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## Spatial Segregation and Transformation of the Bulgarian Urban Space:

### Case Study Bulgaria

Nadezhda Ilieva, Dessislava Poleganova

**Abstract:** Spatial segregation, driven by demographic shifts, political history, and social and economic inequalities, has intensified in Bulgaria since the post-socialist transformation of the 1990s. Today, with most Bulgarians living in urban areas, growing economic and social disparities have led to the construction of new “walls” and “borders” within the urban fabric. This paper explores the complex nature of spatial segregation in Bulgaria, analyzing old and new forms of segregated communities and the process’s internal and external drivers. Addressing these issues requires a comprehensive and holistic approach that promotes intercultural dialogue, reduces discriminatory attitudes and stereotypes, and improves access to public services, transport, and affordable housing in marginalized neighborhoods. Aligning urban planning policies with the New Leipzig Charter (2020) is crucial for creating more equitable and inclusive “urban places” for all Bulgarian citizens.

**Keywords:** spatial segregation, urban space, ghettoization, Roma population, Bulgaria

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Nowadays, the sustainable development of European cities is jeopardized by growing social and economic disparities and deepening spatial segregation. The term “spatial segregation” has many scientific interpretations and is a multidimensional and dynamic phenomenon. Generally, it reflects the uneven distribution (separate way of living) of two or more population groups in a geographic area (urban space) based on social status, ethnicity and/or race affiliation, or other socio-economic or socio-demographic criteria.<sup>1</sup> Spatial segregation has manifested itself differently in historical and ideological contexts and is shaped by numerous factors with divergent influences and various natures – economic, institutional, social, cultural, environmental, etc. In addition, closely associated with the segregation processes are many other concepts and terminology – slums, deprived territories, informal settlements, ghettos, divided and dual cities, gated communities, etc.

To meet the objectives of the current study, we adapted the conceptual framework of Gültekin (2009),<sup>2</sup> with spatial segregation as a result of the interaction of:

i. internal factors – psychological and demographic features, ethnic and religious affiliation, social and cultural peculiarities, etc.

ii. external factors – political and legislative restrictions, economic constraints and inequality, social exclusion, etc.

iii. a complex influence of both groups of factors.

It is commonly accepted that spatial segregation is reinforced due to a dynamic interrelations of factors and has a cumulative effect. The so-called “vicious circle” of segregation is established, and without substantial efforts to break out of it, it prolongs over generations<sup>3</sup> (Fig.1).

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<sup>1</sup> Douglas Massey, Nancy Denton. *American Apartheid: Segregation and the Making of the Underclass*. Harvard University Press, 1993; Sean Reardon, David O’Sullivan. Measures of spatial segregation. *Sociological Methodology*, Vol. 34(1), (2004), 121–162; John Logan, Harvey Molotch. *Urban fortunes: The Political Economy of Place*. University of California Press, 1987.

<sup>2</sup> Nevin Gültekin. The Impact of Social Exclusion in Residential Segregation: A gipsy Neighbourhood Fevzi Paşa in Turkey, *G.U. Journal of Science*, Vol. 22 (3), (2009), 245-256

<sup>3</sup> Tiit Tammaru, David Knapp, Siiri Silm, Maarten van Ham, Frank Witlox. “Spatial Underpinnings of Social Inequalities: A Vicious Circles of Segregation Approach.” *Social Inclusion*, Vol. 9(2), (2021), 65–76. <https://doi.org/10.17645/si.v9i2.4345>

## The Stages of the Ghettoization Process



*Figure 1. The vicious circle of segregation*  
 Adapted from: Mionel, V. & Negut, S. (2011). The socio-spatial dimensions of the Bucharest ghettos, *Transylvanian review of administrative sciences*, 33E, 197-217

Since the post-socialist transformation of the 1990s, spatial segregation, driven by demographic shifts, political history, and social and economic inequalities, has intensified in Bulgaria. Today, with over 70% of Bulgarians living in urban areas,<sup>4</sup> growing economic and social disparities have led to the construction of new “walls” and “borders” within the country’s urban fabric. The Roma population has been particularly vulnerable to these negative trends in recent decades, and there has been an increase in the number and size of Roma ghettos.<sup>5</sup> The Roma people number 266,720, or 4.4% of the total population, and are the third largest ethnic group in Bulgaria (2021).<sup>6</sup> Although the number of Roma has decreased by 0.5% since the census in 2011, the population nearly doubled between 1900 and 2021 (in 1900, they made up 2.4% of the population, Fig. 2).

<sup>4</sup> National Statistical Institute (NSI) of the Republic of Bulgaria. *Census 2021. The population as of September 7. Final data.* [https://www.nsi.bg/sites/default/files/files/pressreleases/Census2021\\_population\\_en.pdf](https://www.nsi.bg/sites/default/files/files/pressreleases/Census2021_population_en.pdf)

<sup>5</sup> Boris Kazakov, Todor Lyubenov, Nadezhda Ilieva, Kamelia Petkova, Aleksandra Ravnachka. “Spatial and Social Dimensions of Roma Segregation and Integration (A Case Study of the City of Kyustendil, Bulgaria),” *Journal Socio-Economic Analyses*, Vol.15 (3) (2023), pp. 157–167, <https://doi.org/10.54664/AZBT7107>; Надежда Илиева, Калоян Цветков, Иванка Ботева. Пространствени и социални измерения на гетоизираните ромски структури в град Видин, *Проблеми на географията*, 3-4 (2023), <https://doi.org/10.35101/prg-2023.3-4.8>

<sup>6</sup> National Statistical Institute (NSI) of the Republic of Bulgaria. *Ethno-cultural characteristics of the population as of September 7, 2021. Final data.* [https://www.nsi.bg/sites/default/files/files/pressreleases/Census2021-ethnos\\_en.pdf](https://www.nsi.bg/sites/default/files/files/pressreleases/Census2021-ethnos_en.pdf)

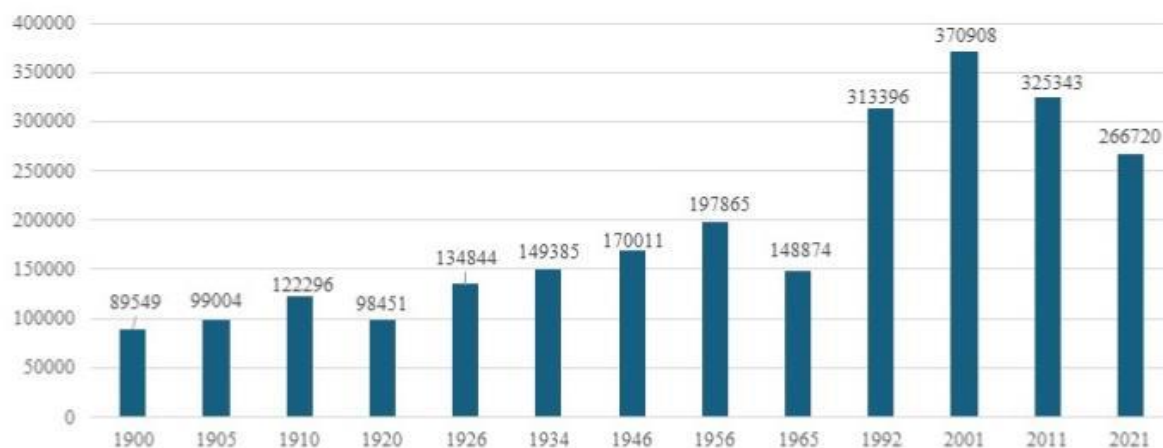


Figure 2. Dynamics in Roma population numbers in Bulgaria (1900-2021)  
 Source of data: NSI, www.nsi.bg

After 1945, the Roma ethnic group migrated from villages to urban centers, changing their living conditions and occupation. According to Ilieva (2013),<sup>7</sup> since 1965, the ongoing tendency of geographical polarization has resulted in the establishment of several compact areas, namely the North-Western, North-Eastern, Maritsa, Trans-Balkan, and Burgas regions, which are home to a sizable Roma community. These areas, which comprise over 20% of Bulgaria's total area, exhibit a constant territorial expansion, and over half of the Bulgarian Roma are concentrated in these five regions (Fig. 3–6).

<sup>7</sup> Надежда Илиева. *Ромите в България: брой и локализация от Освобождението (1878 г.) до началото на XXI век*. София: Национален институт по геофизика, геодезия и география-БАН, 2013

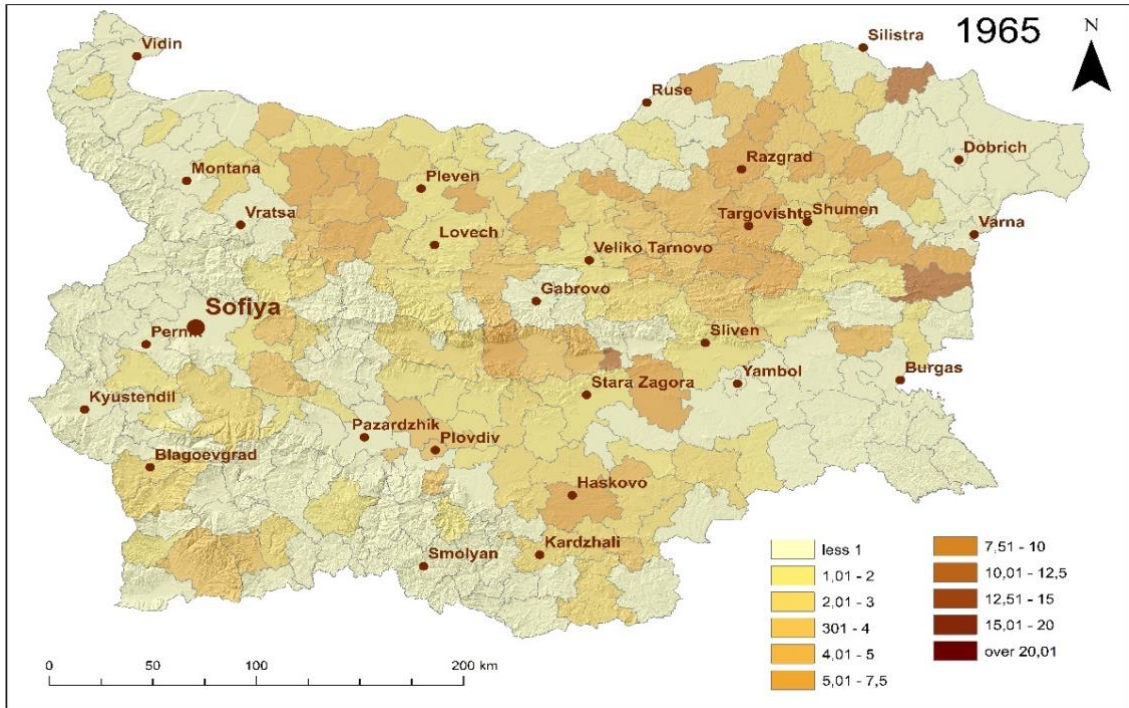
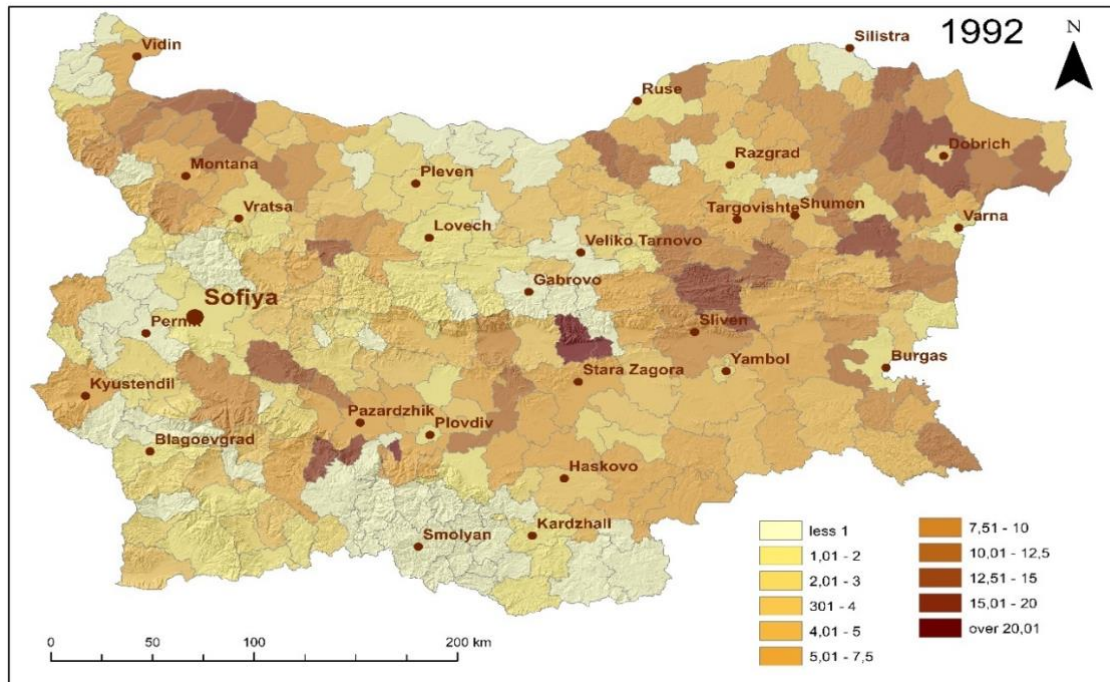


Figure 3. The territorial distribution of the Roma population in Bulgaria in 1965 (in %, municipality level)  
 Source of data: NSI, [www.nsi.bg](http://www.nsi.bg)



Figures 4. The territorial distribution of the Roma population in Bulgaria in 1992 (in %, municipality level)  
 Source of data: NSI, [www.nsi.bg](http://www.nsi.bg)

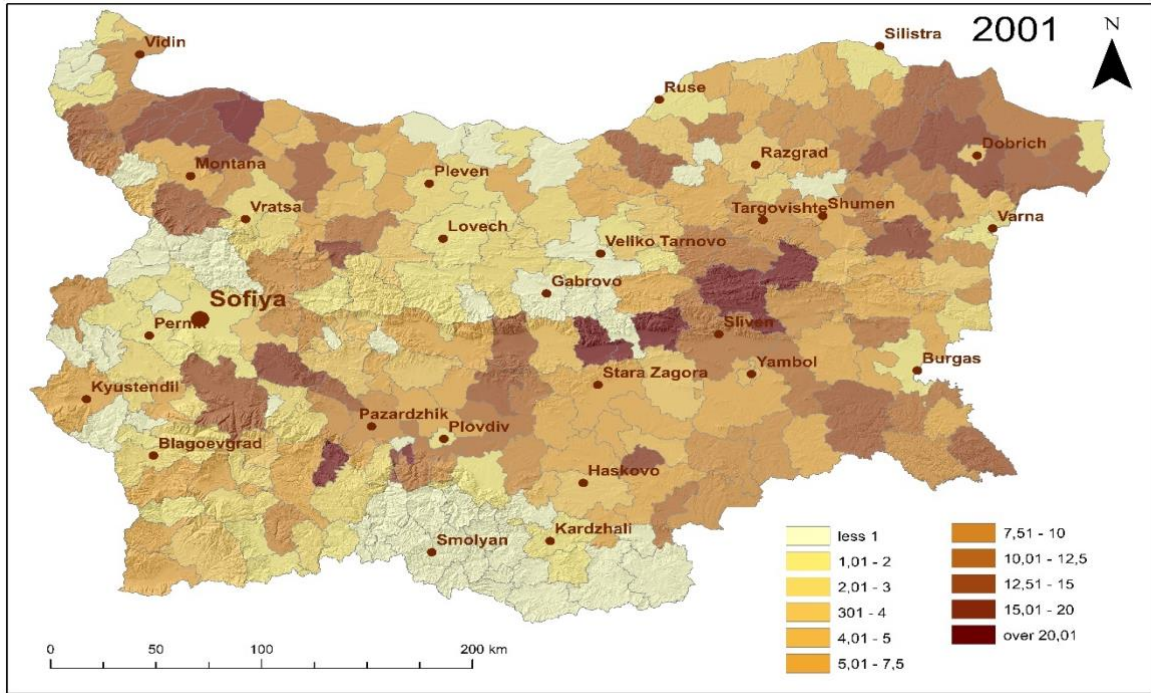


Figure 5. The territorial distribution of the Roma population in Bulgaria in 2001 (in %, municipality level)  
 Source of data: NSI, www.nsi.bg

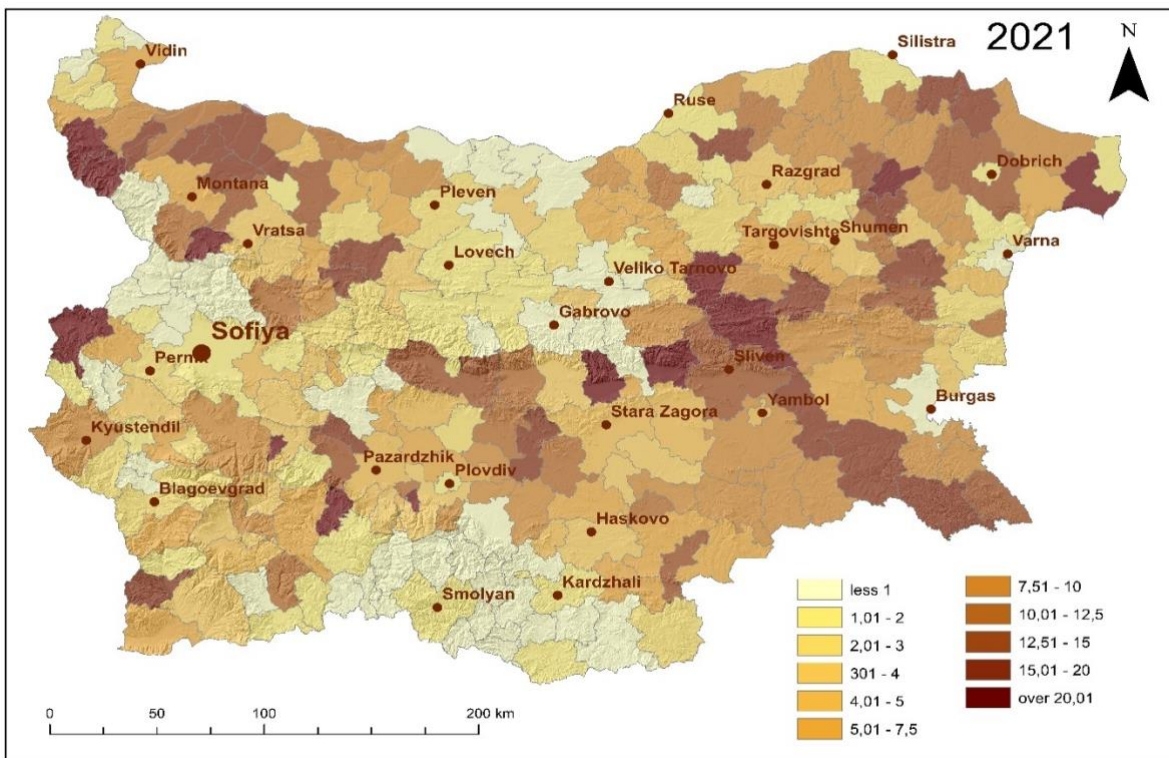


Figure 6. The territorial distribution of the Roma population in Bulgaria in 2021 (in %, municipality level)  
 Source of data: NSI, www.nsi.bg

As of 2021, over half of the Roma population live in urban areas, but they continue to be with the greatest rates of unemployment and illiteracy, which makes them vulnerable to continuous stigmatization and social marginalization. Furthermore, since 1945, the pace of the Roma population’s urbanization has accelerated, and almost 50% of them now live in cities with over 10,000 inhabitants. This tendency is even more complicated because most Roma people either establish new Roma neighborhoods or reside in old ones in cities. Over time, these impoverished urban areas have developed into Roma urban ghettos, which share many common features but differ in many other aspects, such as how severely segregated they are. Therefore, the continuous process of searching for the most appropriate framework that investigates and describes the essence of these vastly expanding areas is of high scientific importance (Fig.7).

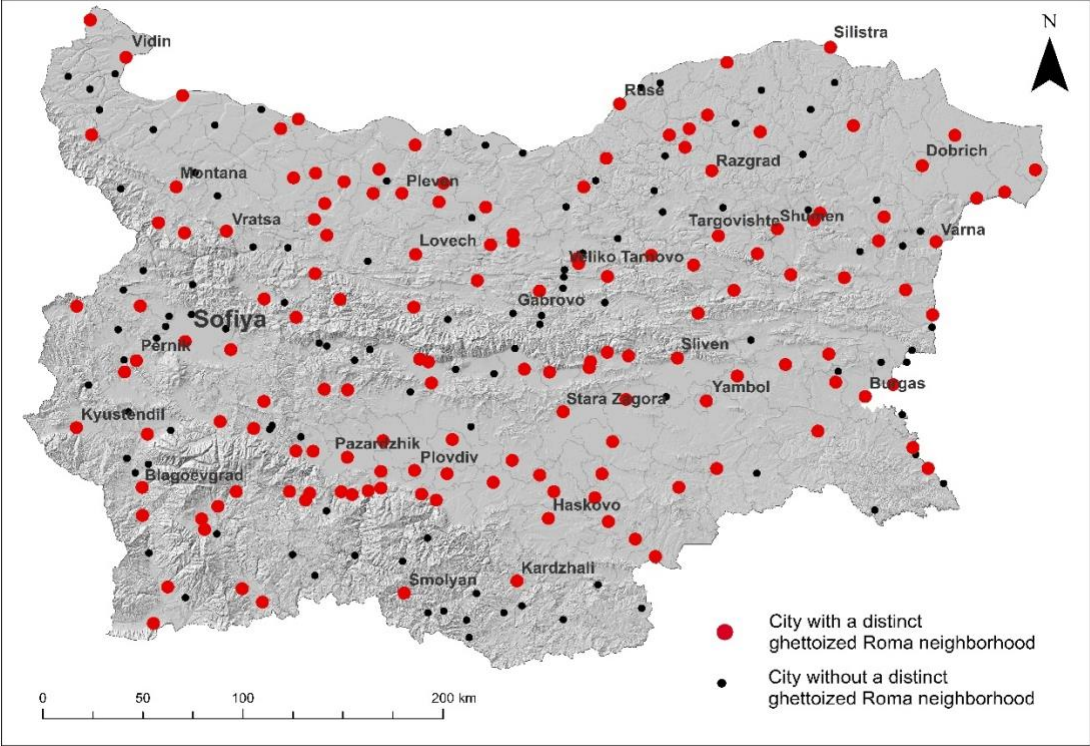


Figure 7. Territorial distribution of Roma ghettoized urban structures in Bulgaria (2024)  
 Source: Author’s compilation

We thus adopted the term “ghettoized urban structure” (GUS), and its main distinctive features are:

- a GUS has different sizes of territory – a separate ghetto-like settlement, part of the urban space (representing a city neighborhood), district, or micro-district.

- GUS frequently has fixed and visible boundaries and is characterized by:
  - a) a poor, missing, or unregulated street, housing, electrical, social, and other infrastructure
  - b) the population is characterized primarily by ethnic, racial, social, cultural, or other characteristics.
  - c) social relationships are often regulated by pre-modern norms within the GUS
  - d) the residents are distinguished by their subculture.<sup>8</sup>

Due to their distinct features, GUSs are easily identifiable in urban settlements. When we delineate the GUSs, a variety of criteria are applied: socio-economic (high unemployment and poverty rates, unfavorable educational structure, a substantial share of grey economy, etc.), ethnocultural (ethnic and religious affiliation, cultural peculiarities of different Roma groups, etc.), and those related to urban morphology (deteriorated housing stock, lack of transport and social infrastructure, high percentage of illegal buildings, etc.). GUSs are often found on the outskirts of cities, next to industrial areas, or in other urban areas where environmental problems exist. Because Roma residents are cut off obviously from the rest of the urban settlement, they lack proper communication with other citizens and experience a strong feeling of isolation and fear. Therefore, the relationships between the Roma residents are more important and intense in the GUS, and the community's attachment and sense of belonging to their "city in the city" is strengthened.

The comprehensive understanding of the existing Roma GUSs in Bulgaria is a challenging research task. So, to gain more precise knowledge and ensure deeper insights into these ghettoized territories, we adopted a research framework that allows us to find the up-to-date development trends and evaluate the complex process of spatial segregation. Firstly, it is necessary to define the boundaries of these territories, and secondly, to gather the needed data for calculating various indicators (population density, density of building stock, access to public facilities, etc.). Then the process requires the computation of spatial segregation indices, and the final step is the classification of different types of Roma GUSs. The primary obstacles, however, are the encapsulated nature of Roma neighborhoods, the state authorities' withdrawal and disregard for these urban areas, and the Roma's mistrust and hesitancy to interact with other city residents and officials.

Thus, the implementation of a successful policy for Roma integration requires objective and sufficient spatial and demographic data obtained through various approaches:

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<sup>8</sup>Красимир Асенов. *Антропология на „гетото“ – пространство и култура*, Пловдив: Студио 18, 2018.

- **Census Data:** utilizes demographic and socio-economic data from population censuses. However, it lacks detailed information at smaller geographical scales and often can't capture the dynamics within Roma communities.
- **Remote Sensing:** the Roma GUSs can be mapped using drones or satellite images, which offers great accuracy but may be limited by high costs and technical requirements.
- **Mixed Data Collection:** employs qualitative and quantitative research methods (in-depth interviews, questionnaires, etc.) providing valuable insights from community engagement but is resource-intensive and time-consuming.
- **Visual Satellite Imagery Analysis:** it includes interpreting satellite images to identify GUSs based on physical layout. Although quite efficient for studying the morphological structure of the urban fabric, it may ignore the other features of these areas.
- **Machine Learning and GIS:** provides spatial and other forms of scientific research rather quickly by automating the mapping process through picture classification algorithms and data processing; however, it necessitates high-quality images and significant technical expertise.

Each method has its benefits and limitations; therefore, it is recommended to apply an integrated approach providing a better understanding of Roma GUSs to support policymaking initiatives and measures and to enhance the quality of life of community citizens.

### **Case study: Asenovgrad, the Roma ghettoized urban structure Loznitsa**

Asenovgrad, a middle-sized town with 45,322 residents, is in Southcentral Bulgaria, about 20 kilometers from Plovdiv. Like many other Bulgarian towns, Asenovgrad has a sizable and clearly defined Roma ghettoized urban structure, known as the Loznitsa neighborhood (Fig. 8).

The Roma live concentrated in the Loznitsa neighborhood. The large discrepancies in the number of the Roma population (official data from NSI<sup>9</sup> – about 1%, and unofficial from local authorities and Roma informal leaders – more than 20%, 2021) are the result of the so-called “preferred ethnic affiliation,”<sup>10</sup> or affiliation to a foreign ethnicity. Within the Loznitsa

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<sup>9</sup> Национален статистически институт (НСИ), [www.nsi.bg](http://www.nsi.bg)

<sup>10</sup> Веселин Попов, “Циганите в България и тяхното етническо самосъзнание.” В: *Аспекти на етнокултурната ситуация в България*, съст. Валери Русанов, София: Център за изследване на демокрацията и фондация “Фридрих Науман”, 1992

ghettoized structure, two distinctive parts exist – an old and a new one, inhabited by different Roma groups and with specific urban morphological structures. The old part was established in 1962 by the local authorities' decision, after the resettlement of the Roma people from the two previously existing Roma neighborhoods in the urban core (near the hospital and the town beach) to the periphery of the city on the uneven and highly sloping terrain. The state funded the construction of 142 houses and adjacent infrastructure, involved the Roma citizens in the construction process, and ensured partial financial aid. Although the houses are built on municipality-owned terrain, most of the properties have problems with their legislation due to additional illegal construction and expansion. Roma people who live in the old part of the Loznitsa GUS belong to the group known as “millets.” They are distinguished from other Roma groups by their Turkish mother tongue, their professed Muslim faith, and their identification as Turks.

Since 2000, a new part of the Roma ghettoized structure has emerged and, according to the interpretation of satellite images and municipality experts, the largest territorial expansion was observed during 2004–2007. Despite coming from different regions of Bulgaria and representing various Roma communities, the newcomers settle down outside the old part of Loznitsa GUS and more than 85–90% of the buildings are illegal. Unlike in the old part of the neighborhood, where the building density is higher, the new inhabitants have much more free space for construction. However, when the new Loznitsa GUS neighborhood reached the municipal cemetery, the local government decided to physically separate the neighborhood from this area of Asenovgrad by constructing a wall.

It can be stated, like the other urban ghettoized structures in Bulgaria, that Loznitsa GUS experienced substantial spatial growth during the last 20 years. The satellite image data shows a rapid increase in the building stock and can be successfully used to track the construction accurately and in real-time. Generally, like the rest of the country, the studied neighborhood has serious problems with illegal housing and its regulation. The local government has no efficient instruments to control and legalize the new properties, and the Roma families' lack of interest, and communication difficulties, turn the problem intractable.

According to the local authorities, there are no religious tensions between different Roma groups. As stated in conducted interviews and focus groups in 2023, about 60–62% of Roma people are Sunni Muslims, 30% are part of Evangelical Christianity (however, they speak Turkish and do not consider themselves Christians), and 10% hesitate to state religious identification. Although there are no anthropological differences among Roma groups living in

Loznitsa GUS, they are separated evidently and set off from one another within the community. In the last decades, and especially after the accession of Bulgaria to the EU, many Roma people migrated abroad in search of better incomes and a higher standard of life. This caused demographic trends to change, and for now, migratory inflow – rather than the natural crude rate – is primarily responsible for the growth in the Roma population. The Loznitsa GUS has typical problems with educational and health services like other Roma neighborhoods in the country. In Asenovgrad municipality, only 3% of Roma people have secondary education, the pupils attend segregated schools, and their drop-out rate is 14%. It is pointed out that the assistance of Roma mediators and encouraging kids to participate in extracurricular activities (sports, dance, and art) are the most effective ways to boost enthusiasm for learning.<sup>11</sup>

High rates of morbidity, high mortality, and low life expectancy (ten years lower than the national average) are among the highly detrimental trends in the health of the Roma population across the country, and also in Loznitsa GUS.<sup>12</sup> About 95% of Loznitsa citizens lack health insurance, according to the health mediator's data, for many reasons, including increasing employment of Roma in the grey economy and abroad, employers failing to provide health insurance, etc.

In conclusion, the spatial segregation of Roma urban communities in Bulgaria is a challenge, and efforts to integrate them through regional and national plans have not yet produced noticeable progress. Achieving long-lasting transformation in our society requires a thorough understanding of the cultural and other inherent features of the Roma population as well as the participation of Roma stakeholders in policy discussions and implementation. Aligning urban planning policies with the New Leipzig Charter (2020) is crucial for creating more equitable and inclusive “urban places” for all Bulgarian citizens.

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<sup>11</sup>Надежда Илиева, Георги Бърдаров. *(Не)възможната ромска интеграция: демографски специфики*, София: фондация “Фридрих Еберт”, 2020

<sup>12</sup> Пона Томова, Lubomir Stoytchev. *Thematic report on Roma. Key social inclusion and fundamental rights indicators in Bulgaria*. National Statistical Institute, Iceland-Liechtenstein-Norway grants, European Union Agency for Fundamental Rights (FRA), 2022, [https://www.academia.edu/89259778/Thematic\\_report\\_on\\_Roma\\_Key\\_social\\_inclusion\\_and\\_fundamental\\_rights\\_indicators\\_in\\_Bulgaria](https://www.academia.edu/89259778/Thematic_report_on_Roma_Key_social_inclusion_and_fundamental_rights_indicators_in_Bulgaria)



**Figure 8. The location of the Roma ghettoized urban structure Loznitsa in Asenovgrad**  
Source of map: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, 2024

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