

**GCPMED 2020**  
**Global Challenges and Prospects of the Modern Economic  
Development**

**ANTICOMPETITIVE AGREEMENTS IN THE DIGITAL  
ECONOMY CONDITIONS: LEGAL ASPECTS**

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**Abstract**

A growing number of antimonopoly law violations in the digital economy conditions are committed with the help of information technology. Economic entities use software to secure anticompetitive advantages. A violation that stands out is a cartel – an anticompetitive agreement usually aimed at the price policy in a specific market sector. The issue of combating anticompetitive agreements is relevant for the majority of countries. This study reviews the statutory framework of combating anticompetitive agreements in the digital environment, the main information technology types used to create digital cartels, means of identification of anticompetitive agreements in the digital environment used by the Federal Antimonopoly Service of Russia and legislative initiatives related to combating anticompetitive agreements in Russia. The following general scientific methods – analysis, synthesis, comparison, generalization; a special scientific formal law approach, a comparative law method have been used in the course of the research. The study is based on research, publications of Russian and foreign scientists and lawyers reviewing legal issues of competition protection against anticompetitive agreements. Analytical files on the issues related to the competition policy and combating cartels in different countries are also used in the research. The study confirms that the means of combating anticompetitive agreements used in Russia are efficient.

2357-1330 © 2021 Published by European Publisher.

*Keywords:* Anticompetitive agreement, competition, digital economy, information technology



## 1. Introduction

A competitive environment presents the foundation of any modern economic system. Competition is the basis for the market development and satisfaction of demands of individuals and legal entities in varied and high-quality goods, works and services. The world's leading systems of justice view restriction of competition and unfair competition as an offense. Protection of competition is especially relevant in the conditions of digitalization. The means of performance of illegal actions aimed at restriction of competition change under the influence of application of digital platforms, Big Data (large information volume processing technologies), deployment of robots and systems based on artificial intelligence. One of such violations is conclusion of anticompetitive agreements – cartels. These are traditionally understood as agreements between subjects of market relationships being competitors on the same commodity market, which can lead to negative consequences affecting the state of full-fledged competition. The antimonopoly authority of the Russian Federation – the Federal Antimonopoly Service of the Russian Federation (the FAS of Russia) is regularly finding cases of cartel establishment in the digital environment. In 2019, the Russian antimonopoly authorities initiated 944 cases on violation of the prohibition against conclusion of competition restricting agreements (almost by 20% more than in 2018), where 424 cases involve cartels (FAS, 2020). Globalization of processes in the digital environment causes the origination of similar phenomena in all world's leading economies contributing to the relevancy of this research.

## 2. Problem Statement

Legal aspects of securing due competition protection in the digital economy conditions are a subject of multiple research and discussions in Russia and abroad. The main issues discussed in publications are the use of digital platforms in carrying out of economic operations to analyze pricing, robot technologies for participation in trading. Krausová (2018) dedicates a number of articles to an analysis of the use of information technology, artificial intelligence and their influence on competition. In particular, the mentioned author reviews in one of the publications the issues of market abuse using big data and artificial intelligence technologies. Krausová (2019) develops this subject in further research and studies the impact of artificial intelligence on pricing and competition. Controversial issues of the use of artificial intelligence in the competitive environment are studied in the paper by Beneke and Mackenrodt (2019). Spiridonova and Juchnevicius (2020) dedicates an article to the issues related to the use of pricing algorithms, where a pricing algorithm is viewed as an instrument restricting competition and used to conclude anticompetitive agreements. Marty (2017) also reviews the establishment of pricing algorithms with the use of artificial intelligence and the liability for such competition disrupting actions. The issues of the application of laws on competition in the modern digital environment conditions and the application of algorithms are studied in the article by Ezrachi and Stucke (2017). The presented discussions and research are evidence of the relevant character of the issues arising in relation to the application of information technology for creation of anticompetitive agreements.

### **3. Research Questions**

The range of subjects of research on anticompetitive agreements in the digital environment is rather diverse. The following questions should be answered within the framework of this study. What provisions of applicable laws regulate the identification and combating of anticompetitive agreements in the digital environment? Are these provisions sufficient on the modern economic relationship development stage? What information technology of conclusion of anticompetitive agreements do unfair subjects use to violate the provisions of laws on competition? What are the peculiarities of modern methods of identification of anticompetitive agreements in the digital environment? What modern legislative initiatives are aimed at toughening of the struggle against anticompetitive agreements?

### **4. Purpose of the Study**

According to the relevancy of the reviewed problem, the purposes of this study are caused by the above stated research issues. The purposes of this study are as follows.

1. To determine a statutory framework for combating anticompetitive agreements in the digital environment.
2. To determine the level of sufficiency of the present-day Russian legal acts for solution of the issues of combating anticompetitive agreements in the digital environment.
3. To establish the types of technologies used to enter into anticompetitive agreements in the digital environment in Russia and abroad.
4. To determine the means of identification of anticompetitive agreements in the digital environment used by the FAS of Russia.
5. To review modern legislative initiatives aimed at combating anticompetitive agreements in the digital environment.

### **5. Research Methods**

The following general scientific methods – analysis, synthesis, comparison, generalization; a special scientific formal law approach, a comparative law method have been used in the course of the research. The study is based on research, publications of Russian and foreign scientists and lawyers reviewing legal issues of competition protection against anticompetitive agreements. Analytical files on the issues related to the competition policy and combating cartels in different countries are also used in the research. The problem has been studied in two steps. The problem and the research purpose have been singled out on the first step. Then the author has analyzed the existing scientific and analytical publications on the research subject and laws on competition. Conclusions arrived at in the course of the analysis of the scientific and analytical publications have been phrased, the publication has been prepared within the second step.

### **6. Findings**

The legal definition of the concept of an anticompetitive agreement (cartel) is given in competition law. However, a unified scientific or legal definition of a cartel in the digital environment does not exist.

The “digital cartel” term is often used in respect of anticompetitive agreements involving the use of information technology.

The Competition and Antimonopoly Regulation Development Strategy in the Russian Federation Until 2030 approved by Resolution of the Presidium of the FAS of Russia No. 6 of July 3, 2019, states that the priorities of operations of the service are the improvement of the antimonopoly regulation mechanisms in the digital economy development and globalization conditions, the development of methods of identification, prevention and suppression of cartels and other anticompetitive agreements on commodity markets and in trading in the digital economy conditions (FAS, 2019).

Implementation of priority areas of operations of the antimonopoly service in terms of combating digital cartels is placed on the Directorate for Combating Cartels of the Federal Antimonopoly Service that aims at identification and suppression of agreements and coordinated efforts restricting competition and inadmissible pursuant to the antimonopoly laws of the Russian Federation as well as methodological support of the structural subdivisions of the central administrative office and territorial authorities of the FAS of Russia on the issues referred to the jurisdiction of this institution. One of the serious problems encountered by the Directorate for Combating Cartels is identification of digital cartels. Keeping in mind that digital technologies are widely used in many spheres including the ones requiring compliance with the principles of competition, the task of this authority is identification of illegal actions performed with the use of algorithms and robots.

Pursuant to Federal Law No. 149-FZ of 27.07.2006 “On information, information technologies and information protection”, information technology is understood as processes, methods of search, collection, processing, presentation, distribution of information and means of implementation of such processes and methods. In the scope of digital cartels, information technology is used in the digital environment through computer software for illegal coordination of economic operations and price-fixing arrangements. A report of the European Commission on competition of April 4, 2019 named Competition Policy for the Digital Era is dedicated to the issue of anticompetitive agreements in countries of the European Union and notes negative influence of platforms on competition. It also raises the issues of competition between ecosystems covering platforms, applications, data exchange affecting the competitive environment of the economy and the role of technological capabilities of antimonopoly services in solution of these problems. The following software technologies of anticompetitive agreements can be singled out based on the analysis of publications and analytical files:

- pricing algorithm technologies. A pricing algorithm is a software product used to determine prices on the goods, which is applied to calculate and (or) set and (or) monitor prices based on the parameters defined by the user. The application of a pricing algorithm gives any economic entities an opportunity to process information on prices. The use of pricing algorithms does not constitute a violation of the law in itself, but may be applied to conclude vertical and horizontal anticompetitive agreements;

- trading robotization technologies (auction robots). An auction robot is optional functionality of My Account of auction participants enabling automatic bidding on behalf of an auction participant within the bidding limit set by such participant based on an electronic order with auction robot settings filled in and signed by the participant’s electronic signature. The use of an auction robot is not prohibited by law, moreover, such form of participation in trading is caused by digitalization of many economic and

technological processes including participation in trading. However, it may be an attribute of an anticompetitive agreement at presence of some characteristic features, e.g., being programmed for the minimum reduction in price;

- data processing and exchange technologies used at digital platforms. In this case we are talking about digital platforms offering large volume of services (e.g., Amazon). Due to the “network effects”, they have competitive advantages and an opportunity to produce an impact on the price. It should be noted that these technologies are legal but in some cases may entail liability for a violation of antimonopoly laws. The problem lies in the fact that the above listed technologies are legal and start posing a risk to the public upon acquisition of cartel traits.

The FAS of Russia has been identifying attributes of conclusion of anticompetitive agreements in the digital environment since 2015. First of all, the antimonopoly service pays close attention to trading organized to satisfy state and municipal needs. Starting from January 1, 2019, ordering parties are obligated to hold an open tender, a closed tender, a two-step tender, a request for quotations and a request for proposals only in the electronic form, which has triggered the growth of the number of violations in the competition sphere. According to the FAS (2019) data, more than 88% of cartel cases represent collusion at trading. Practical activities identify schemes of anticompetitive agreements involving suppliers as well as ordering parties. In particular, one of the schemes evidencing a cartel agreement is “battering ram”. The essence of it is that at least three colluding unfair participants take part in an auction. They act jointly against other applicants lowering the lot price down to the economically inadvisable agreement price by efforts of two of three participants. Such schemes may even involve robots. The actions of a robot in fact make it impossible for good faith participants to submit their price proposals as starting from a particular moment, the robot raises the auction price on a step-by-step basis. An example of the schemes involving the ordering parties is the use of a special software formula, which can automatically change the numbers in tender bids of good faith participants to incorrect ones, and thus adapt to specific suppliers. Considering that anticompetitive agreements in the digital environment are information technology, the use of which has attributes of violation of the law on competition, such phenomena can be combated by digital means only. To reveal such schemes, the FAS of Russia has developed and launched automated software, web service named “Large Digital Cat” (FAS, 2019). The service is aimed at control over auctions and identification of transactions violating competition rules. The service screens information resources to find attributes of anticompetitive agreements. The software used by employees of the FAS of Russia allows automatic receipt of the data volume and its analysis as to the correspondence to the set criteria, thus identifying cartels (or other anticompetitive agreements), the establishment of an evidentiary base and automatic drafting of a final document template (Teslenko, 2019).

The majority of European countries note the sufficiency of the legal framework for cartel suppression. Such states as France and Italy note the absence of the need for a drastic change in the antimonopoly laws for solution of digital market issues; some amendments have been introduced in the German laws on competition in terms of the use of big data and digital platforms in the digital environment (Ashurst, 2019). A system of statutory acts allowing combating bad faith actions of economic entities has now also been established and functions in Russia. The FAS of Russia has initiated some legislative changes

to expand the opportunities of the agency to prevent violations of the antimonopoly laws in the digital environment conditions. In particular, two bills are reviewed by the State Duma of the Russian Federation:

- Bill No. 848246-7 On Amendment of Article 178 of the Criminal Code of the Russian Federation and Article 151 of the Criminal Procedure Code of the Russian Federation in Terms of the Increase of Liability for the Actions Related to Conclusion of a Competition Restricting Agreement;

- Bill No. 848392 On Amendment of the Federal Law On Protection of Competition and Some Legal Acts of the Russian Federation in Terms of Raising the Efficiency of Identification and Suppression of Competition Restricting Agreements and Coordinated Efforts.

It seems that these legislative initiatives will be supported by parliamentarians and serve as an effective instrument in combating anticompetitive agreements in the digital economy conditions.

## 7. Conclusion

The use of information technology for the purposes of violation of antimonopoly laws is a kind of the reverse side of digitalization. Information technology is used by unfair business entities to create cartels restricting competition. The following conclusions can be made based on the carried out research:

1. The Russian Federation has a developed legal framework of combating anticompetitive agreements including the key legal acts on the level of federal laws, government resolutions and orders of the FAS of Russia. The current legal framework should be acknowledged sufficient, ensuring an opportunity to combat cartels in the digital environment.

2. The following types of technologies are used in Russia and abroad to conclude anticompetitive agreements in the digital environment: pricing algorithm technologies, trading robotization technologies (auction robots), data processing and exchange technologies used on digital platforms.

3. To reveal anticompetitive agreements in the digital environment, the FAS of Russia uses automated software – web service named “Large Digital Cat”. The service is aimed at control over auctions and identification of transactions violating competition rules. It seems that identification of digital cartels in modern conditions is possible by using digital technologies.

4. The FAS of Russia has initiated some legislative changes to expand the opportunities of the agency to prevent violations of the antimonopoly laws in the digital environment conditions and increase liability for the actions related to conclusion of competition restricting agreements. It seems that such legislative provisions, if adopted, will serve as an effective instrument in combating anticompetitive agreements in the digital economy conditions.

## References

- Ashurst (2019). Competition policy in the digital era: A comparative guide. <https://www.ashurst.com/en/news-and-insights/legal-updates/comparative-guide-to-digital-competition-policy/>
- Beneke, F., & Mackenrodt, M.-O. (2019). Artificial intelligence and collusion. *IIC - International Review of Intellectual Property and Competition Law*, 50, 109-134.
- Bill No. 848246-7 On Amendment of Article 178 of the Criminal Code of the Russian Federation and Article 151 of the Criminal Procedure Code of the Russian Federation in Terms of the Increase of Liability for the Actions Related to Conclusion of a Competition Restricting Agreement <https://sozd.duma.gov.ru/bill/848246-7>

Bill No. 848392 On Amendment of the Federal Law On Protection of Competition and Some Legal Acts of the Russian Federation in Terms of Raising the Efficiency of Identification and Suppression of Competition Restricting Agreements and Coordinated Efforts.  
<https://sozd.duma.gov.ru/bill/848392-7>

Ezrachi, A., & Stucke, M. E. (2017). Artificial intelligence & collusion: When computers inhibit competition. *University of Illinois Law Review*, 5, 1775-1810.

FAS (2019). The competition and antimonopoly regulation development strategy in the Russian Federation Until 2030 (approved by Resolution of the Presidium of the FAS of Russia of 03.07.2019, No. 6 2019). <https://fas.gov.ru/documents/685792>

Federal Law No. 149-FZ of 27.07.2006 “On information, information technology and information protection”. <http://www.consultant.ru/cons/cgi/online.cgi?req=doc&base=LAW&n=339396&dst=100144&rnd=42DEEAF95EEFE6057CB515371FE28609#05098454103320023>

Krausová, A. (2018). Abuse of market power in ICT sector. *Lawyer Quarterly*, 8(1), 75-81.

Krausová, A. (2019). EU competition law and artificial intelligence: Reflections on antitrust and consumer protection issues. *Lawyer Quarterly*, 1(1), 79-84.

Marty, F. (2017). Algorithmes de prix, intelligence artificielle et équilibres collusifs. *Revue Internationale de Droit Economique*. 31(2), 83-116.

Spiridonova, A., & Juchnevicius, E. (2020). Price algorithms as a threat to competition under the conditions of digital economy: Approaches to antimonopoly legislation of BRICS countries. *BRICS Law Journal*, 7(2), 94-117.

Teslenko, V. A. (2019). Large digital cat: Interim results and prospects.  
<https://ilns.ranepa.ru/files/konferentsii/bolshoy-tsifrovoy-kot.pdf>