# NETWORK-BASED ORGANIZED CRIMINAL GROUPS AND ASSOCIATIONS: CONCEPTUALIZATION

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**Abstract:** Analysis of organized crime development in Russia shows that since late 1980's hierarchical method prevailed in formation of criminal groups and associations, which resulted from inextricable connection between the processes of generation of structural forms of the above groups and social, political, and economic situation in society.

Changes in political and economic systems of the country and new technologies emerging required that criminal elements adapt to the new social situation. Development of information technologies, computerization, and globalization influenced the process of criminal groups' formation, which started crossing borders of one country obtaining transnational features. This inevitably resulted in complication of criminal organizations' structures, growth of the number of their members, change of means of communication between structural divisions and individual members of criminal groups. To control such criminal associations, more and more modern technologies and computer networks have been used recently, which allows not only to accelerate processes of communication between various elements of such organizations, but also to ensure their even better security.

Eventually, method of criminal groups' formation changes, they are more often organized in the form of a network. Currently, this is most relevant for the terrorist and extremist groups.

Study of this problem shows that aside from terrorist organizations network-based activity is widely used by structural units of cybercrime generating internal group relations based on the complementarity principle: actions of one member related to solution of tasks set facilitate solution of tasks by other members of the group.

Having analysed norms of international and Russian laws, the authors come to conclusion that in order to ensure efficiency of criminal law standards regulating liability for creation of criminal association, we have to expand the framework of this notion accounting for the new tendencies in formation of organized crime structures and their transition from hierarchical to network forms.

**Keywords:** Criminal groups, terrorist organizations, criminal association, international law, network-based criminal organizations.

#### INTRODUCTION

For a long time, the Russian criminal law mostly viewed the hierarchical structure as a typical feature of a criminal association, where the subordination of its members, both structurally and functionally, ensured that social system's stability (Nomokonov, 1994).

However, V.V. Kazanevskaya noted that the "hierarchical structure was a common yet optional type" (Kazanevskaya, 1987). The analysis of the current state of crime leads to the conclusion that, in fact, the hierarchical structure of criminal

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groups is not exclusive. Therefore, we see the necessity to apply various scientific methods to study the creation and operation of organized criminal groups and communities. Inter alia, system-purpose and system-structure analyses of these forms allowed identifying and summarizing the key characteristics of organized criminal groups and communities created under various principles: hierarchical and network. The formal legal method provided the basis for the proposals of changes in the concept of criminal association as per par. 4, Art. 35 of the Criminal Code of the Russian Federation, and the expansion of the concept of an organized group as used in international law.

The essence of hierarchy is the vertical subordination of subsystems and strict nature of the relationship between them. As a rule, the result of subordination is reduced diversity (freedom) of elements, which makes the system homogeneous.

The modern world demonstrates the power of the universal system law of development and its manifestation - the pursuit of an ideal as a higher purpose of systems. The homogeneity restricting the freedom of the system elements contradicts the evolutionary development vector focusing on cooperation communication, coordination and not subordination. Modern social systems, and even more so, the future ones, are shifting from the hierarchical to the network forms of organization.

According to T.N. Brysina, "the social world is now the world of traversal, overlapping networks of various kinds. The transition from hierarchical to network forms of organization, in fact, is the transition from a society focusing on the production of goods and services to a society with information as the main goal and value" (Brysina, 2006). This trend has also been underlined in works of other authors not only in the sphere of criminal law, but also civil law (Kirillova et. al., 2016; Shilovskaya et. al., 2016; Volkova et. al., 2015, etc.)

Crime, being a negative sub-system of a society, develops concurrently under the same laws, changing its functions in accordance with the changing social and economic conditions and adapting its structural characteristics to innovative processes developing in the environment, moreover, these changes relate not only to the adult crime, but also to minor crime (Sitdikova & Shilovskaya, 2015; Svirin et. al., 2016). A most important feature of network interactions is that they allow identifying and adapting the interests of the participants, formulating a strategic goal and estimating the final outcome of the interaction based on the current potential of the network members (Vasilenko, 2014).

We are currently witnessing spontaneous reorganization of organized crime structures mastering most advanced methods of network interactions, as already noted by the criminology researchers (Merkuryeva, 2014).

In such circumstances, the theory is to develop basic concepts and features of the new network forms of organized crime spontaneously arising in the criminal world.

# **METHODOLOGY**

This study is based on a number of general scientific and law-specific methods, first, the historical law method used in the historical analysis of the rise and development of organized crime in Russia.

Second, the statistical method used in the study of cybercrime development trends in the context of the strengthening position of organized crime in today's world.

Third, the sociological method used in the study of the phenomenon of crime as a specific negative subsystem of the society and networking interaction in today's society.

Fourth, the analytical method actively used in the analysis of trends in the establishment and operation of network-based organized criminal groups and criminal organizations (communities).

#### **FINDINGS**

The study results offer the following conclusions:

- 1. At present, both Russian and international law provides only for the conceptual hierarchical methods of the establishment and operation of organized criminal groups and criminal organizations (communities), and the trends of the emerging network structures do not have proper regulatory repercussions.
- 2. Social systems now tend to restructure from the hierarchical to the network forms of organization. Crime, which is a negative sub-system of the society, develops concurrently and under the same laws, adapting its structural characteristics to the innovative processes occurring in the environment. It manifests in the spontaneous rearrangement of the organized crime structure and in the transition from hierarchical to network forms, mostly widespread in terrorism and cybercrime.
- 3. Criminal justice response to crime needs to develop new concepts corresponding to the changed methods of the formation of organized groups and communities. Hence, it is proposed to supplement Chapter 28 of the Criminal Code of the Russian Federation providing for the liability for the creation of a criminal group with the purpose of committing computer information crimes, and for participating in such communities, as well as to introduce the concept of a criminal association taking into account the network-based organizational structure.
- 4. The international law also needs to update the conceptual framework describing the essence of the network-based criminal organizations.

## **DISCUSSION**

The history of organized crime in Russia demonstrates the inextricable connection of the formation of the structural forms of crime and the state of economic, political and social processes in the society. Since the late 1980s, the hierarchical methods of forming organized criminal groups and communities have been the most appropriate for their activity and the level of crime development in general.

By the end of the XX century, global changes in the economy and politics resulted in the transformation of business structures, the emergence of new markets and technology requiring the criminal world to adapt to new social conditions (Kuzakhmetova et. al., 2016; Sitdikova et. al., 2016; Sitdikova et. al., 2015). The hierarchical method of forming criminal organizations remained dominant in the criminal reality, however the organized crime became increasingly influenced by such factors as globalization, new information and communication technologies, increasing competition.

Developing transnational features, organized crime has moved beyond the borders of a single country entailing the complication of the criminal groups' structure and growing numbers of participants. The management of such large criminal formations began transforming from single-handed to collective control structures capable of overcoming the limited capacity of one individual in solving complex problems. A significant management component was then shifted to computerization allowing accelerating the process of interaction of the criminal group elements.

With the increasing number of members of criminal organizations and organized groups, a large part of administrative functions is inevitably moved down to the lower levels which are gaining more and more freedom in the choice of action. Gradual decentralization leads to the "liberation of numerous live self-organizing network connections" (Chernov & Daiker, 2015).

According to O.V. Ryabtsev, "today, the most prominent manifestation of this trend is the activity of closed radical extremist organizations" (Ryabtsev, 2008).

Ryabtsev also described the activity model of closed-type structures as based on such factors as the existence of a common ideology uniting network group segments, stable communication between them, prevalence of informal relations and maximal decentralization proposing autonomy of the network elements.

The terrorist network structures not bound by hierarchical constraints have common coordinating centers located outside the boundaries of the countries where the key participants are located impeding the disclosure of such networks and increasing their social danger.

The analysis shows that the network principle of activity, except for terrorist organizations, is extensively applied by cybercriminal structural formations building

intra-group relations based on the complementarity principle: the actions of one participant associated with the set tasks help to solve the tasks of other group members.

Example: the case of A. and his wife Z. who created a transnational organized criminal group including eight individuals with programming skills and experience in creating malicious software. The group organizers selected participants in the course of communication in the Internet, and the communication was anonymous for the sake of secrecy. Giving false geographic location, users located in various regions of Russia, Kazakhstan and Latvia came into contact, coordinated their actions and began implementing criminal plans proposed by the organizers. The crime scheme was as follows:

Having gathered information on the UK electronic casinos and bookmakers specializing in commercial activity in the Internet, the organizers e-mailed them proposing to protect their servers from DDoS-attacks for one year for \$ 10,000. First, the companies ignored the proposal. Then there was an attack on the Internet server, which resulted in the attacked company incurring loss amounting to hundreds of thousands of dollars. After that, the organizers sent a letter to the company demanding the transfer of \$ 40,000 to the addresses of various residents in different regions and, as a rule, the money was then transferred. The case included 19 similar episodes of racketeering committed against 17 foreign companies (Criminal Case No. 290824.)

The activities of the organized group had no subordination relationship, although there were organizers (in fact, only the initiators of the crime), who had built their relationships with the group members as equal participants in accordance with the complementarity principle. In this group, the stability was ensured not by the hierarchical structure, as in the classic forms of organized crime, but by the partnership and trust relations of the participants. These relationships lead to the elimination of the traditional control mechanisms and sanctions to violators, to the flexibility and mobility of the group capable of instantly dissolving in the Internet in case of an emergency.

The structures created on the network principle are also obviously able to form strategic alliances, as now demonstrated in Syria and Afghanistan by the transnational terrorist crime.

Researchers have noted the increased share of computer crimes committed under the leadership of transnational organized criminal groups (according to the Interpol report, in 2012 the figure was 80%) (Osipenko, 2012).

One must acknowledge that the development of cybercrime is far ahead of the society's ability to counter it. The delay in the development of measures to combat this type of crime is observed not only at the level of individual national legal systems, but globally as well. Even the United Nations began developing issues of combating cybercrime much later than the European Council adopted the Budapest Convention in 2001.

Various countries have adopted and applied laws against cyber crime, however these rules need to be harmonized, as the difference in the criminalization of the actions, the lack of common terminology and conceptual framework result in the inefficiency of international cooperation.

The gap between the cybercrime rate and its countermeasures is particularly evident with the analysis of the manifestations of the organized nature of such criminal area. The connection between organized crime and cybercrime is more and more often recognized as a dangerous trend of our time (Nomokonov & Tropina, 2012), however, the criminal legislation of the Russian legislation does not fully take this into account. As per Chapter 28 of the Criminal Code of the Russian Federation "Computer information crimes", qualifying circumstances include crimes committed by a group of persons in collusion or by an organized group (p. 3, Article 272 and p. 2, Article 273 of the Criminal Code of the Russian Federation).

In our opinion, these provisions do not take into account the fact that a large part of computer crimes are committed not only by organized groups but also by associations of such groups, that is, criminal networks. Still, the law does not provide for specific liability for the creation of a criminal group in the sphere of computer information, similar to liability standards for the creation of terrorist and extremist communities, which we consider a legal loophole. It seems that the further development of computer tech crime can only gain pace and improve the forms of its activities and organizational structures, so the adoption of appropriate standards, complementary to Chapter 28 of the RF Criminal Code, would not go amiss.

However, to ensure the efficiency of the criminal law, which regulates the liability for creating a criminal association, it is necessary to expand the scope of this concept, taking into account the new trends in the formation of the organized crime structures and their transformation from hierarchical to network forms. For these purpose, the following (working) concept can be suggested: Criminal association is an association of organized groups or a structured organized group of several people (minimum three) united in a hierarchical manner (under the unified leadership) or on a network principle (based on complementarity) for the purpose of criminal activity.

The international law has not yet provided a proper legal interpretation of network forms of organized crime. As is well known, the definition of an organized group is given in Art. 2 of the United Nations Convention against Transnational Organized Crime.

In this article, an organized criminal group is defined as a structured group of three or more persons, existing for a certain period of time and acting consistently with the purpose of committing one or more serious crimes or offenses, recognized as such by the Convention, in order to obtain, directly or indirectly, financial or other material benefit. This means that the concept of an organized group accepted in international law contains the required system features characterizing a group created as a hierarchical type:

- solid structural form;
- existence for a certain period of time, as required for the stability descriptor of such groups;
- coordinated actions (connection between system components and the managing body);
- number of group members 3 or more persons;
- purpose: committing one or more serious crimes or offenses recognized as such by the UN Convention (immediate goal of the system);
- objective: directly or indirectly obtaining financial or other material benefit (the desired effect or a distant goal of the system).

According to this definition, an organized criminal group is a system with a clear structure, the stability of which is ensured by quantitative representation of minimum three persons acting with common goals, and existing for a certain period. This kind of structure presupposes the existence of developed governing mechanism playing a central role in the whole process of the system formation, setting for all system objects/components the qualities or changes that would lead to the formation of the integral properties; it sets the requirements that would ensure the system emergence and retention of its stability. Article 2 of the UN Convention only assumes the sign of general guidance, however it is expressly stated in the Russian legislation as a mandatory feature of a criminal community (criminal organization).

### **CONCLUSION**

The scientific issues raised in this article require further in-depth study, as the network-based criminal organizations (associations) formed spontaneously in the criminal world have not yet been the subject of penetrating scientific research. An exception here would be the works of O.V. Ryabtsev on the analysis of network activity principles of closed-type organizations (for example, the Crimean Tatar national movement). However, the scope of his study is limited to relatively narrow regional problems. There is a long-felt need for large-scale research of the transformation of criminal organizations using statistic and other data and creating a concept framework according to the current state of organized crime in the world.

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