

## **ХАРАКТЕРИСТИКИ, ОПРЕДЕЛЯЩИ МОДЕЛА НА ОБЛАСТНА ПРОТИВОПОЖАРНА СЛУЖБА В ПОЛУПЛАНИНСКИ РАЙОН**

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### **РЕЗЮМЕ:**

Най-добрият начин за създаване на оптимален примерен модел на противопожарна служба на базата на: местоположение, техническо оборудване, персонал и др. е да се анализират статистическите данни за: населението, топографията, икономиката, селищата, хидрологията, земеделските земи и т.н.

За тази цел основните характеристики на тази специфична област Търговище - са проучени, анализирани и представени в графична форма. Тези данни са базирани на основата на географска информационна система (ГИС) и други налични източници на информация.

Въз основа на направените анализи и заключения се определят основните критерии, на които трябва да отговарят съответните Областни служби по пожарна безопасност и защита на населението / РУ ПБЗН /.

**Ключови думи:** население, топография, икономика, населени места, хидрология, противопожарна служба

# **CHARACTERISTICS DETERMINING THE MODEL OF DISTRICT FIRE FIGHTING SERVICE IN SEMI-MOUNTAINOUS AREA**

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## **Summary:**

The best way to create an optimal sample model of a fire-fighting service on the basis of: location, technical equipment, staffing etc. is to analyze the statistics on: population, topography, economy, settlements, hydrology, agricultural land et.

For this purpose, the basic characteristics - of this specific area of Targovishte - have been studied, analyzed and presented in a graphic form. These data are based on a Geographic Information System (GIS) and other available information sources.

On the basis of made analyses and conclusions are defined the basic criteria which are to be met by respective: District service of Fire Safety and Protection of Population /DSFSPP/.

**Keywords:** population, topography, economy, settlements, hydrology, fire service

## **Introduction**

In Targovishte region there are: 1 director of Regional directorate of Fire safety and protection of population /RD-FSPP/; 3 district directors of district administrations of FSPP; 1 chief of cadastre, 1 chief of administration of forests etc. The borders of Targovishte region are: Shumen region on the East, Veliko Tarnovo region on the West, Razgrad region on North-East, Ruse region on North-West and Sliven region on South [1].

Targovishte municipality is composed of : 52 settlements: 1 town and 51 villages with total population of 57 264 inhabitants.

The main statistic data about the region – concerning: population, economy, topography, settlements, hydrology, agricultural lands etc data regarding the region -are taken from the Geographic informational system /GIS/.

GIS is an informational system comprising: software, hardware, data, procedures and personnel qualified for making, handling, conservation, analyses, visualisation of dimensionally specified data.

## **Population in targovishte region**

Number and structure of the population:

The population of Targovishte region comprises 113 694 people which consists 1.6% of the population of Bulgaria and ranges this region on 24-th place by number of population. The population of the region diminishes by 1 517 people yearly which means by 1.3%.

Men are 55 644 (48.9%); and women are 58 050 (51.1%). Along with age growth, number and relative part of women arise in the total population of the region.

The process of population aging continues. Individuals with reached age of 65 and more are 23 711, which means: 20.9% of the population in the region [2]. In

comparison to previous years the part of the population in this age group arises by 0.4 percentage points.

The process of aging is more pronounced among women than men. The relative part of women at the age above 65 is 24.3%, and of men - 17.3%. This difference is due to higher mortality among men; the average duration of men's life is lower. Children up to the age of 15 are 16 707, which means: 14.7% of the total number of the population in Targovishte region. This part arises by 1.3 percentage points annually.

The population structures in and above working age are influenced by: aging of the population and the legislative changes when determining the age limits for retirement.

The population in working age in Targovishte region comprises 67920 people, which means 59.7% of the population in the region; men are 36 197.

The age limits - for population categories: below, in and above working age – are determined according to Ordinance on pensions and insured length of service adopted by Decree No: 30 of the council of ministers [3]. Despite of the increasing age limit for pensioning the working population is reduced by 1 057 people.

Above the working age are 27 969 people; thus, 24.6%; below the working age – 17 805 people, which means 15.7% of the population in the region.

Territorial distribution of the population:

In the towns of Targovishte region live 61 212 people which means 53.8%; and in the villages - 52 482, or 46.2% of the population in the region. The settlements in Targovishte region are 194; 5 of them are towns and 189 – villages. There are 2 settlements without population. In 40, or in 20.6% of the settlements in the region there are inhabitants numbering from 1 to 49 inc.

Regarding administrative-and-territorial structure: Targovishte region is divided in 5 municipalities.

Municipalities:

By number of its population the smallest municipality is Antonovo where live 5 736 people - 5.0% of the population of the region; and the biggest is Targovishte municipality with 54 428 inhabitants.

By the end of each year the population number and structures are calculated on the basis of the data for previous year and data about natural and mechanical movement of the population during the current year.

The informational system on Demography - to the National statistic institute - provides the data about number and structures of the population.

Source - for data about natural and mechanical movement of the population /births, dying, marriages, divorces, inner migration/ - is: the single system of civil registration and administrative services for the population /CRAS - GRAO/ [4].

The data - about the number of population and the occurred demographic events in a territorial profile – are presented according to the administrative-and-territorial structure of the country by 31 Dec of respective year /settlements, municipalities, regions/ and statistic regions - by actual address which is the address corresponding to residence declared in writing by a person.

The age of the population by the end of the year - as calculated by 31 Dec – means completed years. The age of people – when occurring a demographic event – is calculated as completed years on the ground of: date of birth and date of respective event i.e. the age achieved by individuals when occurred the respective event.

When calculating demographic indexes is taken into account the annual average entire population. The annual average number of the population is the

average arithmetical rate of the population calculated by the end of a previous year and the end of the reported year.

### **Targovishte (municipality)**

Targovishte municipality is situated in North-East of Bulgaria; as part of the municipalities forming Targovishte region

### **Geographic situation, borders, size**

The municipality is situated in the North-East part of Targovishte region . With a surface of 840,429 km<sup>2</sup> it is the biggest among the 5 municipalities in said region - 31,01% of the territory of the region.

Natural resources [5]

Relief The relief of the municipality is flat, hilly, low-mountainous with prevailing altitudes between 150 and 300 m. Its territory is situated in the Southern parts of the Eastern Danubian plain and in the extreme Northern parts of the Eastern Pred-Balkan. In the Northern parts of the Targovishte municipality the extreme Southern ramifications of the Razgrad heights are situated. Their highest point – of 481,6 m – is located on the Northern side of the village Miladinovtsi, 2,5 km away. In the extreme North-Eastern parts of the municipality the most Southern ramifications of the Samuilovki heights are extended. In South-Eastern direction, 1 km away of the village Tvardintsi their altitude reaches 436,8 m. The Western areas of the municipality are occupied by the Eastern most elevated parts of the highland. Within it - at 3 km in North-Western direction of the village of Koprets – the highest point of Targovishte municipality is situated: the peak Golemiya vis (Kodzhakus) 689,4 m<sup>[1]</sup> of altitude. In the South of the mountain, on the territory of Targovishte region, the most Northern part of the hilly historical-and-geographical area of Gerlovo is extended.

Till the village of Prolaz it flows in a large valley; then, in North-East direction, in the Eastern part of the mountain Preslavaska planinna – through a

deep gorge. After going out of the gorge, its valley bed becomes large; to the North forming a big convex arc and gradually turning to South-East through the Targovishte field. In its low flow it runs along the Southern foothill of the Shumensko plateau. It flows from the left side into the river Golyama Kamchiya, at 86 m of altitude, till and near the village Han Krum. After the town of Targovishte its bed is corrected by waterproof dykes. The surface of its drainage basin is 938 km<sup>2</sup>, consisting 17,5% of the catchment basin of the river Golyama Kamchiya. Its main feeder effluents - on the territory of Targovishte municipality are: Kerizbunar (Saedinenska river, 24 km) and Kalaydzhi (Osenka, 22 km). The river Kerizbunar (Saedinenska river, 24 km) springs from the highlands Razgradski visochini, at 462 m of altitude; 400 m North-East from the peak of Kanarata (the municipal land of the village Miladinovtsi). The surface of its drainage basin is 214 km<sup>2</sup>, i.e. 22,7% of the drainage basin of the river Vrana [6]. The river Kalaydzhi (Osenka, 22 km) starts at the Western slope of the mountain Preslavaska planina, at 566 m of altitude, 2,2 km South-East of the village Strazha. Economy Lands sown with barley are 148 875 ha., with maize are 35 731 hectares.

### **Popovo (municipality)**

General data

region Targovishte region

surface 832.9 km<sup>2</sup>

population 30 676 people

administrative center Popovo

Popovo municipality is situated in the North-Eastern Bulgaria with borders: on the North – Opaka municipality and municipality Tsar Kaloyan, Razgrad region; on North-East – Razgrad municipality, Razgrad region; on South-East – Targovishte municipality; on the South – Antonovo municipality;

on South-West – Strazhitsa municipality, Veliko Tarnovo region; on the West – Byala municipality and municipality Dve mogili, Ruse region. It forms composing part of the Targovishte region [7].

### **Geography**

Natural resources

Relief The relief of the municipality is hilly-to-flat and plateau. Its entire territory is within the limits of the Eastern Danubian plain. In the South-West parts of Popovo municipality are extended the highlands Popovskite visochini. In them, 1,5 km North of the village of Kovachevets their highest point is situated: the peak Kalakoch 485,3 m, being also the highest point in the whole Popovo municipality [8].

### **Omurtag (municipality)**

The Omurtag municipality is located in immediate proximity to the Northern slope of the Eastern Stara planina, close to the Lisets peak. It occupies the Southern part of the Targovishte region, having a crossroad transport-and-geographical significance [9]. The town of Omurtag is an important transportation hub, situated near to first-class road I-4 Sofia - Varna, 25 km distant from the railway Sofia – Varna. Across the municipality, nearly in meridian direction, passes a second-class road II – 48 – from Targovishte through the Kotel pass to Sliven.

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