



THE NEED FOR PREPARING THE CITY FOR THE CONDUCT OF MILITARY OPERATIONS

Lecturer Sorina-Georgiana RUSU, PhD

University of Architecture "Ion Mincu", Bucharest

Urbanisation has a direct influence on the security and defence field. Military operations tend to take place, with increasing frequency, in the complex environment of contemporary cities. In order to fight in this environment, it is necessary, first of all, to understand the similarities and differences between cities. Each city requires a unique approach, starting from the strategic level of planning, to the tactical level. At the same time, the cooperation of civil and military planners is needed in order to create a common legal framework for the design and defence of cities.

Keywords: urbanisation, civil-military planning, smart city, offensive city, military operations in urban areas.

INTRODUCTION

The way cities develop and expand has an overwhelming importance on the future of human existence. Cities are in a process of continuous transformation, which entails preserving some elements while renouncing others, in order to develop and modernise. There is an extraordinary diversity of urban landscapes today and this makes the preparation of military operations in this environment difficult and extremely challenging.

The increasing connection of cities leads to their increased complexity, interdependencies and vulnerabilities. Finding specific solutions in response to any possible conflict situation is an inappropriate approach. The approach that is required, in the context of the third millennium, is that of prevention, of thinking of urban planning in correlation with military planning.

The diversification of the enemy's typology, in the context of escalating conflicts generated by terrorist actions, also brings to mind the idea of globalising communications, which implies the free flow of information. Although it seems to be a virtue of the modern world, which belongs to the high degree of civilisation, this explosion of information flow is one of the vulnerabilities of post-modernity. Thus, the friend-foe dichotomy, specific to the classical war, should be replaced with the idea of permanent protection of the population, by eliminating the front-line concept, which, as it is known, separates the two conflicting categories: attackers and attacked¹.

Some of the questions that the pre-conflict analysis has to consider are related to the city's planning for a balanced and safe development of the methods to evacuate the city in case of imminent danger and to defend the city, considering how it could be attacked and reconstructed post-conflict, the sites to protect inside the city, the vital internal and external flows of the city.

The diversification of the enemy's typology, in the context of escalating conflicts generated by terrorist actions, also brings to mind the idea of globalising communications, which implies the free flow of information. Although it seems to be a virtue of the modern world, which belongs to the high degree of civilisation, this explosion of information flow is one of the vulnerabilities of post-modernity.

¹ Sorina-Georgiana Rusu, *Planificarea și proiectarea obiectivelor destinate apărării în orașul inteligent*, Editura Paralela 45, Pitești, 2018, p. 109.



URBANISATION AND SECURITY

Worldwide, a historic transition is underway. More than half of the world's population currently live in cities, and the rate of migration is accelerated. By 2030, cities will represent 60% of the world's population and produce 70% of the world GDP². Every day, about 180,000 people around the globe migrate to cities³. The urbanisation at such an accelerated rate, especially in developing countries, has an effect on the way cities are configured as well as on their defence.

Cities have distinct, unique, individual similarities and characteristics that require a personalised defence approach. The similarities are given by the elements of urban life and those of urban framework. All the activities located in cities make the urban life (activities, behaviours), while the spaces related to the localisation make the urban framework (spatial configuration, urban culture, urban policy)⁴. The urban life and the urban framework are interdependent, the first element being the engine of transformation, which can take both the form of involution and the form of evolution at the city level.

As Le Corbusier points out, in 1980, "*The great city commands everything, peace, war, work*"⁵. Today we are talking about the existence of urban settlements such as the metropolis⁶ or the megalopolis⁷, particularly complex environments, in which a new approach to urban planning, related to ensuring the security of the inhabitants, is needed.

More than half of the world's population currently live in cities, and the rate of migration is accelerated. By 2030, cities will represent 60% of the world's population and produce 70% of the world GDP. Every day, about 180,000 people around the globe migrate to cities. The urbanisation at such an accelerated rate, especially in developing countries, has an effect on the way cities are configured as well as on their defence.

² United Nations, *World Urbanization Prospects*, 2011, Department of Economic and Social Affairs, New York, http://esa.un.org/unup/pdf/WUP2011_Highlights.pdf, retrieved on 23.03.2020.

³ United States Agency for International Development, USAID Policy, October 2013, *Sustainable Service Delivery in an Increasingly Urbanized World*, p. 3, <https://www.usaid.gov/sites/default/files/documents/1870/USAIDSustainableUrbanServicesPolicy.pdf>, retrieved on 20.03.2020.

⁴ Alexandru M. Sandu, *Teoria sistemelor urbane – part I*, University Course, Editura Institutului de Arhitectură "Ion Mincu", București, 1975.

⁵ Le Corbusier, *Urbanisme*, Flammarion, Paris, 1980, p.78.

⁶ The major metropolises are defined by equipment and by areas of influence, the latter defining a threshold of profitability required for high-level equipment (transport infrastructure, reception capacities, political, economic and cultural decision-making institutions, services for large international companies). There are more relationships between international metropolises than between a capital and the cities in its metropolitan area. The size of the metropolitan areas leads to the exacerbation of urban problems (segregation, unemployment, insecurity, land pressure and real estate speculation, degradation of environmental quality), in Jacques Bonnet, *Marile Metropole Mondiale*, Institutul European, Iași, 2000.

⁷ *Giant urban ensemble, the result of multiple and complex conurbations taking the form of a continuous city, which was formed when the rural intersections between metropolitan areas were swallowed by urban growth*, in Cătălin Zamfir, Lazăr Vlăsceanu (eds.), *Dicționar de sociologie*, Editura Babel, 1993.

“Overwhelmed by disparities, affected by the multiple major ecological disasters, to which is added the diversification of the range of conflicts that appear either because of the social inequities that favour criminality or because of the escalation of armed conflicts of terrorist type, the contemporary cities must build a defence component. Increasing ethnic, cultural, religious, commercial, economic diversity in general has become a space for conflict generation, especially in areas where managing the situation at the level of governance has not proven the diplomacy needed in such a context. Unfortunately, violence defines some urban communities, and the state of insecurity is the major threat to the peaceful citizen”⁸.

In recent years, within the US military, there has been increased focus on settlements of tens of millions of inhabitants. In 2014, the US Armed Forces conducted a research project⁹ on the big cities, which essentially concluded that the armed forces are “*poorly prepared*” to conduct any mission and to function in such a complex environment.

ARMED CONFRONTATION IN CONTEMPORARY CITIES

The contemporary city is dependent on the technical infrastructure necessary to support modern urban life, this element also making it vulnerable to attackers. The increasing urban density, together with the anonymity that the big cities provide, makes it difficult to manage these environments, in general, and from the perspective of defence, in particular. Major problems arise both in terms of costs and the complication of the general situation of the classification of urban settlements, in relation to the concept of smart city¹⁰.

The number of terrorist attacks was relatively low in 2012, with 6,771 attacks globally. In just two years, in 2014, the number of terrorist attacks doubled, reaching to 13,463. Most acts of terrorism were located in countries in the Middle East, such as Iraq, and Southeast Asia (Pakistan), where there were 2,965 attacks and 734 attacks respectively. Continuing the analysis of the situation for the following years, the Action on Armed Violence concludes that, during the period



The contemporary city is dependent on the technical infrastructure necessary to support modern urban life, this element also making it vulnerable to attackers. The increasing urban density, together with the anonymity that the big cities provide, makes it difficult to manage these environments, in general, and from the perspective of defence, in particular.

⁸ Sorina Georgiana Rusu, *Planificarea și proiectarea obiectivelor destinate apărării în orașul inteligent, op. cit.*, p. 58.

⁹ See <https://api.army.mil/e2/c/downloads/351235.pdf>, retrieved on 10.02.2020.

¹⁰ Smart means intelligent. The word is also an acronym, which concentrates the concepts of Specificity, Measurability, Adjustability, Feasibility and Time. These concepts are, at the same time, reference elements on which the city of the future is built – smart city.



The dynamics of economic powers continuously create disparities and make certain areas vulnerable. That is why it is necessary to propose intelligent solutions to protect the population and resources, by paying special attention to investment in security and defence.

January-November 2016, 236 kamikazes acted by detonating explosive charges and causing the death of 11,621 civilians, increasing the percentage of suicide attacks by 19% and the number of victims by 78%¹¹. The psychological impact of such attacks on the population is at emotional level, also because of the effect of mental contagion and suggestibility that propagate extremely quickly through online media.

The dynamics of economic powers continuously create disparities and make certain areas vulnerable¹². That is why it is necessary to propose intelligent solutions to protect the population and resources, by paying special attention to investment in security and defence. Therefore, this is a fundamental argument for the concept of urbanisation of war and for the need to create specialised management structures that ensure the smart planning of cities, having the effect of defending the population, as well as material and spiritual values.

The new military urbanism¹³ requires a way of thinking that involves the concern for how to organise and prepare cities for military operations inside them. It is a complex and multidimensional process, although its components are as old as the war itself.

SMART URBAN DEVELOPMENT FOR SAFER CITIES

In order to make cities safer for their inhabitants, it is necessary to inform, educate and train the population to understand the new security challenges and to understand the risk in the context of living in the urban environment.

Given the rise of smart cities, the space saving needed in the localities, the fact that the appearance of the building is no longer mandatory in relation to the functions it can perform and considering the possibility of using the buildings for multiple purposes (multifunctionality/functional reconversion), we consider that modern,

¹¹ See <https://www.statista.com/statistics/202864/number-of-terrorist-attacks-worldwide/>, retrieved on 03.02.2020.

¹² China's economic growth is expected to slow by up to 4.5% in the first quarter of 2020 – the slowest pace since the financial crisis, because of the new coronavirus in Wuhan, COVID-19 and the epidemic spreading throughout the world. See <https://www.weforum.org/agenda/2020/02/coronavirus-economic-effects-global-economy-trade-travel/>, retrieved on 20.02.2020

¹³ Fundamental to the new military urbanism is the paradigmatic change that makes the public and private spaces of the cities, as well as their infrastructure – together with the civilian population – a source of targets and threats. See Stephen Graham, *Cities under Siege, the New Military Urbanism*, Verso Books, London and New York, 2012.

flexible, and adaptable to the defence requirements cities are necessary, at the same time able to satisfy both the needs of the armed forces in a cost-effective way and the daily comfort of the inhabitants in peacetime. It is important for the inhabitants of the urban settlements to feel the effect of the protection that the secure urban space can offer. In this postmodern context, we consider that the city needs to build and strengthen the intelligence dimension, with the role of intimidating the enemy actions, sliding towards the transition from the concept of defensive city to that of offensive smart city.

Moreover, the new standards for green and smart buildings¹⁴ assist in the construction of buildings in accordance with the principles of sustainable development. Without having the claim of completeness, we consider that at the urban level, besides the specific defence components, there should be concerns for:

- mitigating cyber risks by smartly designing the city's cyber space;
- construction of flexible buildings and infrastructures with a high degree of modularity, allowing, under certain conditions, for multiple use, either for civil or military purposes (by all categories of forces);
- construction of accessible and secure buildings, connected with the defence infrastructure through the application of integrated mobility solutions etc.;
- concealment of military constructions in the urban fabric, with the help of innovative materials, thus reducing the negative psychological impact of their presence on the civilian population¹⁵.

At the level of the elements of urban life it is necessary:

- to analyse the human behaviour in relation to the presence of smart buildings (human logic versus the control system of buildings);
- to replace the friend-foe dichotomy, specific to the classical war, with the idea of permanent protection of the population;

¹⁴ International evaluation systems for green and smart buildings such as BREEAM, LEED, Green Globes, Living Building Challenge etc.

¹⁵ Sorina-Georgiana Rusu, *Cerințe militare și civile în procesul de planificare a obiectivelor destinate apărării în localitățile urbane*, in *Gândirea Militară Românească*, no. 1- 2 (2018), București, 2018, p.77.



ROMANIAN
MILITARY
THINKING

Given the rise of smart cities, the space saving needed in the localities, the fact that the appearance of the building is no longer mandatory in relation to the functions it can perform and considering the possibility of using the buildings for multiple purposes, we consider that modern, flexible, and adaptable to the defence requirements cities are necessary, at the same time able to satisfy both the needs of the armed forces in a cost-effective way and the daily comfort of the inhabitants in peacetime. It is important for the inhabitants of the urban settlements to feel the effect of the protection that the secure urban space can offer.



The spatial planning of the cities will undergo substantial changes related to the necessity of responding to the challenges that the change of the concept of violence and masked violence implies in an urban environment. The development of dual-use technologies (civil-military) leads to a dangerous simultaneous use of tools and means of combat by civilians and military.

- to educate and prepare the population to understand the new security challenges and to act in support of law enforcement, without panicking and destabilising the order of defence actions.

CONCLUSIONS

We believe that the future challenges of urban armed conflicts will focus on a few major elements. They could be: multiplication of mobile threats, process supported by the dissemination of information and the potential access of civilians to different types of databases; emphasis on the phenomenon of population and financial capital migration; possibility of outbreaks of pandemics and the panic that such phenomena create in the collective mind (a recent example is the danger of contamination with Coronavirus); spatial extension of the confrontations in the urban environment, by emphasising the dispersion of the front, in depth and altitude, at the expense of the front of continuous fighting in the urban environment, specific to the classic wars; miniaturisation of weapons, applying nanotechnologies and ensuring the camouflage of newly obtained weapons etc.

In this context, the spatial planning of the cities will undergo substantial changes related to the necessity of responding to the challenges that the change of the concept of violence and masked violence implies in an urban environment. The development of dual-use technologies (civil-military) leads to a dangerous simultaneous use of tools and means of combat by civilians and military.

In the context of the contemporary world, the ideological, religious beliefs, as well as the level of education and the characteristics of the mass psychology are of great importance in ensuring the defensive capacity of the city. The elements of mass psychology play an essential role, through the invincible power, the mental contagion and the suggestibility that the virtual communities' ability to use the modern means of information are aimed at. Their effective use can be both a threat and an opportunity, at the level of cyber security as well as of the physical environment security¹⁶.

In conclusion, the concern about how to organise and prepare cities for military operations is a need generated by the inevitable, complex and multidimensional process of urbanisation.

¹⁶ Sorina-Georgiana Rusu, *Planificarea și proiectarea obiectivelor destinate apărării în orașul inteligent*, op. cit.

BIBLIOGRAPHY:

1. ***, United Nations, *World Urbanization Prospects, 2011*. Department of Economic and Social Affairs, New York.
2. ***, United States Agency for International Development, USAID Policy, *Sustainable Service Delivery in an Increasingly Urbanized World*, October 2013.
3. Jacques Bonnet, *Marile metropole mondiale*, Ed. Institutul European, Iași, 2000.
4. Col. Patrick N. Kaune, civilian research project, *Analysis of US Army Preparation for Megacity Operations*, Institute for National Security and Counterterrorism, US Army War College, Syracuse University, New York, 2016.
5. Stephen Graham, *Cities under Siege, the New Military Urbanism*, London and New York, Verso Books, 2012.
6. Le Corbusier, *Urbanisme*, Flammarion, Paris, 1980.
7. Alexandru M. Sandu, *Teoria sistemelor urbane – part I*, Editura Institutul de Arhitectură “Ion Mincu”, București, 1975.
8. Sorina-Georgiana Rusu, *Planificarea și proiectarea obiectivelor destinate apărării în orașul inteligent*, Editura Paralela 45, Pitești, 2018.
9. Sorina-Georgiana Rusu, *Cerințe militare și civile în procesul de planificare a obiectivelor destinate apărării în localitățile urbane*, in *Gândirea Militară Românească*, no. 1- 2 (2018), București, 2018.
10. Cătălin Zamfir, Lazăr Vlăsceanu, *Dicționar de sociologie*, Editura Babel, București, 1993.

WEBOGRAPHY:

1. http://esa.un.org/unup/pdf/WUP2011_Highlights.pdf
2. <https://www.usaid.gov/sites/default/files/documents/1870/USAIDSustainableUrbanServicesPolicy.pdf3>.
3. <https://asc.army.mil/web/wp-content/uploads/2015/01/WinComplexWorld-diagram.jpg>
4. <https://mwi.usma.edu/every-city-different-thats-one-size-fits-approach-urban-operations-wont-work/>
5. <https://api.army.mil/e2/c/downloads/351235.pdf>
6. <https://www.weforum.org/agenda/2020/02/coronavirus-economic-effects-global-economy-trade-travel/>
7. <https://www.statista.com/statistics/202864/number-of-terrorist-attacks-worldwide/>
8. <https://www.weforum.org/agenda/2020/02/coronavirus-economic-effects-global-economy-trade-travel/>

