Protection of critical infrastructure against terrorism during the Olympic Summer Games in Rio De Janeiro in 2016

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Abstract

The Brazilians enthusiastically welcomed the decision to grant them the right to host the 2016 Summer Olympics. The decision to grant Brazil the organization of such a large and spectacular mass sports event to be held in Rio de Janeiro entailed certain risks. This was mainly due to the alarming crime and violence rates in the city, which were largely related to drug trafficking. The decision of the International Olympic Committee sparked a global discussion which questioned Brazil's ability to guarantee the safety of participants in the 2016 Olympics, following the 2014 FIFA World Cup which it also hosted. This article analyzes and assesses the security system of the Olympic Games in Rio de Janeiro organized by the Brazilian authorities, which, according to the organizers' intentions, was to effectively counter the projected internal and external threats. In this context, Brazil's actions for the safety of the Olympic Games deserve recognition and can be a good example for future organizers of this type of mass sporting events. This applies to activities undertaken by the organizers that had the greatest impact on the preparation, organization and functioning of the safety system during the 2016 Olympic and Paralympic Games in Rio de Janeiro. In this regard, a certain specificity of activities undertaken by the organizers should be noted, which not only focused on combating terrorist threats, but were also aimed at countering internal threats, mainly the organized crime.

Keywords: terrorism, Olympics, security, protection, threat, sports facility

1. Introduction

In recent years, research on terrorism and security in the Olympic Games has attracted a wide interest of scientists from various fields and disciplines, such as history, sociology, criminology, political science, international relations, communication science, sports management and legal sciences. This confirms the need for an interdisciplinary approach to the safety of the Olympic Games as a mass sports events of international nature.

This is particularly important due to the fact that terrorism is a systematically returning phenomenon that generates threats of various scale and scope. In terms of the global interest that accompanies the major sporting events such as the Olympic Games, they are also attractive to terrorists. This is due to, inter alia, the fact that by carrying out attacks during the Olympic Games, terrorists can gain wide publicity and seriously disturb the sense of security among the international community.

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Analyzing the issues of terrorist threats in the case of this type of mass sporting events, it should be noted that the potential perpetrators carry out attacks not because they have any particular claims to the Olympic movement, but mainly because of its powerful peace symbolism. In practice, terrorist attacks are sometimes also an element of a campaign carried out by the individual terrorist groups against an identified enemy, e.g. the government of the state or its representatives participating in the Olympic Games (Silke, 2010, p. 58).

When analyzing the issues of terrorist attacks during the Olympic Games, it is impossible to forget their tragic history. It refers to the Olympic Games in Munich in 1972, where extremists from the Black September Organization killed five Israeli athletes, six coaches, and a German policeman. This tragic event became a specific impulse to intensify the activities aimed at improving the effectiveness of counteracting terrorist attacks during mass sports events such as the Olympics. These actions were even more exacerbated by the terrorist attacks that took place in the United States on September 11, 2001 (Spaaij, 2016, p. 452). The examples confirming this thesis were the effective security systems set up by the host countries of the winter and summer Olympic Games, i.e. in Athens (2004), Torino (2006), Beijing (2008), Vancouver (2010), London (2012), and Sochi (2014). In the case of the Summer Olympics in Rio de Janerio in 2016, other events were more disturbing for its organizers, despite the awareness of the threats similar to those of September 11, 2001 (Atkinson & Young, 2005, pp. 269-94). This time, it was about the terrorist attacks in Paris on November 13, 2015, in which 130 people were killed. This was the result of a series of coordinated attacks by three suicide bombers who struck close to the Stade de France, Saint-Denis' national stadium. The first explosion near the stadium took place during the friendly football match between France and Germany. The investigators believe the striker planned to detonate his belt with explosives at the stadium but did not make it through the gates. Despite the fact that he was in possession of a valid ticket for the match, he did not pass the security check at the gate. Ten minutes after the first explosion, the second bomber detonated an explosive in a suicide vest near the stadium. 23 minutes after the second explosion, the third suicide bomber detonated the belt with explosives (Robinson & Laudauro, 2015). In addition, the attacks were accompanied by other suicide bombings and shootings in cafés, restaurants, and music clubs in Paris. These events were referred to by one of the researchers of terrorism, Ronald Crelinsten, who used the term "September 12th thinking", regarding terrorism as a new form of war in which all far-reaching preventive measures should be used. According to him, "September 12th thinking" requires intensification of activities that also increase the safety of the Olympic Games.

In fact, this has translated into an exponential increase in budgets in part allocated for the safety of such sporting events, to the point that the Olympic Games are now among the most protected mass events (Boyle, 2012, p. 394). This is also confirmed by the words of a security expert Neil Fergus, who, regarding the 2004 Athens Olympics, believes that it was "the largest security operation since the time of Alexander the Great marching through Persia" (Fergus, 2004). In turn, in relation to the Olympic Games in Beijing 2008, a political scientist Ying Yu described it as "the largest peacetime security operation in the history of the country" (Ying Yu & Klauser, 2009, p. 390). A dozen or so years ago, sociologists John Horne and Wolfram Manzenreiter also commented on this issue, and they predicted that the security issues "will probably be in the foreground of the organization of great sports events" and "will be an important research topic in future research on mega-sports events" (Horne & Manzenreiter, 2006, p. 19)

The terrorist attacks in France and the discussions between scientists and politicians have re-triggered the concerns about the security of important sporting events, including the upcoming Olympic Games in Rio de Janeiro. They also sparked discussions on the candidacy of Paris to host such a sports event in 2024 (Morgan, 2015).

There is no doubt that the events identified above made the Olympic Games in Rio de Janeiro a huge organizational challenge for the Brazilian authorities and, at the same time, a serious test for their credibility and effectiveness (Watts & Douglas, 2016).

Taking into account the outlined problem situation, it was assumed that the purpose of this article will be to: examine the issues related to the organization of the security system of mass sports events on the example of the Olympic Games in Rio de Janeiro in 2016. It was assumed that this goal would be achieved as a result of empirical research allowing to identify the types of internal and external threats to the Rio Olympics and to characterize the basic determinants that influenced the organization and functioning of the security system of this sporting event

2. Internal and external factors determining the security of the 2016 Olympic Games organized by Brazil

On October 2, 2009, at the meeting of the International Olympic Committee (IOC) in Copenhagen (Denmark), Rio de Janeiro was selected as the host of the XXXI Olympiad in 2016. The Brazilians, including the then President Luiz Inácio Lula da Silva, responded to this long-awaited decision with joy and excitement (121st IOC Session, 2009). Nevertheless, just a few weeks after the first anniversary of this memorable decision to award Rio the function of the host of the Olympic Games, the joy of the authorities was severely chilled. The reason for this was a series of attacks that were carried out in November 2010 all over Rio de Janerio. As a result, dozens of cars were burned by criminals in retaliation for the activities carried out by the local police. The event from August 2010, when the police tried to arrest gang members returning from a night party, who were moving from one favela to

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another, resulted in a shooting. Several police officers were injured and one gang member was killed on the spot. In addition, gang members also took 35 hostages at a nearby hotel, but later released them.

Apart from the internal unrest, the situation in the international environment also did not help the Brazilian authorities to calmly prepare for the Olympic Games in Rio. It was related to numerous terrorist attacks that affected various countries in different parts of the world. Below there are some examples of terrorist attacks that took place in 2015-2016.

- On December 2, 2015 (eight months before the start of the Olympics), 14 people were killed and other 22 were injured in an attack at the Inland Regional Center in San Bernardino, California.
- On March 22, 2016 (four months before the start of the Olympics), 31 people were killed and 270 were injured in a bomb attack at the Brussels airport.
- On June 12, 2016 (fifty-five days before the Olympics started), one shooter killed forty-nine people and injured dozens at the Pulse Nightclub in Orlando, Florida.
- On June 28, 2016 (thirty-eight days before the start of the Olympics), a bomb attack at Istanbul Airport killed 41 people and injured over 230 people.
- On July 1, 2016 (thirty-five days before the start of the Olympics), an attack in Bangladesh resulted in the death of twenty-one people and thirty injured.
- On July 14, 2016 (twenty-one days before the start of the Olympics), during the celebrations of the French Bastille Day, a truck hit over a hundred people in Nice and eighty-four were killed.
- On July 22, 2016 (thirteen days before the start of the Olympics), an attacker at a shopping center in Munich killed nine people and injured twenty-seven.
- On August 1, 2016 (just three days before the opening ceremony in Rio de Janeiro), a home-made bomb similar to the one used in the Boston Marathon bombing exploded in a shopping center in Brasília, with no casualties.

Based on the threat forecast, it was determined that reducing criminal and terrorist threats will play a key role in protecting the Rio 2016 Olympic and Paralympic Games. In order to effectively counter these threats, the Brazilian government was forced to search for original solutions appropriate to the prepared scenarios and consistent with the actual capabilities of the country and its social and economic conditions.

In terms of the security of the Rio Olympics, it was decided to strengthen control over the situation in the favelas, which was to lead to a reduction in the activities of criminal nature in the city. To this end, the Brazilian authorities took a series of large-scale and decisive steps to stabilize the situation, especially in the southern part of Rio. The Brazilian army, including the navy and the military police, came to the rescue of the police force. The actions carried out by these forces resulted in the arrest of many gang members and the confiscation of hundreds of weapons and large amounts of drugs. This allowed to limit the activity of criminal groups in many parts of the city. Despite this, the feeling of threat at the 2016 Olympics in Brazil was still serious. In order to improve the security situation, the Brazilian authorities tried to obtain broad public support for the activities of the security forces. This need was argued by Carlos Arthur Nuzman, the chairman of the Brazilian Olympic Committee, who said that only great commitment and consistency in the actions of the Brazilian authorities are able to deal with crimes related to drug trafficking in Rio. He also stressed that it was achievable, because Rio had already proved in 2007 that the Pan-American Games could be safely held. The mayor of Rio de Janeiro, Eduardo Paes, spoke in a similar vein, saying that the resolution of the crisis will contribute to solving the crime problem in Rio, and assured that "in seven years the situation in Rio will be completely different" (http://esporte.ig.com.br/mais/2009).

A key role in these activities was played by the safety plan developed for the 2016 Olympic Games, which was approved by the International Olympic Committee already in 2010 (Bitencourt, 2011). With regard to the plan in question, it was also declared that it would take into account the use of all necessary preventive measures, including those used during the London Olympics (2012) (Graham, 2012) and the Football World Cup, which were also to be held in Brazil in 2014 (Bitencourt, 2011, p. 3).

Despite these assurances, the development of the situation in Rio was worrying and heralded possible threats that could also arise during the 2016 Olympics. Similar concerns were also expressed by foreign experts, who often questioned the Brazilian authorities' ability to ensure safety during such a large mass sports event.

Irrespective of the comments submitted, the adopted Rio 2016 security plan focused on counteracting two types of threats. The first threat was of an internal nature related to the local crime described above, which had been present in Rio for many decades. The second threat was external and related to the possibility of terrorist attacks during the Games.

In order to deal with the first type of threat, the authorities of Rio, who had a lot of experience in fighting crime, planned to implement an effective set of measures that would result in increased security by 2016. The other type of threat had a wider international context and required a strategic approach of the Brazilian authorities. It turned out to be difficult due to the fact that, on the one hand, Brazil was not targeted by terrorist organizations, including those best known and associated with Islamic

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extremism. On the other hand, however, the lack of terroristic attacks in Brazil could not make the organizers of the 2016 Olympic Games inattentive. Moreover, it was obvious that such a spectacular and media-publicized sports event could be an ideal venue for terrorist attacks (Bitencourt, 2011, p. 5). In terms of counteracting terrorism, however, it had to be remembered that the Brazilian police were not sufficiently experienced and prepared to combat this type of threat.

In general, ensuring security against internal and external threats required an extremely wide and comprehensive cooperation between institutions responsible for national security, and also foreign institutions (Bitencourt, 2011).

The key issue in creating an effective security system for the 2016 Rio Olympics was the assessment of crime risk based on the level of the crime rate. It was also referred to by the International Olympic Committee, which emphasized that the homicide rate in Rio fell in 2009 from 39 to 100,000 (2008) to 33. In this regard, it should be noted that the declared actions, including the implementation of crime prevention programs by the authorities Rio assumed further declines of this indicator. It should also be emphasized that, in addition to the crime rates in Rio, the high number of slums was a major threat Under these conditions, very often criminals transformed some of these favelas into their own territorial kingdoms from which they fully managed and controlled the drug trade. This meant that there was often a fight between gangs for control of drug sales and the controlled territory.

Such a situation shook the sense of security among the citizens of Rio and undermined the effectiveness of the actions implemented by the state so far. The map below shows the locations of the favelas that have been targeted by anti-drug operations (Alemão Complex, Jacarezinho, Vila Cruzeiro, and Rocinha). At this point, Rocinha was one of the largest favelas in Rio, which was also dynamically developing.
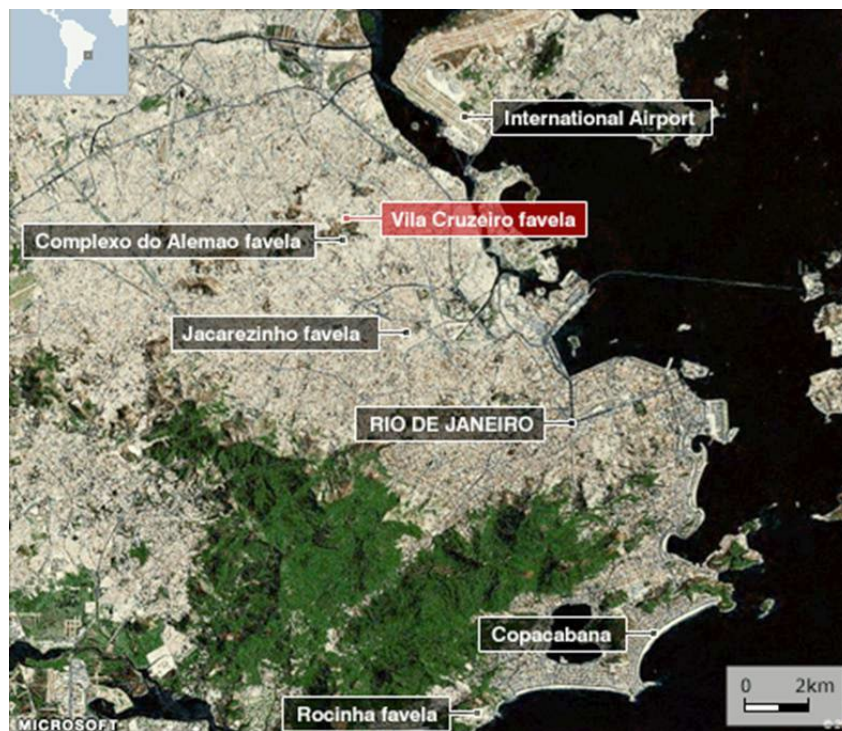

Figure 1. Main Favelas in Rio
Source: http://www.bbc.co.uk/news/world-latin-america-11852588.

Therefore, in the face of the upcoming 2014 World Cup and the 2016 Olympics, steps have been taken to contain the crisis and regain control of the Alemão complex. To this end, new Pacifying Police Units (PPU) have been established. They were set up by the Rio Public Security Secretariat as a "community police" based on partnership with the public and other public security institutions. Originally, in the financial plan, the Rio authorities allocated 8 million dollars to create these units. By 2016, it was planned to create a contingent of 60,000 officers (Bitencourt, 2011). The Brazilian authorities, in addition to creating PPU units, also took steps to increase the presence of the police in the southern district of Rio (Freeman, 2013, pp. 95-112). In addition, during periods of increased criminal activity, the number of policemen on beaches and other vulnerable places in the city was also increased. To this end, already in 2010 the police force in Rio was increased by 2,000 officers, and the next year it was planned to increase the

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number by another 7,000 people. In total, the number of police officers was to be increased from about 40,000 to 60,000. According to the adopted plan, by 2016 the Military Police Battalion intended for special operations was to be doubled (Bitencourt, 2011).

It should be emphasized that in the safety plan of the Olympic Games, security efforts focused on people arriving in the city (over 10,500 athletes, national delegations, tourists, journalists, local community, etc.). In addition, the focus was on the protection of the planned sports events and their venues. The Olympics opening and closing ceremonies, sports events, competition grounds, parking lots, the Olympic village, hotels, airports, transport system, tourist sites and other places and facilities were subject to special protection. As a result, it can be concluded that the protective activities focused on securing the four main zones, which are presented in the figure below (Bitencourt, 2011).

Figure 2. Planned Olympic Zones in Rio
Source: http://www.economist.com/node/14587915.

The Barra zone was the so-called "heart" of the Olympics, because it was here that the Olympic Village and the Media Center were located. The Copacabana district was to host outdoor sports competitions in the so-called temporary venues. The opening and closing ceremonies of the Games were scheduled to take place at the Maracanã Stadium. In turn, other sports competitions were to be held in the Deodoro area. The protection of these zones (areas) to a large extent required taking standard measures, i.e. establishing safety circles (zones) and checkpoints (Gaffney, 2014, pp. 217–237). A more complex task was to ensure safety in areas not directly related to the sports events. In these areas, the main threat were the criminals active in attractive places visited by tourists, i.e. in public transport, hotels, at the airports, etc.

In these places, they could carry out robberies, harass people or sell drugs, or kidnap people for ransom. The presence of more police officers in these places and the organization of additional checkpoints were to limit the activities of the criminal groups in Rio's downtown area. In this regard, the Brazilian authorities assured that they had gained the necessary experience by hosting the Pan American Games in 2007, which went smoothly. In addition, it was declared that the security system would be tested before 2016 during the 5th World Military Games, which were to take place in July 2011, and during the 2014 FIFA World Cup (football). There is no doubt, however, that the scale of the Olympic Games compared to the sporting events mentioned above, made ensuring their safety pose a greater challenge for the Brazilian authorities.

With regard to terrorism, it should be noted that the Olympic Games have become very attractive to people interested in promoting their political or religious views. Through the attacks during such a large international event followed by the international community around the world they could show their true power. In this regard, however, it should be noted that Brazil had not been targeted by terrorists, especially those motivated by ideological extremism. Hence, it was widely believed that terrorist groups might not have particular reasons to attack the people of Brazil. In this situation, it was forecast that terrorists could be interested mainly in attacking representatives of other countries, i.e. athletes, state delegations and tourists. Regardless of this, however, it should be remembered that acts of terror are not unfamiliar to South America. An example is 1992, when 30 people were killed in a bomb blast at the Israeli embassy in Buenos Aires, Argentina. In 1994, another act was committed again in Buenos Aires that was directed against an Argentine-Israeli mutual understanding. As a result of the explosion 85 people died. In earlier years, there were also other ideological or political terrorist attacks in the region. Another example is Colombia, where many bombings and

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kidnappings took place. There have also been several cases of terrorism in Brazil's history - such as bombings and kidnappings. They happened during the military dictatorship period (1964-1985) and were organized by left-wing groups. On the evening of April 30, 1981, a bomb accidentally exploded during a concert in Rio de Janeiro (Rio Centro Pavilion) on the occasion of Labor Day.

3. Characteristics of the Brazilian security forces and their participation in the protection of the Olympic Games in Rio de Janeiro

The Brazilian government, through the Ministry of Justice, assumed financial and operational responsibility to the IOC for the security of the 2016 Olympic Games. To this end, the National Secretariat for Public Security within the Ministry of Justice has been entrusted with the task of coordinating the activities of federal, state and municipal agencies regarding the security of the Olympics. In addition, it also received funding of US 3.5 billion dollars. This was to be spent on introducing the security measures, the process of which was extended to 4 years – as promised by the Rio Governor Sergio Cabral to the IOC in Copenhagen (Cabral, 2009). Additionally, the World Bank pledged 485 million dollars to solve problems in favelas and to improve the public transport. As far as the security services are concerned, at the municipal level, Rio de Janeiro relied mainly on the municipal police, which is basically a preventive police force but has no investigative powers. At the state level, the main role was to be played by the civilian police, which focuses on patrolling the streets in civilian clothes. This formation was commanded and controlled by the Secretary of State for Public Security. These forces were also strengthened by the Military Police, which is a uniformed formation belonging to the Brazilian army. In addition to these forces, the governor of the state also had a military brigade at his disposal, which, although not carrying out police tasks on a daily basis, could be used in crisis situations for this type of activity.

In Brazil, there are three police institutions at the federal level: the federal police, the federal traffic police, and the federal railway police. The Federal Police, subordinate to the Ministry of Justice, is responsible for law enforcement and deals with crimes against the federal government and its agencies, as well as the fight against international drug trafficking, the fight against terrorism and immigration affairs, and border control.

The federal traffic police are responsible for maintaining order on highways, but do not investigate any crime. The Federal Railroad Police, on the other hand, patrols the federal railroad's facilities, but has no power to conduct criminal investigations. Additionally, as a response to rampant crime in city centers, the Brazilian government created the National Public Security Force in November 2004. These are specially trained and equipped units that can be used in crisis situations. An example is their use during the Pan American Games. By law, these forces are used at the request of the state governor, which he submits to the Federal Government.

Despite the numerous security forces operating in Brazil, one of the key elements determining their effective operations is the efficiently functioning intelligence service. As regards their tasks during the Olympic Games in Rio, the vast majority of their work focused on the identification of internal (national) threats. During the military dictatorship in 1964-1988, when they were under strong pressure, their scope of tasks was expanded and their units were created at all levels of state administration (federal and state). In addition, the National Intelligence Service, whose head had the status of a minister, could use an extensive network of regional intelligence cells. In December 1999, a new intelligence body was established – the Brazilian Intelligence Agency (http://www.abin.gov.br/modules/mastop, 1999). Its main task was to link intelligence activities at the federal level with units operating at the regional level and to coordinate their activities. In terms of specific organizational activities, the Rio government at the state administration level created the Integrated Command and Control Center to develop and oversee police training plans to secure major events. In addition, it should be noted that the International Academy of Public Security was established as a result of an agreement between the Brazilian Ministry of Justice and the United Nations. It offers distance training (courses) for police and fire brigades selected to secure the World Championships and the Olympic Games. In this center, members of the Military Police battalion assigned to special operations also undergo special training.

In addition to managing the national intelligence authorities, great efforts in Brazil have been made to improve reconnaissance capacity and personnel exchanges with other countries, namely France, Spain, Colombia, the United States, and Italy. An important element of the Brazilian intelligence activities was also the fight against corruption. One of the effects of these actions was the arrest in February 2011 of 30 police officers who were accused of corruption (New York Times, 2011).

Summing up this part of the discussion, it should be emphasized that the Brazilian authorities are very determined to reform the institutions responsible for the state security. In addition, many investments were made to improve the infrastructure and additional funds were allocated to establish the security measures of the 2016 Olympics. The effect of these activities was to be the change of the security landscape in Rio, including an improvement in the level of security of the citizens and visitors to Brazil. For the most part, this concerned the reduction of internal criminal threats generated by the well-armed and organized crime groups such as Comando Vermelho and Primeiro Comando da Capital (PCC). The second challenge was to effectively counteract the potential external threats, mainly of terrorist nature.

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In terms of the terrorist threat, the risk of its occurrence was much greater than in the case of the London Olympics in 2012. One of the reasons was the country's system of controlling people coming to Brazil, which was less restrictive compared to the regulations in force in the United Kingdom and the US (9-11 Commission Report Final Report of the National Commission on Terrorist Attacks). Moreover, terrorists could easily obtain weapons and explosives in Rio by purchasing them from criminal groups. In addition, criminal activity, including drug trafficking, has shown that due to its extensive nature, the border protection system has many gaps and weaknesses. In this situation, it was extremely difficult to effectively control the inflow of these objects into the country. It was also important that the capacity of the government forces, including the intelligence agencies, to prevent terrorist attacks was limited as their activities focused mainly on domestic cases. Under these conditions, the Brazilian authorities were aware that the ability to predict a terrorist attack would largely depend on the quality of cooperation with the intelligence organizations of other countries.

In addition, an important issue in the preparatory period was taking into account the conclusions of the previously organized Olympic Games. It was about ways of securing the airspace, among other things. It became even more important after the incident of March 12, 2009, when a small plane was hijacked and had been flying for two hours over the city of Goiania and ended up crashing in a parking lot in front of a large shopping mall. As a result of the plane crash, the man who piloted it and his kidnapped 5-year-old daughter were killed. This incident, however, sparked a discussion on securing the Brazil's airspace, as the hijacked plane, despite having no flight plan, was not identified as a threat by the Brazilian air defense command authorities (The Department of Homeland Security Strategic Plan, 2008-2013). As a result, it was concluded that ensuring the safety of the Olympic Games in Rio would require the development of special procedures and the participation of specialized military forces, air defense measures and forces. In this respect, cooperation with the United States was to turn out to be particularly effective, as it introduced stringent procedures in this regard after the terrorist attacks on September 11, 2001 (CRS Report, 2008).

During the Rio 2016 Olympic and Paralympic Games, the main goal of the Joint Command for Preventing and Combating Terrorism was to ensure that, through interagency cooperation, preventive and defense measures were properly combined with the offensive coercive actions.

According to the risk assessments prepared by the Brazilian intelligence agency, potential threats to the security of the Olympiad were not related to specific terrorist cells whose members could penetrate the country, but mainly to the possibility of attacks by the so-called "lone wolves". Therefore, the degree of unpredictability of a possible attack was much greater than that of larger terrorist groups.

To this end, it was necessary to conduct a detailed analysis of the available resources and to develop a realistic and detailed diagnosis of the police and the military special forces, identifying their strengths and weaknesses in terms of personnel, equipment and tactical training. In addition, the necessity to create an effective security system required the involvement of many entities that were to be responsible for various tasks.

Summarizing this part of the considerations, it can be stated that the creation of an effective security system for the Rio 2016 Olympic and Paralympic Games required the Brazilian authorities to create a complex architecture of management, command and control. In addition, these solutions also had to take into account the specificity of the administrative structure of Brazil, which includes twenty-six states and the Federal District. This was an important issue because each federation has its own public security forces, including the state police force (civilian and military) and civil defense – responsible for crisis situations. On the other hand, at the level of the federal administration, the functioning Ministry of Justice is supervised by the Federal Police Department, the Federal Traffic Police and a small National Public Safety Force. The Brazilian intelligence agency, which acts as the central authority of the Brazilian intelligence system, also played an important role. Besides, it was also an armed force consisting of three types of navy, ground forces and air force) which are subordinate to the Ministry of Defense. An important factor in ensuring safety during the Rio Olympics was the development and adoption of a strategic integrated safety plan for the Rio 2016 Olympic and Paralympic Games (Plano Estratégico de Segurança Integrada para os Jogos Olímpicos e Paralímpicos Rio 2016, also known as PESI Rio 2016). It was developed to integrate the public safety activities with the government's strategy. The adopted security measures were of an integrated nature and focused on three areas (CRS Report, 2008, pp. 7-8).

1. Public safety,
2. Defense,
3. Intelligence.

This document set out the key principles for the security of the Olympiad, as well as the missions, areas of operation and management structure that were to be responsible for managing the public security, national defense and intelligence agencies.

To carry out security tasks, an Executive Committee for Integrated Security (Comitê Executivo de Segurança Integrada, known as CESI) was established at the national level, and it was composed of the officials from the Office of the Chief of Staff of the Presidency, the Ministry of Justice, the Ministry of Defense and the Brazilian Intelligence Agency, as well as the representatives of the countries and municipalities that hosted sports competitions (CRS Report, 2008, p. 20). In addition to this body, a network

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of local regional executive committees for integrated security (Comitês Executivos de Segurança Integrada Regionais, known as CESIR) has also been established (Security in the Rio 2016 Olympic and Paralympic Games, 2016).

An important role in the security system was also played by the State Commission of Public Safety and Civil Defense for the 2016 Games (COESRIO2016), which was established by a joint decree No. 01 of January 29, 2015. It was a discussion forum responsible for defining the principles and mechanisms which the integrated management of all work performed by the public and security and civil defense agencies at the federal, state and municipal levels relied on. This body also coordinated the work of other related entities.

In addition, the Ministry of Defense established the Special Advisory Committee for Important Events, which was subordinate to the Joint Staff of the Armed Forces.

The key element in terms of the efficient functioning of the security system was the integrated command and control system, which operated on the basis of an administrative decision No. 269 of July 30, 2016. It defined a number of coordination, implementation, monitoring and evaluation activities related to the organization of the Rio Olympics, which was to be implemented by a special body of the SICC consisting of three centers: integrated command and control, international police cooperation and the fight against terrorism. The main purpose of the SICC was to ensure that different agencies could cooperate on safety during the Rio 2016 Games. This system was coordinated by the National Integrated Command and Control Center (CICCN) in Brasilia. In addition, there were Regional Integrated Command and Control Centers (CICCR) in Rio de Janeiro and in the five cities where football matches take place. The Rio CICC, in turn, coordinated four Sectoral Integrated Command and Control Centers – located in Deodoro, Maracanã, Copacabana and Barra. They were created to oversee safety in the four areas of the city where the competition was to be held. Additionally, each of the 37 venues – 32 in Rio and five football cities – had their own Integrated Safety Centers.
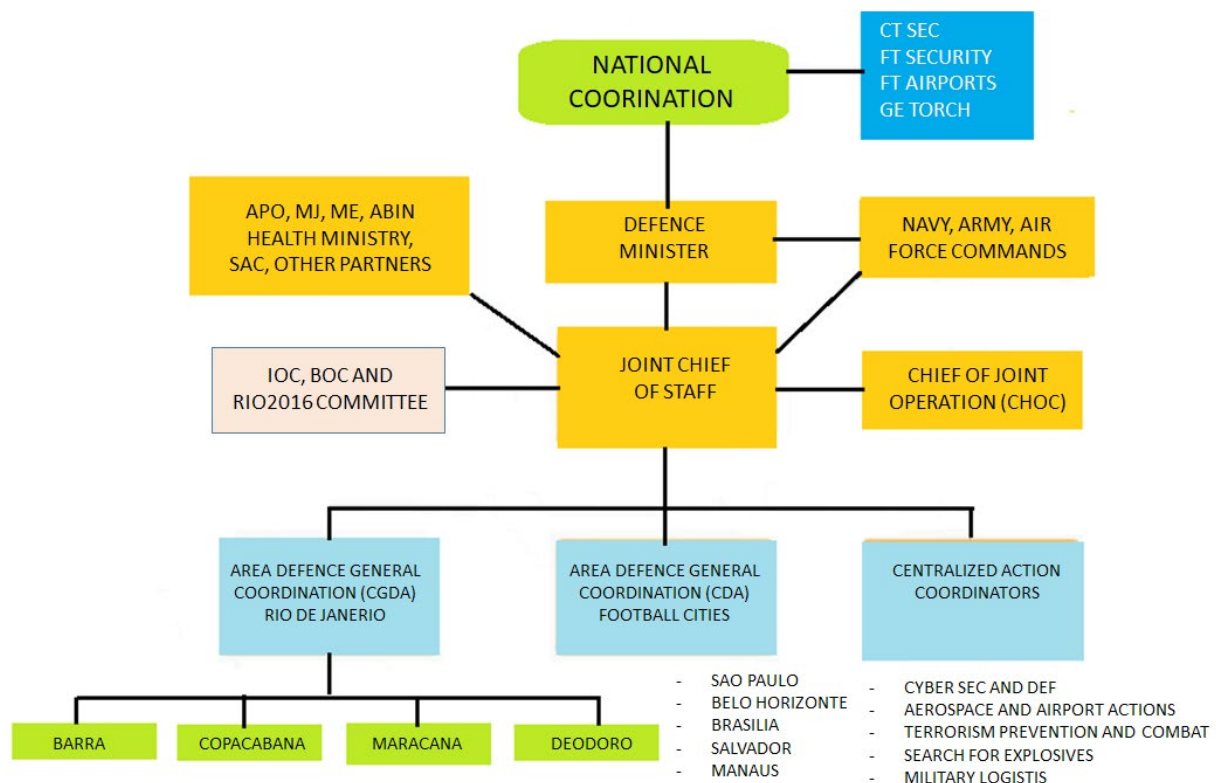

Figure 3. Brazilian Armed Forces' General Security Organization for the Rio 2016 Olympic Games and Paralympic Games
Source: Own study based on Security in the Rio 2016 Olympic and Paralympic Games, Social Communication Secretariat – International Area Office of the President of Brazil, July 2016.

These centers also had their representatives in all institutions at the federal, state and municipal levels, who were responsible for various activities in the areas of public security, social defense, civil defense, health, sports, intelligence, national defense and any other that may have contributed significantly to the safety of Rio 2016. The integrated command and control system used the

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emergency service hotline of the State Police Operational Control Center (190, emergency number for Brazil) and the Mobile Medical Rescue Service (SAMU), managed by the Fire Brigade, as well as entities representing the Civilian Police, Federal Traffic Police, Rio de Janeiro Traffic Company and transport agencies. Calls to international emergency numbers such as 911 (US) and 112 (Europe) were also to connect to the Brazilian emergency service, having been approved by the Brazilian telecommunications agency.

In addition, the Integrated Public Safety Management and Control System (CICC) was established at the Ministry of Justice to support the public security measures at major events, and a Special Secretariat for Safety and Security was established at the national and regional levels.

It should be noted here that the security efforts of the Rio 2016 Olympics included all public security, national defense and intelligence services that were needed to ensure the safe and peaceful life of the local population, as well as visitors and participants of the Games. The mission of these activities was to ensure the safety of the Games in a discreet and friendly manner, in coordination with the federal government and in integration with the state and municipal governments and the Rio 2016 Organizing Committee.

The fight against terrorism was in the foreground, with Brazil adopting the international best practice on prevention. The key tool of the security forces in counteracting terrorism was to be cooperation, training and investment in equipment. The Brazilian federal police has had a terrorism department and liaison offices in more than 20 countries for over 20 years, and has participated in Interpol, through which it has been exchanging information with 190 countries. Brazil has also created the Integrated Anti-Terrorist Center (CIANT) specifically for the Olympic Games. Coordinated by the federal police, CIANT employed foreign police officers from the intelligence area with experience in combating terrorism. In addition, there was also the International Center for Police Cooperation (CCPI), created for the 2014 World Cup, which included policemen and employees from over 50 countries and Interpol who participated in the games in their national uniforms. Uniformed foreign policemen walked unarmed, but always accompanied by Brazilian policemen, into areas where citizens from their countries were expected to concentrate. This collaboration had a double effect. Firstly, it gave foreigners a greater sense of protection because they recognized officers by their uniforms. Secondly, it prevented them from committing crimes because they were under the watchful eye of the authorities of their own countries (Buzanelli, 2013, pp. 16-17).

The Integrated Committee for Combating Terrorism played a very important role in the efficient functioning of the security system. The need for its creation stemmed from the fact that Brazil did not have an inter-ministerial body entrusted with authority and responsibility for promoting inter-agency cooperation. Taking into account the wide range of heterogeneous institutional interests, the adopted management model tried to take them into account by directing its activities to public security and defense. In turn, the task area related to the prevention and combating terrorism was delegated to the Brazilian armed forces. However, in practice this division of tasks proved to be inadequate in terms of the actual needs and capabilities, and therefore, as the Olympic Games approached, the safety management model adopted in the previous events was subject to criticism and was eventually re-examined and revised. The main problem was to ensure the unity of command, as all the institutions involved refused to become subordinate to each other. The changes in this system also had to take into account certain provisions in the legal system of the time. Under these conditions, it was necessary to grant powers to individual services, law enforcement agencies and other security agencies. In addition, the expertise of certain intelligence agencies and special forces (military and police) also had to be respected. According to the finally adopted assumptions, it was decided that integration in the fight against terrorism would be based on intelligence, public security and defense. In order to achieve the assumed goals, a temporary advisory structure was created in the form of the Integrated Committee for Combating Terrorism, the model of which is presented in the figure below.

It should also be noted that Brazil lacked anti-terrorism legislation prior to the 2016 Olympics. It was not until March 2016 that President Rousseff signed Act 13.260, known as the "Anti-Terrorism Act", which is the legal basis for organizing and conducting effective action against terrorism (Presidência da República do Brasil, PESI Rio 2016, pp. 20–21). Then, on July 21, the Federal Police's Anti-Terrorism Department launched the first phase of Operation Hashtag, which aimed to break up a network of people who have been referred to as "sharia defenders." In addition to supporting the Islamic State, the group members reported on social media about the intention to launch attacks during the Olympic Games.

In addition, as part of international cooperation, the Brazilian intelligence specialists visited countries that have recently hosted major sporting events in order to exchange experiences and become familiar with the best practices in the field. In this regard, nearly 100 policemen have been dispatched to major international events such as the Boston Marathon, Beijing World Athletics, Toronto Pan American Games, Tour de France, United States Super Bowl, and the United Nations General Assembly. These teams monitored the functioning of the security systems of the above-mentioned events. The process of preparing the police forces and commanding the security forces was particularly observed. Serious investments have also been made in intelligence equipment and the specialist counter-terrorism vehicles. A number of trainings and courses for 15 thousand people were also conducted. employees. Hotel, metro and taxi drivers, the armed forces, and the federal police were also trained in identifying terroristic threats. These types of courses have helped staff from various services to identify suspicious behavior in the crowd. Hospital workers were also trained to recognize injuries caused by explosives and radioactive burns.
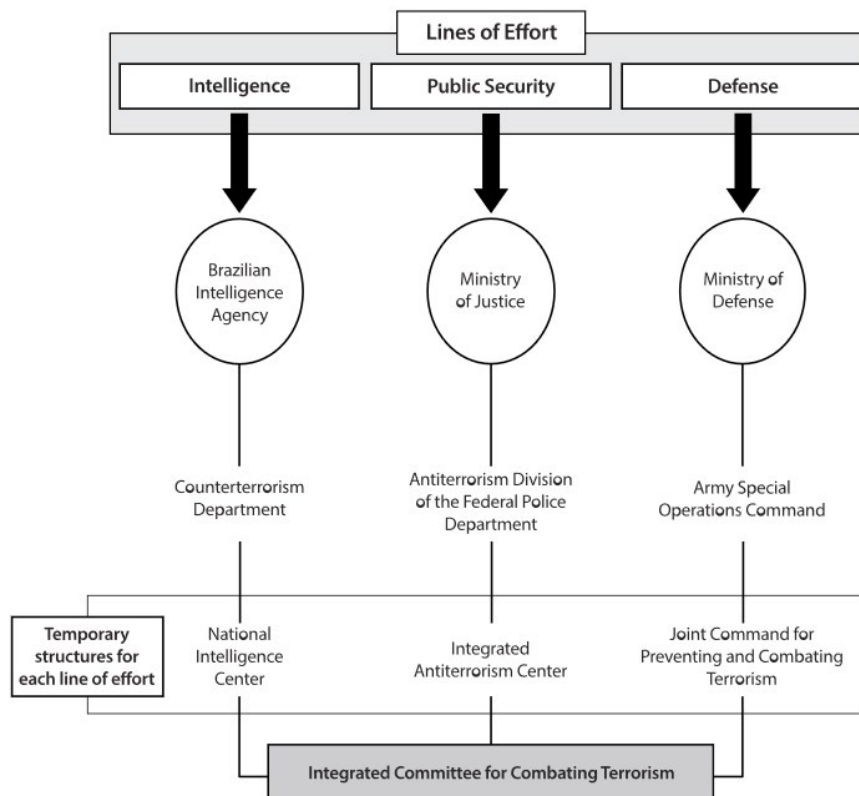
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Figure 4. Lines of Effort and Composition of the Integrated Committee for Combating Terrorism

Source: Alessandro Visacro, Brazilian Organization for Combating Terrorism during the Rio 2016 Olympic Games and Paralympic Games, „Military Review" September-October 2017, p. 100.

Additionally, a series of intelligence activities for the safety of the Rio 2016 Olympics was planned, which included integrated activities carried out by institutions of public security, national defense and intelligence. The Brazilian intelligence agency was responsible for the intelligence system, which worked closely with the public security intelligence subsystem and the military intelligence system, coordinated by the Integrated Counter-Terrorism Committee and the Joint Staff of the Armed Forces.

Financial resources were the basis of all activities carried out in the field of the safety of the Olympic Games. In this regard, the Ministry of Defense budget for security of the 2016 Rio 2016 Olympic and Paralympic Games was 704.4 million dollars, of which 275 million dollars was spent in 2014 and 183.9 million – in 2015. An additional 150 million dollars was secured in the annual budget act to be used in 2016. In addition to the funds provided for in 2016, a temporary ordinance was issued granting the Ministry of Defense an additional 95.5 million dollars. These funds were intended to help the Ministry of Finance to finalize the purchase of the equipment and finance the implementation of the Armed Forces activities aimed at ensuring the safety of the Rio 2016 Olympics.

A total of 88,000 security specialists were employed to secure the Games. These included Public Security Agents (including state and civilian police officers), experts, and firefighters from various Brazilian states who had previously been trained to operate at major sporting events. During the Games, they were responsible for ensuring the safety of the competition venues, accommodation and communication facilities, as well as the routes of the Olympic relay race. This figure also included 18,500 state police officers and 1,822 civilian police officers from the state of Rio de Janeiro.

4. Contribution of the Brazilian armed forces to the protection of the Olympic Games in Rio de Janerio

It should be emphasized that the Joint Command for Preventing and Combating Terrorism played a very important role in the field of defense against terrorism at the national level. It was under the authority of the bodies responsible for their actions at the regional level. This function was performed by the Central Integrated Tactical Headquarters, which consisted of personnel from the Brazilian Navy, Army, Air Force and Special Forces.
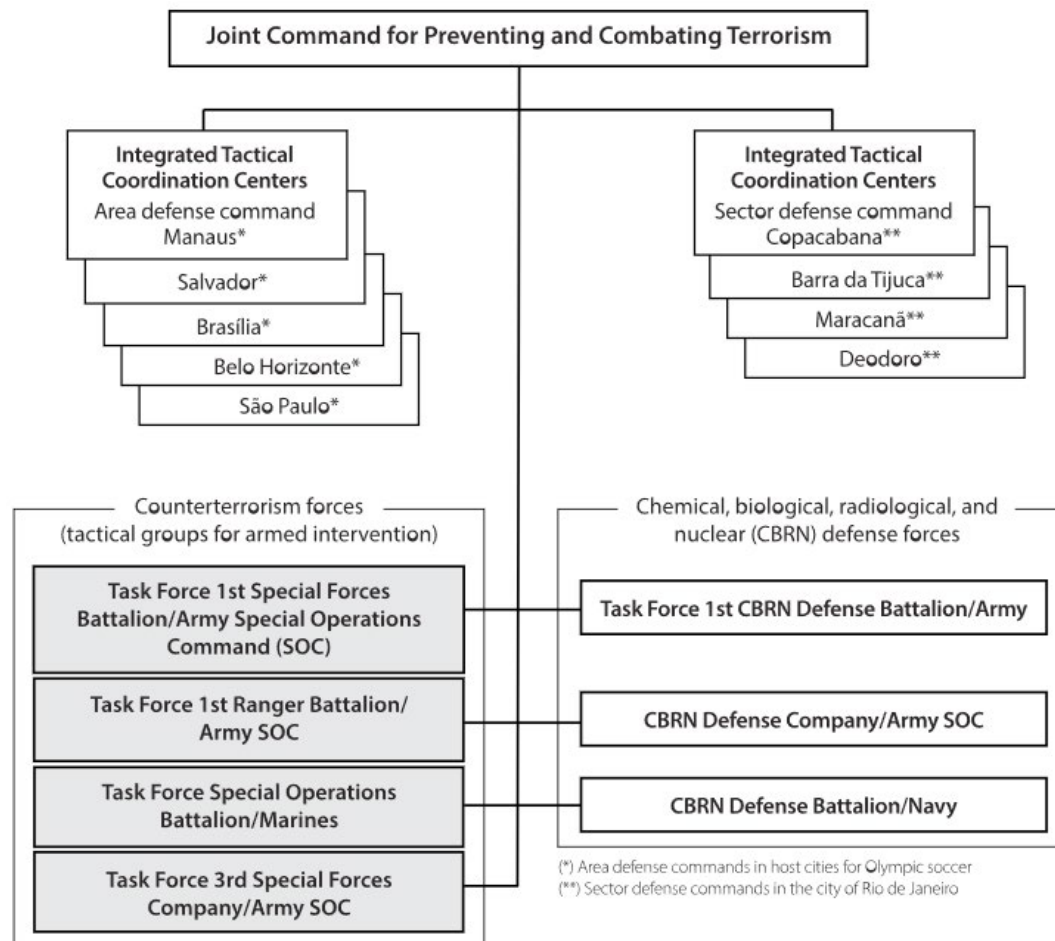
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Figure 5. Organization of the Joint Command for Preventing and Combating Terrorism

Source: Alessandro Visacro, *Brazilian Organization for Combating Terrorism during the Rio 2016 Olympic Games and Paralympic Games*, „Military Review" September-October 2017, p. 101.

The areas related to chemical, biological, radiological and nuclear defense (CBRND), which are the domain of the armed forces, fell under the responsibility of the Joint Command for Preventing and Combating Terrorism. It should also be noted that the three armed forces had highly specialized forces and resources that were deployed within the Rio 2016 security system.

Regarding the use of the armed forces for internal security purposes, it should be emphasized that it is legally sanctioned by the Federative Constitution of the Republic of Brazil, as well as by a number of supplementary regulations that govern the internal activities of military units.

During the Rio 2016 Olympics and the Paralympic Games, the efforts of the Ministry of Defense proved to be crucial, as the large share of over 43,000 soldiers made it possible to ensure a high level of security for all the participants. Overall, for the security purposes, they performed a wide range of tasks, including:

1. **Activities in outer space:** concerned the use of the armed forces for the defense, surveillance and control of the airspace;
2. **Activities at sea and rivers**: related to the use of the armed forces for sea and river defense, activities ensuring the safety of navigation on waterways and safety of life at sea, and the enforcement of laws and regulations concerning sea and inland waters;
3. **Cybersecurity and defense:** it concerned activities in the field of cybersecurity and defense, which were to contribute to the protection of information resources and information and communication technology systems that supported structures organized to coordinate activities in the field of cybersecurity and defense against cyber threats arising in the country and beyond its borders;

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4. **Air logistic support**: consisted in using the military air resources to provide logistic support by transporting personnel and materials of interest within the military operations or government operations;
5. **Explosives inspection:** related to the use of the Brazilian Army, through regional audited networks to oversee the transport of explosives and related products throughout the territory of the country;
6. **Defense of mass destruction (chemical, biological, radiological and nuclear)**: it concerned preventive action, defense, counteraction and management of consequences related to chemical, biological, radiological and nuclear threats as well as undertakings supporting health and protection of people, resources, strategic structures and other assets;
7. **Protection of strategic structures**: related to the use of armed forces in activities aimed at monitoring, supervising or protecting strategic structures ensuring the ability to ensure the uninterrupted provision of the services;
8. **The use of forces to act in conditions of failure, lack or unavailability of resources for public safety,**
9. **Fight against terrorism:** included a set of defense activities aimed at preventing and combating terrorism. On the preventive side, defense and counter-terrorism intelligence activities have been developed to prevent and/or stop terrorist acts. For the purposes of counteracting, apart from intelligence, offensive actions of repressive nature were carried out, aimed at stopping, preventing and responding to terrorist acts;
10. **Activities at the airports:** included the use of military air bases as needed to accommodate civilian and government civilian aircraft or at civilian airports;
11. **Road safety:** traffic control, public (uniform) policing, public order maintenance, civil defense and safety of dignitaries and VIPs.

The activities described in items 6 to 11 could only be carried out on the condition that the president issued a decision to use the armed forces.

In preparation for action against terrorism, the Ministry of Defense trained its employees who participated in exercises with the armed forces of several other countries. It also oversaw training ventures in Brazil, such as the December 2015 disaster exercise. Institutions such as the Military Fire Brigade, civil defense agencies, the Ministry of Health and others participated in this exercise. In addition, in March 2016, military specialists participated in courses organized by the US Department of Defense on decontamination in the event of the use of weapons of mass destruction.

In total, the Armed Forces have deployed 41,000 military personnel to directly secure the event. It was deployed in cities (Brasilia, São Paulo, Belo Horizonte, Salvador and Manaus). About 20,000 of these were in Rio de Janeiro.

In the Rio 2016 security system, securing the airspace was a very important issue. The Brazilian Air Force has allocated over 15,000 troops to secure the Olympic and Paralympic Games. Among them were aviation personnel and air traffic control management. This number included soldiers serving in the city of Rio de Janeiro and those who managed flights performed elsewhere in the country. The main command post and air traffic management center was located in Rio de Janeiro. Its structure included representatives of several government agencies, such as the Department of Civil Aviation, the National Civil Aviation Agency, the Federal Police, Anvisa (Brazilian Health Agency) and others. The work was carried out 24 hours a day (General Alvani Discusses Brazilian Air Force's Actions in Brazil and Abroad, 2016).

In addition to human resources, the Brazilian air force deployed 80 aircraft. There have been 32 fighters (Northrop F-5M and A-29 Super Tucano) assigned to defense missions and air patrols. Air warning tasks were performed by 2 Embraer R-99 planes, observation tasks were performed by 3 unmanned aerial systems (Hermes 450 and Hermes 900). For maritime transport and patrol missions, one P-3 Orion plane was assigned. The logistic support was supported by planes (Boeing C-767, C-130 and C-295) and 15 helicopters (Mil Mi-35, UH-60 Black Hawk and EC-725).

The anti-aircraft VSHORAD RBS 70 anti-aircraft systems by the Swedish company Saab were also used in the security system. During the Olympic Games in 2016, this system not only protected the venues of the sports competitions, but also the strategic infrastructure facilities. In addition to the RBS 70, the Russian IGŁA-S MANPADS were also used, as well as the modernized German-made Gepard 1A2 artillery systems.

A great challenge for the military and civilian air traffic control services was securing the increased traffic in the airspace. In this regard, it should be stated that the adopted solutions, despite the enormous volume of traffic during the Olympics, turned out to be effective. The air traffic peak was between 8 and 9 a.m. and 9 to 10 p.m., with an average of 33 flight operations per hour. In order to ensure safety in the airspace for this type of task, the Brazilian Air Force received the support of fighter planes, helicopters and radar airplanes. To ensure fast, safe and orderly flow of air traffic, as well as the safety of the entire Brazilian airspace, 1,900 well-trained air traffic controllers were prepared. The Air Traffic Simulation Program (PROSIMA) was used for their training. In air traffic management, an important role was played by the Institute of Airspace Control (ICEA), which was responsible for predicting threats mainly in extreme situations, such as terrorist attacks, hijackings, and identification of unauthorized aircraft approaching venues for sports competitions. Ensuring the safety of participants in these sports events required restrictions on the use of airspace.

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Picture 1. Military means used to protect the Olympic Games in 2016
Source: opracowanie własne.

In accordance with the safety criteria accepted all over the world, the following limitations have been adopted (Practical Reference Guide on Airspace changes to the Brazilian Airspace for the Rio 2016 Olympic and Paralympic Games):

- *Reserved area, "White"*, concerned all cities organizing the competition, in which there were detailed rules for the use of the airspace, thanks to which the Air Traffic Control - ATC services could quickly identify the movement of each aircraft.
- *Restricted area, "Yellow",* which was located within the White area, existing in all cities organizing the sports competitions. This area was only accessible to a specific group of aircraft according to the criteria defined by the airspace defense command units.
- *Prohibited area, "Red",* which was located within the Yellow area, and was introduced in all cities hosting the sports competitions. This area was accessed by aircraft that directly secured the event and obtained approval from the airspace defense command authority.
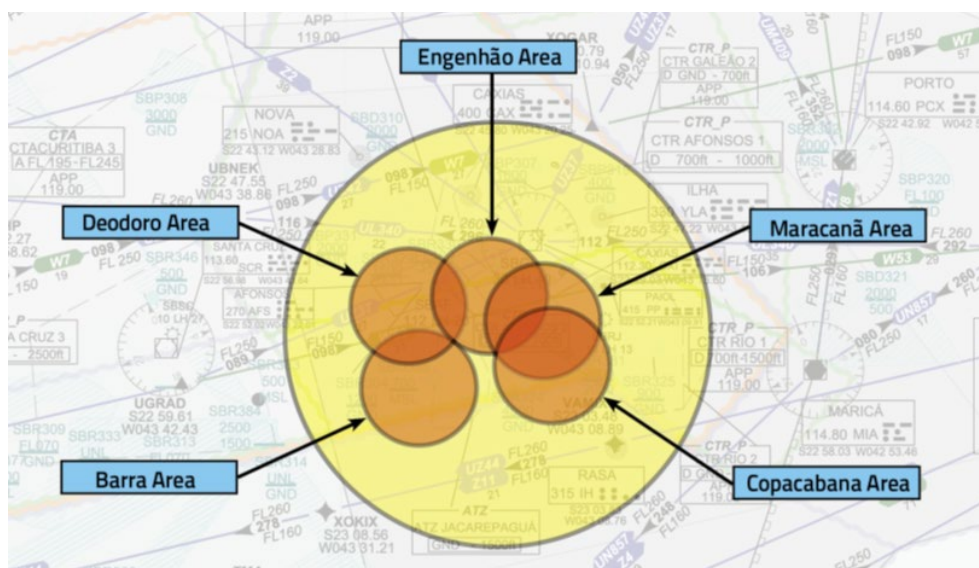

Figure 6. Rio de Janeiro Exclusion Areas
Source: Practical Reference Guide on Airspace changes to the Brazilian Airspace for the Rio 2016 Olympic and Paralympic Games, p. 5.

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To sum up, the threats in the airspace constituted one of the most dangerous sources of air safety destabilization both in the regional (state) and international dimension. The experience gathered during the organization of security systems, including this from large and spectacular international sports events, indicate that their planning should take into account the use of not only aviation, but also anti-aircraft defense measures. An important role, especially in the case of less financially capable countries, is also played by the costs, which in terms of the use of aviation are incomparably higher than in the case of using anti-aircraft systems.

The practice also showed that the need to increase the effectiveness in counteracting terrorism forced the search for effective procedural and technical solutions. One of such solutions has become the introduction of No-Fly Zones around the potential attack targets. These zones may be permanent, such as the airspace over Washington, or temporary (organized on an ad hoc basis), e.g. around sports and cultural facilities during mass events. The implementation of such restrictions has already become a standard during the organization of not only sports events, but also economic and NATO summits, political meetings such as G-8, G-20, important state and religious celebrations and other projects of an international nature.

5. Conclusions

Based on the results of the research aimed at assessing the organization and functioning of the security system during the Olympic Games in Rio de Janeiro in 2016, it can be concluded that in this matter it is crucial to prepare efficient structures of security services at all levels of the country and the city, which was the main arena of the sports competitions.

The difficulty in ensuring the safety of all participants of such large mass sports events as the Olympics also results from the difficulty in identifying the full spectrum of threats that may occur there.

In addition, the results of the research confirm that the safety requirements for the 2016 Olympics were determined by several factors, of which their location in Rio de Janeiro played a key role. In this regard, it should be noted that terrorism was not the only threat to the Olympic Games in Rio de Janerio. Criminal activity, which developed in many parts of the city, mainly in the favelas, was equally or even more dangerous.

With the above assumptions in mind, it can be concluded that, despite the existence of many internal problems, Brazil managed to prepare itself well to protect the athletes, technical committees, heads of state, civil servants, tourists, and journalists during the Rio Olympic and Paralympic Games held on from 5 to 21 of August and from 7 to 18 of September, 2016. In this regard, it should be emphasized that, in the run-up to the Olympics, the country has accumulated extensive expertise in the methods and means of ensuring safety during mass sports events. It should also be highlighted that the Rio 2016 Olympics and the subsequent Paralympic Games ended a long series of events organized in Brazil, which required the highest level of safety. Over the course of several years, the Brazilian government secured several major sporting events that required close cooperation with civilian agencies, intelligence organizations, the armed forces, and other government agencies. The basis of an effective security system during the Rio Olympics was the coordination of activities of various state institutions, i.e. the Ministry of Justice and Defense, the Brazilian Intelligence Agency, the state and local governments, as well as international organizations. Coordination in securing this type of sporting event was gradually improved during the organization of earlier events such as: 1st World Military Games (2011), United Nations Conference on Sustainable Development Rio + 20 (2012), Confederation Cup (2013), World Youth Day, attended by Pope Francis (2013) and the 2014 World Cup. However, for the Rio 2016 Summer Olympics and Paralympics, this was the biggest challenge for the Brazilian government, as it had to ensure the safety of 15,000 athletes from 206 countries, and some 7.5 million spectators to watch the competition, some 25,000 journalists and around 100 state dignitaries (Security in the Rio 2016 Olympic and Paralympic Games, 2016, p.2).

The threats to the safety of such a large sports event were not only of an external and terrorist basis, but also resulted from the difficult internal situation. It was related to a serious economic crisis and an internal recession, accelerated by turbulent political changes. Against this background, there were demonstrations and social unrest (McRos k e y, 2010, p. 97). In addition to the economic and political crisis, a severe public safety crisis hit the city of Rio de Janeiro as the metropolis fell into chaos and fratricidal fights between the armed gangs associated with the international arms and drug trade.

Another threat was the uncontrolled spread of tropical endemic diseases like Zika.

In addition to all these concerns, the threat of international terrorism, which has become increasingly serious as the Olympic Games start date approached, had to be considered. These fears were triggered by the successive terrorist attacks around the world that began in November 2015 and ended on August 1, 20166. Just three days before the opening ceremony in Rio de Janeiro, a house bomb similar to the one used in the Boston Marathon attack exploded at a mall in Brasília without injuring anyone.

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Declaration of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

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