

# THE UNITED RESCUE SYSTEM IN BULGARIA. CURRENT RESOURCE RELATED ISSUES AND PROSPECTIVE SOLUTIONS

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*The article presents some problems related to securing the Bulgarian system for disaster management with the necessary resources for its proper functioning. The main challenges for the united rescue system in the country are analyzed, including those related to ensuring the system with the necessary material, financial and human resources. Some possibilities for solving these problems with the use of funds from the European Union are presented.*

**Key words:** *resources, disaster management, united rescue system, Bulgaria.*

## 1. INTRODUCTION

The scale of the devastation, caused by natural and man-made disasters in the Republic of Bulgaria in the last decades shows the necessity for mobilizing a great deal of public resources for decreasing the risk of disasters and for managing their consequences when they inevitably occur. This is the reason why it is necessary to unite the efforts of all public institutions and organizations in a united rescue system for civil protection and disaster management.

## 2. STRUCTURE AND FUNCTION OF THE UNITED RESCUE SYSTEM IN THE REPUBLIC OF BULGARIA

The united rescue system in the Republic of Bulgaria includes different public and privately

owned organizations that have legal obligations to perform different activities related to civil protection and disaster management. In accordance with the Bulgarian Disaster protection act the system includes structures of:

- ministries and institutions;
- municipalities;
- partnerships and individual proprietors;
- emergency medical aid centers and other medical facilities;
- non-profit organizations, including volunteer units for disaster protection;
- the armed forces.

The main elements of the united rescue system in the country are the Directorate General “Fire safety and protection of the population” (directorate of the Ministry of Interior), the regional directorates

of the Ministry of Interior, the Bulgarian red cross organization and the emergency medical aid centers. They are meant to ensure continuous preparedness for receiving information in case of a disaster, its evaluation and immediate action.

For this purpose their structure is built on the territory of the whole country corresponding with its administrative and territorial division.

In case additional resources are needed other elements of the system get involved in accordance with the disaster protection plans.

The units, offices and other operating structures of the system keep their institutional and organizational affiliation and their functions and tasks. In case there is a risk of a disaster or if a disaster occurs they all have responsibilities for disaster management in accordance with their specific competences. These responsibilities include [2]:

1. early warning;
2. urgent measures for decreasing the influence of disasters;
3. informing the population and the corresponding authorities;
4. rescue operations;
5. first medical aid in cases of emergency;
6. first psychological assistance both to people injured in the event of a disaster and to those who take part in the rescue operations;
7. managing the consequences of ecological incidents;

8. protection in cases of explosions and use of ammunitions;

9. search and rescue operations;

10. CBRN protection in cases of accidents involving hazardous substances and materials and in case chemical, biological or nuclear weapons are used;

11. extinguishing fires;

12. evacuation and hiding the endangered population and giving them personal protective equipment;

13. performing emergency reconstruction;

14. limiting the spread and eradication of emerging epidemic outbreaks, epidemics and epizootics of infectious and parasitic diseases;

15. other operations, related to civil protection.

### **3. PROBLEMS RELATED TO ENSURING THE UNITED RESCUE SYSTEM WITH THE NECESSARY RESOURCES**

Ensuring a country's disaster management system with the necessary resources that are for its proper functioning is one of the main problems that need to be addressed. It has been especially serious in Bulgaria in the last two decades due to the constant changes in the priorities of the government policies and the negative tendency in the development of the Bulgarian economy. It is necessary to point out that such problems exist practically

in all structures that are part of the system and concern all the main kinds of resources that are necessary for protection of the population in cases of disaster, that is human, material and financial resources.

One of the main problems for ensuring the united rescue system with the necessary resources is related to securing the required material resources.

The analysis made in 2012 of the state of the system and its necessities of different kinds of resources found that the current state of the machines and the availability of material resources for fire extinguishing and personal protective equipment are insufficient. This leads to the fact that the Directorate General "Fire safety and protection of the population" is practically incapable of performing its main tasks related to protection of the population. The problems related to securing the necessary material resources are in fact so severe that, according to the opinion of the experts, they could not be resolved if based only on the professionalism of the employees [5].

The situation in the system, providing urgent medical assistance, is similar to that in the Directorate General "Fire safety and protection of the population". As of 2014 the analysis of the state of this system shows that the state of the infrastructure and the degree

to which the necessities of the emergency medical aid centers are provided for with regard to specialized transport vehicles and medical equipment does not meet neither the requirements for quality and safety of the medical service, nor those for ensuring the safety of work for the medical personnel. In addition to this, some of the urgent medical cabinets in hospitals do not meet the requirements of the medical standard for provision of urgent medical aid with regard to the working area, location and medical equipment [1].

Additional problem that affects the system is related to the amortization of the material resources, including the medical equipment in use.

Another difficulty for the proper functioning of the system for urgent medical aid arises from the different degree to which the medical aid centers are equipped with the necessary material resources. This leads to unequal access of the population to urgent medical aid.

The second main problem of the united rescue system with regard to ensuring all necessary resources is related to securing the human resources required for its proper functioning.

The Republic of Bulgaria holds one of the last places in Europe with regard to the average number of volunteers and professional firefighters per 1000 people in the

country (according to a survey, made by the International association of firefighting and rescue services in 2012). The difference between the values for Bulgaria and for the leading countries in this area is significant (in Bulgaria there are less than 1 per 1000 people, whereas in Austria and Slovenia the figures are more than 30 times higher – 30 and 32,74 per 1 000 respectively) [6].

Significant difficulties exist with regard to ensuring the system for protection of the population within the Ministry of interior with the necessary human resources.

The personnel of the Directorate General “Fire safety and protection of the population” is 8 048 people. This number includes not only experts in the field of civil protection, but also people engaged with activities related to limiting and extinguishing fires, fire prevention and control. The constant reorganization of the system has a negative effect on the motivation of the human resources, engaged it. The limited financial resources for implementing the public policy in the area have similar effect on people’s motivation.

In the system for urgent medical aid the situation with regard to human resources is similar. Problems concern not only securing the necessary personnel, but also ensuring its allocation in all regions of the country in accordance with the necessities of the population.

The number of employees, working in the system can reach up to 7111. On this basis 352 mobile and 167 hospital units can be formed. As part of the total number of mobile units – 75 should be specialized in performing cardiopulmonary resuscitation, 127 – should be medical units, 125 – paramedical units and 30 – transport units. As of 01.01.2014 only 6 380 people work in the emergency medical aid centers (1457 of them are doctors and 2652 medical auxiliaries and other medical personnel) [1]. In reality the vacancies are more than 10 %, which shows how severe the problems related to securing the system with the required personnel actually are.

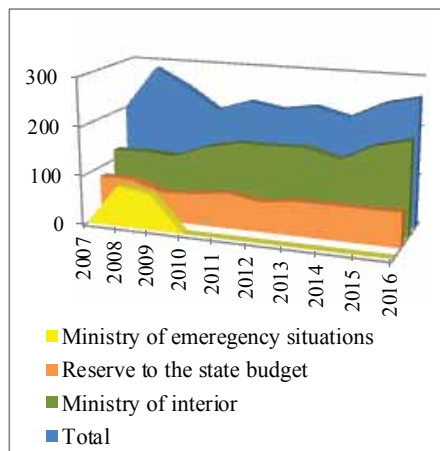
A significant problem for the urgent medical aid system is related to the age structure of its human resources. This structure reveals some extremely negative trends related to the constant increase of the personnel aged 55 – 65. Currently every fourth person working in the system is in this age group. In the meantime only 8 % of the medical experts are in the age group below 35 [1]. In the nearest future this may increase the shortage of medical staff and worsen the access of the Bulgarian population to urgent medical care.

The third problem related to securing the necessary resources for the proper functioning of the united rescue system in Bulgaria concerns the ensuring of the necessary financial resources.

The greatest part of the financing for the system comes from the public sector. It has two main instruments for this purpose – the state budget and the independent budgets of the municipalities.

The constant changes in the priorities of the government's policies as well as the structure and the development of the economy have had a negative effect on the financing provided for the system for protection. The public financing for the system is limited (*fig. 1*), and as a result of this – the possibilities for development and modernization of the structures that carry out the defense significantly decrease [5].

Financing the activities of the state for protecting the population in cases of disasters is ensured mostly through the budget of the Ministry of interior. The reason for this is that since 2009 the main structure responsible for these activities (the "Fire safety and protection of the population" Directorate General) has been a part of this ministry. Additional financial resources are available through the budgets of the municipalities in the country, as well as through the reserve for contingent and/or urgent expenditure of the state budget (in particular that part of the reserve for prevention and consequence management of disasters).



**Fig. no. 1.** Expenses for fire safety and protection of the population in cases of disasters ('000 BGN)

It is evident from *fig. 1* that the budget of the public sector in this area has not changed significantly in the last 10 years. But as it was pointed out above many new problems, concerning the lack of resources for civil protection and disaster management have been registered since. These facts decrease the possibilities for ensuring the resources that are necessary for the functioning of the united rescue system.

#### 4. POSSIBILITIES FOR RESOLVING THE PROBLEMS RELATED TO SECURING THE BULGARIAN UNITED RESCUE SYSTEM WITH RESOURCES

Given that the public budget for disaster protection is likely to remain unchanged, the main possibility for

overcoming the negative tendency toward decreasing the availability of resources for the united rescue system comes from the funds of the European Union.

As a full member of the union, the Republic of Bulgaria has access to all its funds that can be used to finance the national policies in the field of civil protection and disaster management.

**The European Agricultural Fund for Rural Development** provides opportunities for financing different projects both for prevention of disasters and for reconstruction of sites affected by disasters. The national *Programme for the development of the rural areas 2014 – 2020* gives the country the opportunity to use financial resources from this fund in order to complete the following activities [4]:

- creating, improving and supporting anti-fire infrastructure;
- purchasing equipment for fire extinguishing and personal protection equipment;
- construction or modernization of helicopter pads;
- construction or modernization of water sources that can be used for firefighting;
- construction or modernization of surveillance posts that can be used for facilitating firefighting;
- purchasing communication and surveillance equipment for

monitoring forest fires, pests and diseases;

- building and improving forester roads.

For the purpose of financing projects related to civil protection and disaster management the **Cohesion fund** and the **European Regional Development Fund** can be used through the national *programme “Environment” 2014 – 2020* [3]. Financial resources from these funds can be used for:

- the construction of a National center for real time management of water resources;
- realization of measures for prevention and risk management of floods, with a focus on stabilizing costs in inhabited areas;
- research and evaluation in relation to the second Plan for managing the risk of floods for the 2022 - 2027 period;
- realization of demo or pilot projects, related to prevention and management of the risk of floods.

Measures, financed by the programme aiming to increase prevention and managing the risk of floods, include:

- reconstruction of flood zones;
- improving the containment of water;
- biological reinforcement of banks;
- prevention of risks in the inhabited areas—for example designing



and construction/reinforcement/rehabilitation/elimination of defence infrastructure and/or hydro-technical equipment.

It is necessary to point out that, apart from projects for protecting the population from risks of floods, the “Environment” programme can finance projects related to the defence of the population at risk from landslides.

## 5. CONCLUSIONS

There are a number of significant problems related to the securing of the united rescue system in the Republic of Bulgaria with the necessary resources, which impede the normal functioning of the system. It is necessary to take them up immediately in order to restore the proper functioning on the system.

In the short term the funds of the European Union present the main possibility to overcome the chronic deficit of resources in the system. These funds can be used not only to finance the prevention activities that can lead to the decrease of the risk of disasters, but also to finance the purchase of different material resources for protection and for the follow-up reconstruction in the event that a disaster took place.

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