the activities of the supplier. So if a company increases the price or takes action detrimental to the values mentioned before, they may lose customers despite the barriers in the form of the cost incentives.

However, in the situation when the overall cost of the conversion, including investment made in order to use a product or service that a consumer wants to change to a substitute, expenditures related to the same conversion and also to the possibility of using a substitute, are too high or even prohibitive, such goods should not be included in the same product market.[15] Should this happen, the possibility of substitution would only be illusory, which would be a profitable solution only for telecommunications companies and would undermine the powers of buyers. Another result of such misclassification would be a too broad definition of the product market, which in turn would produce biased results in the evaluation of the competitiveness of this market. The entity with the actual significant position could be unnoticed because the basis of the assessment of the market would be defined too broadly. This in turn means that the force of its impact on the market would be classified as much lower than it actually was. Because of that the overall result would be far from reality due to the erroneous assessment of premises, although in theory it would be the most correct.

SUPPLY SUBSTITUTION

Supply substitution, as an instrument used to determine the extent of a product market, refers to potential output, both in the objective and

[15] Cf.: Guidelines § 50.

subjective-objective aspect. Therefore, the point is to examine whether, in a reasonably short period of time, the market will expand by new substitution goods or services, or whether new companies will appear in the market together with new substitution goods. If so, it should, of course, be taken into account while determining the boundaries of the market relevant for the purposes of an ex ante regulation. As the European Commission stated, a reasonably short period of time in which the potential output should occur is to depend on the characteristics of each market and should be considered individually in each case.

The objective aspect of the potential output applies to telecommunications companies that already operate in the relevant market. This does not mean, however, that they are not able to introduce new goods or services to this market that may be substitutes for the goods included in their current offer. For if in the eyes of buyers certain goods are identical in terms of price, destination, or properties, then the willingness to replace them with some other goods depends only on the possibility of launching new capacities and expanding production. Such activities enable companies to gain new customers and increase their market power. Therefore, in this case only the objective extension in the market occurs, as new substitution goods and services are introduced, and the subjective catalogue remains the same.

In the case of subjective-objective aspect - one deals with the extension of the market both by the emergence of new suppliers and new substitution goods offered by them.[16] The result is that while defining the relevant market one should also analyse the probability that the telecommunications companies will shift to a different profile of production. Such a change depends primarily on the interaction of two factors. Firstly, hypothetical profits expected from the sale of goods in another market. Secondly, costs generated by such a change. In fact, only estimation of the economic relations between the two elements allows one to decide whether such a change would be beneficial at all, and if so, after what time the first profits should be expected.

One should not forget, however, about the existence of barriers that may hinder or even prevent supply substitution. Both the introduction of

[16] The ECJ and the European Commission in the assessment of the product aspect of the market used the concept of supply substitution, among others in cases Continental Can and Tetra Pak I.

new products or services, and the emergence of new telecommunication companies may be limited by commercial liabilities or administrative regulations. The production capacity of a given company when it is bound by long-term contracts will not be sufficient to expand or change the production profile. On the other hand, regulatory requirements may disable the possibility to enter the market quickly and by this discourage from undertaking such activities. There may be, for example, difficulties in negotiating access to the network or obtaining right-of-way for network development.[17]

The existence of supply substitution can be checked by conducting a test that refers to the relationship between hypothetical withdrawal of a given supplier from the market and the acquisition of its share in this market by other suppliers. Although it is a far-reaching simplification, it allows, with a certain degree of probability, to specify the entities that will be able to offer substitution goods or services in a reasonably short period of time. However, as emphasized by the EC, merely hypothetical supply substitution is not sufficient for the proper formulation of the market definition.[18]

This view seems to be most correct, because only a thorough analysis based on specific data should be the basis for determining the product range of the market. Otherwise, the entire process of the ex ante regulation will be exposed to failure, as incorrect definition of the market will result in an incorrect assessment of its competitiveness, which in turn may lead to burdening with regulatory obligations entities that do not require this or to omission of entities that occupy significant positions and their actions in fact interfere with the proper operation of competition in the market.

CHAIN SUBSTITUTION

Chain substitution is a specific variant of substitution, which can be illustrated by a model of the relationship of three goods.[19] However, the

[17] Cf.: Guidelines § 53.

[18] Cf.: Guidelines § 52.

[19] Such model also applies to geographical areas.

direct substitution takes place only between two of them. Namely, if the goods are marked with letters A, B and C, only good B will be directly substitutable, both with good A and good C.

The substance of the chain substitution is a good relationship between goods A and C. Although they are not directly substitutable, their prices may certainly be limited by the substitution of good B.[20] If such relationship between goods A and C is present, one may say that this is a chain of substitution, and therefore the market definition should be expanded to include goods A and C.[21] Such substitution can occur, e.g. in the case of price limitation for undertakings providing networks in particular areas by the company with significant position operating on the national level.[22] However, as emphasized by the European Commission, every application of this model should be duly justified and proven in order to prevent unfounded expansion of the market, which, as is already known, can distort the results of the entire regulatory procedure. Therefore, the most correct is the concept of applying in such cases the principle of particular caution. Justification for the existence of chains of substitution needs to contain two elements: firstly, it should indicate a strong degree of substitutability between the goods and, secondly, it should prove clearly that the prices of commodities A and C, (i.e., those at the ends of the chain) are in a relation of dependence on prices of commodity B. In case of the correct application, chain substitution allows one to formulate a more complete definition of the market by extending its scope to the goods or geographical areas that, in the general understanding of the concept of substitution, would not be found within its boundaries. This in turn translates to the result of the whole regulatory cycle, even in terms of more accurate imposition of any obligations.

[20] Cf.: Guidelines § 62.

[21] See: Case COMP/M.1628 – TotalFina/Elf, Official Journal L 143 z 29.05.2001, p. 1. Item 188.

[22] Such structure also appears in other cases, when an entity in the national market limits prices of goods in other geographical markets.

The last indicator that should be taken into account when determining the product market is potential competition. It is based on an assessment of the likelihood that telecommunications companies that currently are not part of the product market are able to enter this market. This in turn will cause its extension, so undoubtedly this is a factor of great importance from the point of view of the ex ante regulation, which essentially is future-oriented. The substance in this case is the period in which such change of production profile, enabling the existence on the market, is to take place. It is assumed that it should be evaluated in the medium term. Therefore, while in the the case of supply substitution entry to the market must be made in a short period of time, in the case of potential competition it is assumed that it should be a period of average length, ranging between one and two years. However, in a sector marked by such dynamics and shaped by constant innovation, which happens in electronic communications, distinguishing between supply substitution and potential competition in many cases may be complicated and often takes place already at the stage of market analysis.

Also in relation to potential competition one can talk about the obstacles that may hinder or prevent its appearance on the market. These are undoubtedly costs associated with switching or extension of production capacity, legal barriers, both in the civil and administrative law, as in the case of supply substitution. One should also bear in mind that potential competition does not always mean the emergence of a new telecommunications company in the market. It may happen that entities already present in that market will maximize their production capacity in the medium term and introduce new substitution goods that will enhance the competition without changing the subjective catalogue of the market. Therefore, while assessing the potential competition, one should take into account, which is often forgotten, not only companies operating outside a given market, but also those that are active within it, because only then a reliable analysis may be conducted and a decision may be made about not only potential competitors, but also about potential substitution goods that should be included in the market.

REFERENCES

Babis Henryk, Kinga Flaga-Gieruszyńska, *Rynek usług telekomunikacyjnych (Telecommunications Services Market)*, Warszawa 2011.

Jurkowska A., Skoczny T., *Prawo konkurencji Wspólnoty Europejskiej* (*Competition Law of the European Community*), Volume 2, part 1, Warsaw 2004, pp. 319-321.

Kowalik-Bańczyk K., *Internet a problematyka wspólnotowego prawa konkurencji* (*The Internet and the Issues of the Community Competition Law*), Studia Europejskie (European Studies) 2/2005, pp. 96-102.

Laskowski S., *Modelowanie popytu na usługi telekomunikacyjne* (*Modelling Demand for Telecommunications Services*), Telekomunikacja i Techniki Informacyjne, 1-2/2003, Instytut Łączności - Warsaw 2003.

Majewska-Jurczyk B., *Dominacja w polityce konkurencji Unii Europejskiej* (*The Dominance in the Competition Policy of the European Union*), Wrocław 1998, pp. 31-38.

Piotrowski A. J., *Co z tym rynkiem?* (*What about the market?*), PiEwT 4/2004 r., pp. 35-37.