



# The “Sofia Model”: Creation out of chaos

Pathways to creative and knowledge-based regions

ACRE report 2.10

Evgenii Dainov  
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Accommodating Creative Knowledge – Competitiveness of European Metropolitan  
Regions within the Enlarged Union

Amsterdam 2007  
AMIDSt, University of Amsterdam



# ACRE

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## EXECUTIVE SUMMARY

In the 20<sup>th</sup> century, Sofia was designed as an administrative and industrial center backed up by heavy industry based on technologies from before WWII. The quality of life of its citizens was of secondary importance as evidenced by the prefabricated concrete apartment blocks of a limited period of exploitation and offering an unsatisfactory quality of life.

The successful cities of the 21<sup>st</sup> century are very different. While in the 20<sup>th</sup> century comparatively low added value was created by industrial production, in the 21<sup>st</sup> century relatively high added value is being created by the knowledge economy. In other words, if high value added is the aim, then a knowledge economy should be developed and the appropriate human resources to work in it should be attracted and retained.

The basics are already in place. The capital city is no longer a heavy industry area – over 70% of Sofia's GDP comes from the service sector. The bulk of Bulgaria's creative industries is concentrated in Sofia, and these industries form 20% of the number of companies active in the city. The bulk of amenities required by creative individuals – such as ethnic mix, public interaction areas, highly profiled and segmented cultural life, wide choice of lifestyles – is also concentrated in Sofia.

Sofia's development plans should be reconsidered in “creative” terms. The existing plans (metropolitan, municipal, district and regional) do address the “hard” factors of development, but there are several very fundamental problems with all Sofia development plans:

- The “historic development path” shows that since the 1940s the city has not developed according to plan. The plans occasionally implemented have always been based on unrealistic assumptions, which have almost immediately made all such planning irrelevant.
- The current development plans at all levels (city, municipality, region, planning region) are based on faulty and unrealistic statistical data and projections, and their implementation may simply continue the imperfect planning heritage.
- Sofia has dramatically re-structured itself (away from heavy industry and to services) and doubled in size, over the 1990s, without any plan. Insofar as we observe the beginnings of “creative city”, these are also entirely due to private initiative. Given that no plans seriously address the problematic of “creative city”, in the mid-term future we expect Sofia's evolution into “creative city” to continue un-planned – “creation out of chaos”.



# **1 BULGARIA BACKGROUND: ECONOMY AND SOCIETY**

## **1.1 Introduction**

The Republic of Bulgaria is a country in South-Eastern Europe. It is situated in the Eastern half of the Balkan Peninsula. It borders east on the Black Sea, south on Greece and Turkey, west on Serbia and the Republic of Macedonia and north on Romania, divided by river Danube. The total length of the country frontiers is 2,245 km, 1,181 km of which are land, 686 km a river– frontage, and 378 km a sea- frontage.

Its land mass is some 111,000 sq. km., making it, at half the size of Great Britain, one of the bigger medium-sized European countries.

Bulgaria is one of the very oldest European countries, recognised officially by the Byzantine Empire in 671 A.D. Between 1393 and 1879 was part of the Ottoman Empire. Thereafter an autonomous principality under the ultimate suzerainty of Istanbul, declared full independence as monarchy in 1908. After losing the two World Wars as German ally, Bulgaria saw a communist takeover in September 1944 and to the end of 1989 remained part of the Soviet satellite system of states, and a republic since 1946. Following several years' of vacillation in reforms after 1989, since 1997 has been determinedly reforming in the direction of market economy and democracy.

NATO member since 2004, the Republic of Bulgaria became a member of the European Union on 1 January 2007.

The road network in Bulgaria is long 36,720 km and the railroad one is 4,300 km.

## **1.2 Economy and society**

The first steps of the Bulgarian economy in its modern meaning date from the beginning of 19th century, when Bulgaria became known for its agricultural produce and textiles. In the first third of 20th century, the country was one of the largest producers and exporters in Europe of early vegetables, fruit, milk, cheese, butter, and meat. Industry is developing in moderate rate until mid-20th century, when the Bulgarian communistic government decided to turn it into the industrial giant of the Balkans. This policy succeeds to a certain extent, at the cost of plundering resources from agriculture and savings, environmental degradation and a mis-match between the heavy industry built and the raw materials available for it.

Much of the industrialisation effort is driven by the desire to increase the numbers of the working class, which is a fundamental doctrine, requiring opening of new state enterprises, establishing of new factories and plants, building of power-plants, industrial compounds, and reservoirs. An important resource becomes the “youth-brigade”, unpaid labour of students and soldiers.

At the time, Bulgaria is bound with the economy of USSR and the ex-socialist countries through the contemporary economical organization Council for Mutual Economic Assistance (Comecon), which supports certain branches in the manufacturing and revives the trade between these countries. On the other hand, Bulgaria has no choice and cannot initiate the market and competitive import-export of goods, because of the lack of trade alternative. In the 1980s, the inability of the economy to attract and use financial capital needed for modernization, as well as the lack of desire of the ruling Communist party to eradicate or reform loss-making enterprises leads to accumulating of enormous foreign debt. This is compounded by a mid-1980s Soviet decision to stop selling fuel to Bulgaria at nominal prices, which leaves industry with untenable fuel bills, while also closing down the lucrative trade in processed oil products being sold at market prices to the West.

The maintenance of artificially low prices leads to a number of negative effects, such as power cuts and insufficiency of consumer goods. Around the end of the decade, Bulgaria is no longer able to pay its foreign debt and declares a default in 1990. Its weakly competitive economy, left without the network of the Comecon and losing Soviet markets, to which it is geared, enters into a spin-dive.

In contrast to other eastern European countries, the state largely maintained its control over the economy until the second half of the 1990s. Privatization is limited and corrupt, which leads to arising of the so called “grey economy” or “shadow economy”. The first symptoms of reviving appear in 1994, when the country GDP (Gross Domestic Product) increases and the inflation slumps, but the biggest downfall comes at the end of 1996 and the beginning of 1997, during the socialist government of Jean Videnov, when the economy contracts again by up to half, because of the hyperinflation and the collapse of the financial system and banking.

The UN sanctions towards Yugoslavia also hit hard the Bulgarian economy. The sanctions stimulated massive contraband into Yugoslavia, a process which forged the criminal alliance between parts of government and organised crime. This alliance persisted and remains a constant counter-balance to the rule of law.

The new government, which took office in the spring of 1997 introduced a package of economical reforms, supported by the International Monetary Fund Board and the World Bank, including a currency board regimen; with this the economy starts stabilizing.

Since 1997, Bulgaria is on its way to economic stability: the GDP increases with 4-6% per year, and macroeconomic stability is maintained. The direction, taken by the government towards EU and NATO membership brings increase in investor trust in the Bulgarian economy. The national currency “lev” (BGN) is successfully pegged to the DEM, and later to the EURO.

The government elected in 2001 pursued, albeit with less energy, the economic course of its predecessor and market economy emerges, closely linked to the EU countries. In 2004 Bulgaria concluded negotiations with EU and accession date was set for 1 January 2007. The government still faces problems related to high unemployment, mis-match of skills, low living standards and corruption within the state administration. The EU has been heavily critical of the inefficiency of the legal and law-enforcement system.

Today Bulgaria exports mainly agricultural produce, electric trucks, electrical power, and non-ferrous metals. The country is famous for being a producer of yoghurt and dairy produce, oil-yielding rose products, flowers, different sorts of wine and local brandy. Bulgaria imports a large amount of equipment, computers, audio, and video equipment, household goods and commodities, confection and raw materials for manufacture. Tourism increasingly becomes a major income-generating industry.

According to data from the National Statistic Institute, the Bulgarian population in 2005 is 7,720,000, down from almost 9 million in the late 1980s. This count includes Bulgarian citizens living permanently abroad. Their number is conservatively estimated to 700,000. According to the Census in 2001, 83.9% of the population is Bulgarians; two of the largest ethnic groups are the Turks (9.4%) and the Roma (4.7%). The rest 2 % include Armenians, Russians, Rumanians, Ukrainians, Greeks, and Jews. 84.8% of the population speak Bulgarian, which is the official language. It is widely known that for various reasons official figures dramatically underestimate the Roma numbers, which are believed to be in the region of 800-900,000 (i.e. more than 1/10 of the total population).

The demographic structure is deteriorating in all groups, except the sizeable Roma minority. The average age of working people is 42. According to official information, every year around 110,000 people die in Bulgaria, while the births are around 70,000-75,000 per year. This means that yearly the state population decreases with 40,000. The birth rate increases slowly, by 5,000 to 6,000 children a year since 2001. This means that the negative growth of the population, with such developing rate in mind, would maintain until 2022, when it is expected that the birth and the death rate will equalize its indexes (100,000 to 100,000). Most Bulgarians are Eastern Orthodox (83.9%), while 12.1% profess the Islam, 1.7% are Roman Catholics, 0.8% Judaism, and the rest 1.6% are Protestants and others.

### **1.3 Policies and development**

Under the stiffly centralised communist economic system, introduced in 1947, all economic and development activity was planned to the last detail (including prices of goods, determination “from the top” of producers and suppliers and so forth). The last remnants of private property in the economy were cleared away during the period of “normalization”, which followed the crushing of the reform movement in Czechoslovakia in 1968. The economy, entirely state-owned, ran according to five-year plans set by the congresses of the ruling Communist Party.

Planning for Sofia and its region, as well as funding, was also almost entirely done at the national (Party and central government) level. By the end of the socialist period, Sofia was a city of heavy industry and administration.

The centralised economy closely followed the Soviet model of favouring the heavy and the defence industries, and was underpinned by easy access to the insatiable Soviet market and by the artificially low prices of Soviet fuel imports – both factors making the economy increasingly deformed and uncompetitive. Planning collapsed, leading to increasingly severe shortages of goods and energy, in the mid-1980s, when the prices of Soviet fuel were increased to market levels. With nowhere to turn, the regime began drawing credit from Western banks, at a rate of some 2 billion US dollars (1.49 billion EUR) annually, bringing the national foreign debt from virtually nothing in 1985 to 12 billion dollars (8.95 billion EUR) in 1990, when the country's government declared a default on repayment, sparking the biggest economic crisis since the end of the Second World War.

Lack of reform, regulative chaos and overly-simplistic understanding of how market economies function led to the disappearance of all planning, national and local, during the 1990s. Since entering negotiations for EU membership in the 1990s, planning has re-emerged, closely aligned to existing EU models. Since 1999, Bulgaria has been divided into six Planning Regions, whose combined plans produce the National Development Plan.

Being both the capital, and the centre of South-Western Planning Region, Sofia is covered by the National and the Regional Plans. In its capacity of administrative Region (one of 28), Sofia is also covered by the Regional Development Plan. Following a 45-year break, since the end of 2006 Sofia also has an Urbanization Plan, covering the city itself and the Municipality. During this 45-year-long hiatus, and particularly during the anarchic 1990s, Sofia's development has followed no plan, has easily breached most attempts at regulation and set the city on the path of "creation out of chaos". The currently binding Urbanization Plan, based on wildly inadequate statistics and projections, is not generally expected to define Sofia's development henceforth.

## 2 SOFIA AND ITS REGION

### 2.1 Introduction

An urban centre for most of the time since the period of late Rome, Sofia has been the national capital since 1879.

When in 1999 the government set about re-drafting the administrative division of the country, it faced several alternatives regarding Sofia and the region. In the end it was decided to split the inherited “Sofia region” unit into two separate parts, with equal administrative weight (“administrative region”<sup>1</sup>). Whether consciously or not, this was a choice away from envisaging Sofia as a “metropolitan area” and was in keeping with the post-war tradition of conceptualising Sofia as a compact, manageable city with clear borders against the surrounding countryside.

“Sofia region” covers the area surrounding “region Sofia” (except to the south-west, which is Pernik Region), has 22 small and medium-sized towns and slightly in excess of 700,000 population. “Region Sofia” exactly coincides with Sofia Municipality, but has been also given the rank “region” because of its status as capital and leading economic hub.

Region / Municipality of Sofia has 35 villages and 3 small towns and is administratively divided into 24 districts, each headed by an appointed Mayoral representative. Uniquely, Mount Vitosha is an administrative part of Sofia Municipality, with the rank of “park”. Within that, “Sofia city” includes 18 nearby villages, which have the status of city districts. Unlike other cities, which for election purposes are deemed single units, Sofia is divided into three separate election units.

### 2.2 Geography and demography

Sofia is located in the Sofia plain and is with altitude of about 550 meters above sea-level and a territory of 1342 square km, of which the populated areas and urbanized zones are 297 square km, agricultural lands - 493 square km, forests – 478 square km, ore and mineral extraction zones – 12 square km, transport and infrastructure territories - 33 square km and

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<sup>1</sup> Bulgaria is divided administratively into 28 Regions and 264 Municipalities. Municipalities are headed by elected Mayors and Municipal Councils. Regions are headed by Governors, appointed directly by the Prime Minister. Their main job is to oversee the legality of decisions taken by Municipal Councils and encourage them to implement locally national-level policies. Several Regions come together to compose a single Planning Region, of which there are currently six.

water basins and streams – about 29 square km. landscape is diverse and climate is comparatively soft.

Sofia is situated close to the north mountain of Vitosha, in the surrounded by mountains Sofia plain (Stara planina, the Sredna gora, Lyulin, Lozen mountain). Four mountain passes lead to the city – Vladaya, Dragoman, Petrohan, and Botevgrad pass. Since ancient times the important roads were passing through them, connecting the Adriatic and Central Europe with the Black and Aegean Sea and the Near East.

Several shallow rivers, the largest of which are Vladayska and Perlovska run through the city. Near the eastern residential districts runs the Iskar River, but this particular part is not very large and deep. Since, antiquity Sofia has been famous for its numerous mineral and thermal sources (15 sources with a total debit of 130 litre/sec of mineral water), and artificial lakes have been built in the past 60 years.

*The transport geographical (communication) location* of the region and particularly of its centre is a historical factor for Sofia's development. Its location as crossroads has had a positive influence over the origin and further city development of Sofia and the close populated areas. This location gives name to the factor "Sofia crossroad". Exactly this factor is significant nowadays for the layout determination of the *transcontinental* and *trans-European* transport corridors.

The municipality of Sofia is a unique crossroads of four international transport destinations – the Intercontinental Diagonal Highway "Northwest – Southeast" (London – Budapest – Sofia – Istanbul – Calcutta), the Meridian Euro-African Highway (Helsinki – Moscow – Sofia – Thessaloniki – Cairo), the Diagonal Euro-African Highway (Tunis – Duress – Sofia – Bucharest – Odessa - Omsk) and the currently constructed transportation corridor along the 40th parallel from the Caspian Sea to the Adriatic Sea (Potty – Varna – Sofia – Skopje - Duress).

Most national highways and railway lines start from here – the highways "Trakiya" and "Hemus", the first-class roads E 80, E 871, E 79 and others, as well as the railway lines Sofia – Burgas, Sofia – Varna, Sofia – Kulata, Sofia – Vidin, Sofia – Kalotina, Sofia – Svilengrad. The biggest international airport in the country provides air-transport services.

In the context of *transport-communicational location* of Metropolitan municipality the Balkan and national roads are important elements of the Sofia crossroad. Sofia has the characteristics of a real geographic transport centre on the Balkans. If we compare the distances between the Balkan capitals and some bigger cities, measured along the international roads, crossing the region, we will notice that the shortest average distances are typical for Sofia – 455km, followed by Skopje – 523 km and Thessaloniki – 530 km.

This is a significant resource for the future development of the city as an important centre within the country, but also in the South-Eastern European region.

The developing of strategic transport-communicational location of the region should be supported by a suitable transport – communicational policy. The use of this potential will

reflect over the social and economical development of the Metropolitan municipality and the country in general.

Sofia municipality is characterized with varied terrain. In general it can be described as *valley, slope, and mountain* type. In direction north-east the terrain is mountainous; to the south it turns into a valley (Sofia plain has the lowest foot of Stara planina). To the south the valley terrain changes into mountainous (Vitosha, Plana, Lozen mountain, Lyulin).

Important for the development of the municipality (and particularly Sofia city) are the number of man-made features, which add to the naturally formed character of the terrain lay. These are the artificial reservoirs (Iskar dam, Pancharevo lake), road-engineering installations (viaducts and bridges on the Hemus and Trakia highways) etc.

The area is part of the temperate continental climatic area in Bulgaria. The average yearly temperature of the air changes from +10.0oC in Sofia plain to +1.8oC in the alpine zone. The average annual temperature of the air in the lowland and semi-alpine zone is +8.0 and +5.0oC. The average January temperatures are negative and drop with the increase of the altitude: from -1.5 to -7.0oC. the average July temperatures also decrease with the altitude: from +20.5oC (Sofia) to +9.0oC (Cherni Vrah, Vitosha).

Predominant winds in Sofia plain are the westerly and north-westerly, followed by the easterly. The frequency of southerly and south-westerly winds increases in the semi-alpine and alpine zones. The rainfall volumes increase from the low towards the high areas. The annual amount in Sofia plain is approximately 600mm, and in the alpine zone in Vitosha is appr.1,100mm. with increase of altitude, increases also the number of days with snow blanket from 42 in Sofia plain to 180 in the alpine zone of Vitosha.

The most serious danger to the region are the earthquakes with local epicentres, some of them serious. Gravitation processes predominate along the periphery of the valley and the river-valley slopes; and those connected to the fluctuation of shallow waters and poor soils predominate in the central valley areas.

Surface waters are not abundant. Unlike most European capitals, Sofia does not have a navigable river. Main elements of the hydrographical system are the small rivers (Iskar River being the only medium-sized) and dammed reservoirs. The main river in the river system of the municipality draining its territory is the Iskar River. Most of the Iskar feeders in the Metropolitan municipality are short (with length around or under 30 km). The dams on the territory of Metropolitan municipality are Iskar, with water surface of appr.30 sq.km and maximum capacity of 637mln cubic metres; Pancharevo with 0.9sq.km surface and 6.7mln cubic metres; Passarel with surface of 0.330sq.km and around 10 micro-dams (including the levelling ones) with a total surface of 1sq.km. The ditch lakes are in numerous groups located around the villages of Negovan, Chepintzi, Chelopechene, Dolni Bogrov etc, or smaller groups and odd ones around the villages of Kapina, Svetovrachene, Novi Iskar. Their total area is 3.340sq.km.

In the water sources structures, besides the surface waters, particularly significant are the underground waters. In the eastern parts of Sofia plain (close to rivers Lesovska and Iskar) the underground waters run at a shallow depth: average of 0.5-1.0 to 1.5-2.0 m., and in the region Kazichene – Lozen – Ravno pole they are 2 to 3 metres deep.

*Mineral waters* loom large in Sofianites' image of their city. It is these waters that, with their drinking and therapeutical qualities, initially attracted the attention of the Romans, who made a city out of a tribal settlement. Mineral waters are plentiful, with around 50 mineral sources available for various usages, of which 8 are suitable for bottling.

There is no policy to develop leisure activities linked to the existing surface waters and their leisure potential is severely under-used. The Iskar Dam and the Pancharevo lake are used for amateur fishing and limited water sports. The small lakes encircling the city are entirely undeveloped, which includes absence of roads and amenities, but are used by amateur fishermen in an unregulated and, in some cases (Dolni Bogrov) – polluting manner.

In contrast, there is a municipal Strategy for the Mineral Waters in Sofia and the region. Its strategic goal is the versatile and sufficient use of the mineral waters' potential over the next 20 years and beyond, with the development of: balneology and rehabilitation centres; hydro-therapeutic and recreational centres (or spa); year-round mineral bathing-beaches; roadside tourist establishment with hydro-thermal bathing facilities.

Nevertheless, currently the potential of mineral water for multiple purposes in both the city and the municipality is used poorly. Also severely under-utilised is the favourable combination of nature and its conditions (mountain climate, various landscapes, surface waters), which is an available resource to combine different forms of tourism and leisure activities.

In the Sofia plain, the soil variety is favourable for developing some traditional for the region agricultural produce as grain and fodder crops, vegetable produce, fruit-cultures etc. Vegetation types, typical for all forested areas in Bulgaria can be found on Metropolitan municipality territory. However, agricultural production has not been a significant contributor to the city's economy since the beginning of the 20th century and is not expected to be so in the future, given that much of the soil has been severely degraded by the decades of Soviet-style heavy industry.

When it comes to demography and other statistics, the researcher of Sofia runs into a tangle of very heavy problems. The National Statistical Institute has not managed to reform its methodologies so as to stay on top of developments and continuously produces figures wildly at variance with observable reality. In the economy, these figures very significantly over-estimate the proportion of heavy industry in the economic make-up of the city, while very severely under-estimating the presence and role of services and creative industries.

In demographics, official statistics routinely “miss” about a million inhabitants of Sofia. The way to arrive at a plausible statistical picture is to overlay official statistics with data from opinion polls, the Ministry of the Interior, professional associations, supply companies and so

forth. The end result is a plausible picture, which is, however, still an informed estimate rather than hard data. City planners, however, have a tradition of taking official figures as fact, the outcome of which is that planners are always “caught out” by the explosive growth of the city.

The population of Sofia (2006) stands, officially, at 1,377,531. Men form 47.5%, and women 52.5% of the population. The largest residential district is Lyulin with 110,117 residents, followed by Mladost with 95,877 residents, Poduyane with 75,312 and Krasno Selo with 72,773 residents. The biggest number of residents is aged between 18 and 64 (790,180 people), followed by those up to 18 years old (201,202) and those over 65 years old (183,049).

The number of people living in of Sofia is considerably bigger than official figures suggest. Cross-checking suggests that what the official statistics do to arrive at 1.3 million is to, basically, build on voter lists (the list of voters, when the under-18s are added to it, comes to slightly under 1.3 million). National representative surveys, plus electricity and water supply companies stubbornly produce different figures: around 1.9 million people living and working permanently in Sofia, plus half-a-million long-term temporary residents from the country and abroad. On peak days (Monday through Thursday), the number of people in Sofia touches 3 million, retreating to 1.8-1.9 million during the week-end.

In reality, therefore, in an average work-day some 28 % of the population of Bulgaria is to be found in Sofia.

The obvious statistical fact is that, while 1.3 million people may be registered as residents of Sofia (and thus end up on the voter lists), as many again work in the city; and of the “constant” inhabitants (the numbers for the week-ends), some half-a-million are simply not officially registered as residents.

The population density at the end of 2000 was 909.1 persons/sq.km. officially, which means that, in observable reality, this figure may be in fact double.

The city produces 1/3 of the nation’s GDP with 1/5 of the workforce. All central government institutions are concentrated in the capital city. It generates over 30% of the total government tax income, and enjoys a high rate of employment. Unemployment is insignificant.

### **2.3 Economy outline**

Sofia plays an important role in the task of turning the region into the best socially, economically and infrastructurally developed administrative and territorial unit in Bulgaria:

- In 2002 the highest GDP in Bulgaria was realized on the territory of Sofia region - 4 823 million EUR or 29.1% of the total national GDP. GDP per capita in the region was almost double the national average, standing at 4,060 EUR, while the average for the whole country was 2,102 EUR. According to this indicator the region of Sofia occupies first place among the other 27 regions in the country;

- The sector structure of the social and economic complex of Sofia region indicates that its tertiary sector has leading functions (70% of the total produced GDP – 3,364 million EUR – and 71.3% of employed people). Industry used to have stronger positions in the past and is now undergoing a process of serious restructuring;
- The managerial and other servicing functions of the city of Sofia are an important factor for the development of a significant tertiary sector. What is specific about it is the high number of representative bodies of the legislative, executive and judicial power as well as of the credit, financial and business sectors and others;
- The average annual salary in the region is quite high – 1,988 EUR, when the average annual salary for the whole country is 1,581 EUR. Sofia region is the leading one among the rest of regions also with respect to this indicator;
- The city is among the most attractive for foreign investments. Until 2002 there were invested foreign capitals at the amount of 1 474 285 thousand EUR, which is 56.0% of all foreign investments in Bulgaria. Almost half of graduate schools in the country are located in Sofia Municipality (19 of a total of 42 universities with 42% of all students in Bulgaria). Sofia is the biggest university centre in the country with a university in almost all spheres of education and science;
- Sofia is also the biggest scientific centre in the country with numerous scientific institutions, research units and laboratories in the spheres of the academic fundamental science, applied scientific research and others. Towards 2001 there were about 7,300 people working in the sphere of scientific research in the institutes of the Bulgarian Academy of Sciences, the agricultural institutes and the various other institutes for applied research; 2,430 of those were research fellows;
- On the territory of Sofia city there is also a large network of cultural institutions, among which: 23 drama theatres; 490 libraries; 29 museums; 31 movie theatres, 5 cinema centres of the Multi-screen type; 116 *chitalishta* (cultural centres); more than 60 arts galleries and art exhibition venues. Many of these cultural institutions are of national significance, which makes Sofia the biggest cultural centre in the whole country. All national newspapers and magazines, as well as radio stations, TV stations, book publishers are situated in Sofia.

The capital is the biggest and best developed complex transportation centre in the country. Due to its strong economic impact and a huge demographic mass, the municipality of Sofia and its centre – the city of Sofia – has a much bigger significance than any other region or large town in Bulgaria. The impact of the city of Sofia and the region of Sofia includes both a zone of direct impact on 8 neighbouring municipalities within Sofia region, as well as an impact over the whole territory of the South-western planning region.

## 3 HISTORIC DEVELOPMENT PATH

### 3.1 Pre-industrial history

The thermal springs in today's centre of the city were what attracted human habitation in the first place, as far back as the 8<sup>th</sup> century B.C. At that time, a Thracian tribal formation known as the Serdi were settled around the springs and when the area was taken over by Rome, the Romans established a town named after its natives – Serdika.

During the 1<sup>st</sup>-4<sup>th</sup> century A.D. Serdika was a flourishing Roman city, the capital of the Inner Thracia region. Following the religious reforms of Constantine the Great, Serdika became a Bishopric. By that time the city boasted a major Christian church, St. Sofia, where in 343 A.D. the crucially important Serdika Ecumenical Council was held. It confirmed the rejection of the Aryan heresy at the First Council of Nicaea (325) and reaffirmed, following turbulent debates, the Nicene creed, which to this day forms the basis of affirmation of faith in all versions of Christianity.

During the great migrations of the 5<sup>th</sup> and 6<sup>th</sup> centuries, Serdika was frequently sacked by Huns, Goths and other barbarians. From mid-6<sup>th</sup> century onward, under Justinian the Great the city, re-named into Triaditsa, recovered its status of regional capital of the Eastern Roman Empire.

In 809 the Bulgars, who had swept in from the shores of the Caspian sea to establish a state to the north of the Balkan mountains, added the city to their land, re-naming it into the Slavic “Sredets”. It was later, as the rest of Bulgaria, re-absorbed into the Byzantine Empire, but recovered its independence and re-joined the resurgent Bulgarian state following a series of uprising in the 10<sup>th</sup> century.

Between the 14<sup>th</sup> century and the late 1870s the city, as the rest of the nation, was part of the Ottoman Empire. It was re-named “Sofia”, after its oldest church, sometime in the 15<sup>th</sup> century. By 1440 Sofia was again a major regional Imperial centre, administratively in charge of 25 provinces. The Ottomans built on the foundations they found in place, re-establishing with lavish scale the Roman baths in the centre and re-structuring a number of churches (not, however, St. Sofia itself) into mosques.

The city went into decline with the rest of the Empire from the latter half of the 18<sup>th</sup> century, to meet Liberation (1879) as a large village, complete with chickens, pigs and cows, and with a population shrunk to under 20,000.

After Liberation, the Sofia managers made a strenuous effort to turn the city into a European-style capital in the shortest time. Czechs, Poles, Italians, French and other Europeans flooded in to set the city on course. In 1907 the centre was paved over with its legendary yellow bricks – the dowry of Austrian Princess Maria-Louise on her marriage to Prince Ferdinand of Saxe-Coburg-and-Gotha, chosen as Bulgaria's Prince and, from 1908, King.

In spite of strenuous efforts to avoid unnecessary entanglements, Sofia did not manage to escape the political turmoil of the 20<sup>th</sup> century. In 1918, as the army on the Western front was roundly beaten, the conscript soldiers revolted and marched on the capital, to be defeated with much bloodshed on its outskirts, near the sugar refinery factory established by the Belgian Solvey Group. Seven years later, in 1925, Sofia became the scene of the world's biggest (until the 1995 Oklahoma City bombing) terrorist act, as Communist Party militants blew up the St. Nedelya Church during a crowded funeral service for a general they had killed previously for this purpose. In 1923, 1934 and 1944, Sofia was the scene of army coups, the latest establishing the 45-years-long Communist regime. In the beginning of 1944 it was severely bombed by the Allies, being the capital of a then Axis ally.

### **3.2 Industrialisation and after**

The Soviet-type industrialisation drive, which begins in the late 1940s, required a huge influx of manpower, which was officially encouraged from the top. At the same time, as through the 1950s collectivisation took over the countryside, the younger generation of peasants, no longer private property holders, migrated to the cities and particularly – to Sofia in search for work and a new life.

The state also took direct non-economic measures for recruiting workers. During industrialisation, the government employed a “system for civilian mobilization” to ensure the supply of workhands. In the period 1946 and 1956, the population in Sofia doubled and constituted a significant part of the population in the country and of urban residents in general. The city became the site of the bulk of Bulgarian industry, as well as of all administration, cultural, and educational institutions. The influx of people into the city placed severe strains on its infrastructure and on housing. This led, by the 1970s, to a number of legal steps for restricting the access of the population to the big cities and particularly to the capital. The restriction of residence in the capital was in force until 1990.

In order to alleviate the housing shortage, which by the early 1960s typically saw several families sharing every single flat (one family per room) in the city, from the late 1960s strenuous efforts were made by the state to construct as many dwellings as possible in the shortest time. The outcome was the currently dilapidated areas of prefabricated concrete blocks of flats, which provide the city with its distinctive “post-socialist” feel.

During the 1990s, Sofia's artificial Soviet-type industry mostly collapsed, as it did all over the country. Unlike most others, however, Sofianites used the newly arisen opportunities for private initiative and so the capital avoided the severe economic depression, which drove into

poverty the provincial cities and de-populated a good number of them.<sup>2</sup> By the second half of the 1990s, the rest of the country registered the fact that there was no unemployment in Sofia, and another influx of migrants started, leading to the current situation, where more than 1/4th of the entire Bulgarian population is concentrated in the capital.

### **3.3 Industrial structure**

Until 1989, the economy in Sofia was based on heavy industry. Some 74% of the production power of ferrous metallurgy was concentrated there, 24% of the electro-technical and electrical industry, 14% of machinery construction, 17% of the construction material production, 11% of the textile and knitwear industry, between 4% and 10% belong to the other industrial branches. In Sofia were concentrated the following production: 34% of paper-production, printing and publishing industry, 25% of electro-technical equipment, and calibration equipment, 18% of rubber and plastic produce, 15% of clothing.

The percentage of industrial production for Sofia region is currently around 16.3 % of its GDP. Some 44% of the production is from the private sector; the largest shares have the food, beverage and tobacco produce (22%), moulding, hardware and equipment (16%), paper, printing and publishing produce (14%), electro-technical and calibrated equipment (11%) etc. There are 17 industrial areas set up in Sofia prior to 1989, which regardless of the changes in production structures and the production stagnation, continue to exist.

Starting out from an economy based on heavy industry, currently Sofia is driven by services, which form over 71 per cent of its economy (2002 figures). The capital also attracts the bulk of Bulgaria's direct foreign investment – 56 per cent of all foreign investment into Bulgaria over the period 1992-2002, rising to 64 per cent from 2002. Sofia has acquired the reputation of being able to absorb into its labour market all newcomers, with durably negligible unemployment figures. Sofia has 4,000 businesses established by foreign migrants. On 1.7 per cent of national territory, Sofia has collected more than one-fifth of the entire working population of the country.

The construction boom, under way since the second half of the 1990s, as well as the currently ongoing boom in the construction of offices, sets the scene for attracting additional numbers of domestic and foreign migrants.

### **3.4 Urban planning**

Sofia's development in the period 1945-1989 staggered under the continued inability of authorities to face the real processes taking place in the city. Planning was not left to the city, but was rather entirely controlled by the leadership of the State / Party, which preferred to believe unrealistic forecasts, promising a relatively small and manageable city, rather than the realistic projections, which envisaged explosive growth and the rapid formation of a

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<sup>2</sup> Some cities, such as Kardjali in the south and Silistra in the north, lost up to half their population during the 1990s.

metropolitan area significantly in excess of one million inhabitants. The repeated result was that the officially approved development plans had little to do with reality. Not surprisingly, they were continually overtaken by events, which ultimately led to chaotic and panic-stricken reactions from the late 1970s, when massive concrete housing districts were built without proper strategy preceding the actual construction stage.

What planning efforts there were have four clearly identifiable stages.

#### *3.4.1 First planning stage: 1945–1961*

The city's crisis at the beginning of the period was caused by damages of a considerable part of the housing (12,000 buildings) as a result of Allied bombings (to 5 September 1944 Bulgaria was a German ally), and the drastic change in the social and political system of the state. This necessitated rapid measures for control of the situation, which happened with the first post-war Sofia Development Plan, passed with a decree in 1945.

The plan envisaged a population of 800,000 on an area of 15 sq.miles. Its declared intention was to achieve a dispersed urban structure, with urban centres outside the city proper, linked to it by a system of transport infrastructure and green areas. In this sense, in spite of the drastic political changeover, planners continued earlier development trends of keeping the urban areas interspersed with green areas, growing in size toward the city periphery and ultimately linking up with the surrounding mountains. However, this was not clearly set out in the plan, nor systematically pursued thereafter. The structure of the main city centre was also not clearly outlined.

As the communist regime settled in, pressure grew for a city centre structure imitating Soviet-style administrative centres of Russian cities. A new development plan for the centre appeared at the end of 1949. It was never fully fulfilled due to shortage of funds, but what was constructed changed dramatically the centre of the capital, structuring it in a "Stalinist classicism" style.

In the 1950s, housing construction was limited. Several housing estates were built on some empty terrains adjacent to the compact city to the south and west – Lagera, Krasna Polyana, Zaharna Fabrika, where the buildings have 3-4 stories. At this time attention was rather concentrated on break-neck industrialisation. By the mid-1960s, housing construction began expanding again, with the first major (currently – mid-sized) residential districts being built, such as Vladimir Zaimov, Lenin, Deveti septemvri, Zapaden park, Hipodruma. By the late 1960s, the first prefabricated concrete housing appeared, in order to lessen pressure on housing.

#### *3.4.2 Second planning stage: 1961–1972*

This stage begins in 1956 with a government call for a new general plan for the development of Sofia. Two teams work on the plan. The work and discussions of the project continued until 1960.

The two projects differed widely with respect to territorial and demographic development. One stipulated migration control, decrease of the demographic growth of the capital, limiting it to 800,000 people, and reconstruction of the infrastructure. The second provided for continued expansion and the constructing new, larger housing estates on vacant territories outside the city.

In both projects, the development of the urban structure was still oriented to a poly-centric system, keeping in the centre the main administrative and cultural functions, but dispersing less vital functions, from the point of view of the city's status as capital, out of the centre. The housing estates were to be structured as residential micro-regions, with their own small shopping, cultural and service centres. According to the urbanization theory and practice at the time, these micro-regions would be basic structural units with a population of 15,000-20,000 residents; they would have a closed circle of services, in which the main criteria would be the school catchment area. The micro-region would be divided into housing groups with populations of 2,000 to 3,000, where the criteria would be kindergarten catchment area.

While this approach worked (as far as can be expected under the inefficient and shortage-ridden central economy) for the residential areas built in the 1960s, by the end of the decade events overtook planning. The new, prefabricated housing estates were to house several times more people than the thinking of the 1960s envisaged, with the attendant problems. In the 1970s, this system had to deal with much larger numbers: a housing district of 40,000 to 50,000 residents, complete with medical facilities, cinema; a planning region of 100,000 to 200,000 residents, complete with a hospital and so forth.

The existing enterprises concentrated and developed in six industrial warehousing zones. Maintained and further developed were the concepts for green zones. In both projects the backbone of the spatial composition was the then fashionable concept of a "navigation canal" – a diversion of the Iskar river along the 600<sup>th</sup> horizontal, running through the city and the ring road. This was another Soviet imitation. The leadership of the Communist Party, who had mostly spent the war years in Moscow, simply wanted to have a river as their Russian comrades did. With such a river not being available, the idea was to divert the Iskar to form a navigable canal.

"Citizen mobilization" and several years of digging followed. Sofia's inhabitants were obliged to turn up on rest days to dig the canal for free. Once the peak of Stalinism passed, and proper calculations were made (revealing that the Iskar simply did not have the water volume required for a navigable canal), the project was quietly dropped. Sofianites were again mobilised to fill up the canal with the earth they had previously dug out of it. One can still clearly see the outlines of the canal in the Mladost housing estate. Other elements, linked to the canal, were however accomplished, such as the Zoo and the Botanical garden.

The saga the Sofia canal again is entertainingly told by the émigré novelist Georgi Markov, killed in London by the famous poisoned umbrella in 1978.

During the discussion and comparison of the projects, the first one was determined as preferable, because of the concepts of control of the demographic and territorial growth. An

international competition for the main city centre was held, and further three projects designed. The emphasis was on the development of the main city centre westwards. These projects were not realized, but some of their westward-migrating elements were later constructed, such as the House of the Trade Unions.

Ultimately, the attempts to control the size of the city failed. Within 5-6 years the parameters and the limits of the Sofia Plan were breached. The capital actually developed according to the second, rejected project, which necessitated the urgent construction of the large housing macro-regions of the late-60s, 70s and 80s. With the development plan following one kind of logic, and the actual development of the city following a completely different one, city planners were faced with insuperable problems. The divergence between planning and reality ensured that no coherent long-term policies were possible to be either devised or properly implemented. The Municipality was reduced to case-by-case problem-solving, rather than being able to ground its development activities in coherent strategy.

### 3.4.3 *Third planning stage: 1972–1979*

By 1968, the unexpected and sustained growth of the city led to the call for another Development Plan, as the current one was deemed at an end. In 1971-1972, a detailed preliminary project (“conception”) was completed, consisting of three parts: urban hypothesis for the Sofia agglomeration; outline project for urban structure; and a communication and transportation project. It had brand new formulations and concepts, most important of which were:

- urban processes were projected on a large territorial scale and assumed unlimited population growth. The urbanized territory of the city on the Sofia plain was seen to have a potential for a population of 1,454,000 to 1,600,000. The term *agglomeration* was introduced, in order to encourage the process of growth and involvement of adjacent territories to reduce the problems with over-concentration on the capital;
- the planning for the new, larger areas that the city would acquire was based on the *linear* model. The axis of this model was the railway line Belgrade-Istanbul and the city was planned to expand north-westwards and south-eastwards;
- the city structure itself was still planned as *polycentric*, with 5 complete macro-structural units. The main city centre would reach out, via city sub-centres, to the three main boulevards;
- the transport system of the city would abandon the radial circular network and turn tangential. The main transit arteries, Belgrade-Istanbul and Athens-Bucharest, were to be taken out of the residential districts to high-speed roads. A new terrain for airport area with characteristics of modern intercontinental airport was planned;
- the backbone of the public transport was the future metropolitan underground.
- the greenery areas were grouped in systems of green zones, making their way from Vitosha to the city, and the number of water bodies was increased with the planned lakes along Iskar river.

The researches in this project had abundant ideas and radical suggestions, and soon were considered to be too avant-garde and theoretical. In 1972, the state assessed them as

“unrealistic”, because of the expected explosive demographic and territorial expansion. The plan was returned for revision.

#### 3.4.4 Fourth planning stage: 1979–1989

The revision was delivered in 1975 and consisted of three projects: regional territory organization; general urban planning, communication and transportation. The revised approach tried to build on the 1972 concepts and theoretical achievements, while taking into account existing opportunities, needs and restrictions. The result in outline was as follows:

- urbanization processes were analyzed, and planned in details for the whole Sofia plain, maintaining the idea for decentralization of urban activities – an idea that had in the meantime entered into national-level urban planning also;
- the development of the urbanization area was foreseen to be over 70sq.miles and a population of 1,200,000 to 1,250,000 was planned for by the year 2000;
- the priority for urbanization development was *reconstruction* – new territories were envisaged for housing construction south-eastwards and south-westwards, encircling Vitosha mountain, without leaving the boundaries of the existing ring road;
- the city structure remained polycentric and had 5 planning units (the historic city, south-east city, southwest city, northwest one and northeast city);
- the functional zoning maintained the concept of three parallel zones (work, habitation, recreation), but retained the idea of each of the five large structural units to have areas to provide all these functions. Particularly detailed was the planning work activities of the industries, science, and the supporting warehouses, which were grouped in 11 scientific and production zones, profiled in different fields;
- the transport city network was a combined radial-circular model, with tangential roads. A particular attention was to be paid to a second city ring (through the boulevard connection “P.Slaveikov”) and the fourth city ring (through the boulevard connection “T. Kableshkov”), and the consecutive construction of eastern, western and northern tangents;
- the metropolitan underground received a more efficient route. The original three diameters were maintained, but their routes were now to be connected and to take passengers to the railway stations.

This project went the way of its predecessors and failed to be adopted as a practical guide. In 1979 the project was, indeed, approved by the metropolitan authorities and the government, and a draft Act was prepared for its ratification. Before proposing it in Parliament, the approval of a draft by the Political Bureau of the Communist Party was needed; but this did not happen. Instead, in 1980 the Government decided to concentrate on large-scale housing construction on vacant terrains: “Drujba” 2, “Ovcha Kupel” 2, “Levski” G, “Obelya” 2, “Mladost” 1A, “Malinova dolina” and “Gorublyane” 2.

The result was that Sofia was again left without a coherent development plan and continued to evolve as the result of ill-coordinated patchwork of activities.

In 1985, the team of “General Project” Directorate produced another draft of the project, without changing the main concept and space composition, but this version failed completely to make any headway with decision-makers. In 1988-1989, an actualization of the General

communication and transportation project was produced, but this project was also not approved until the reconstruction of the social, political, economical constitution in the country at the end of 1989.

### *Outcomes*

One feature of Sofia's post-war development stands out very clearly, making it a unique case among all cities studied under the ACRE umbrella. None of the various Sofia Development Plans, produced between the 1940s and the 1980s, were implemented or even sustainably considered as the basis for practical activities. The Sofia development plans that were hesitantly attempted were the most unrealistic ones and crashed against the city's realities.

Whatever decisions were actually implemented, were little to do with urban development considerations. Such decisions were imposed imperatively and without prior consultation by the top levels of national government, and had to do with Sofia's status as capital, rather than an urban environment.

This placed the authorities in the situation of continually dealing with unexpected events that looked like sudden, unsurmountable crises, which obviated all forecasts. This in turn formed a culture of suspicion against all attempts at forward-planning, and an attendant practice of engaging in sudden, piecemeal grandiose-looking projects unconnected with the existing elements of the urban area and thereby leading to a constant crisis of infrastructures. These projects (mostly the great prefabricated-concrete housing districts outside the city) were consecutive attempts to address decisively a particular crisis, but by not being placed into a planned system of activities not only did not resolve the crisis as expected, but laid the grounds for future problems.

At no stage did planning address the problematic of "creative" individuals. As Jean-Paul Sartre once quipped, in the communist view of the world the individual disintegrates as does a body placed in a bath tub full of sulphuric acid. In close alignment with the Russian / Soviet worldview, people were what they did (and the level they occupied in their allotted hierarchy), and were largely interchangeable, as are nuts and bolts of industrial machinery. The Sofia that Communists imagined was a town of Party and state functionaries, the uniformed services (military, police, security "organs") and of industrial workers. But because relentless planning pressure to attain this image never materialised to the necessary extent, the city retained the cultural and artistic sides to its character. Briefly, the regime would encourage this aspect of Sofia's make-up in the mid-1980s, when the Communist Party attempted to shelve its "internationalist" (i.e. Moscow-subservient) past and acquire a new national-patriotic legitimacy.

The regime performed somewhat better in the sciences. Decisions taken at the national level situated in Sofia an Academy of Sciences on the Soviet model – a massive establishment, at its peak employing up to 25,000 people devoted entirely to scientific research. It would, however, be incorrect to argue that this formed some kind of "creative cadre" for the city<sup>3</sup>,

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<sup>3</sup> Not least, this would lead to the conclusion that the massive loss of jobs (up to 4/5) in the Academy following 1990 has destroyed the creative potential of the city, which is patently not true.

given the rigidly centralised system (which was, furthermore, bereft of any motivation for innovation) that the scientists, as all others, had to work in.

### 3.5 Construction and architecture

Architecture is a dominant theme in the “image of the city” of Sofia’s planners and inhabitants. This is inevitably so, given that the city’s defining moments in history have left visible and at times striking architectural imprints. The turn-of-the-century determined “Central European” look, designed to emphasise the break with the heritage of the Ottoman Empire, left the city with its picturesque “Viennese Baroque” buildings, together with the yellow bricks laid out in the central public squares and crossroads, reflected in the yellow facades of surrounding buildings to announce a new golden age of national sovereignty. As in the turbulent 1930s the political climate veered to authoritarian, Italian-German neo-classical buildings, favoured by those countries’ dictators, appeared (National Bank, Defence Ministry). The advent of communism Stalinised the buildings that form the seat of power in the 1950s, and attempted the re-structuring of residential areas around the concept of closed, self-sufficient and inward-looking neighbourhoods on the model of the Moscow “dvor” or Vienna’s famous Karl-Marx-Hof (1930). The partial relaxation of the 1960s brought in Modernism in public buildings and the distinctive mid-sized open housing estates, set in airy green areas. The political clamp-down of the 70s and 80s, together with the continued influx of population, resulted in the desperate construction of prefabricated-concrete housing estates in empty areas on the edge of the city, while the no less desperate attempt of the regime to demonstrate its durability and modernity led to the 1980s revival of Neo-Modernism.

Uniquely, architecture belongs both to the past and the present. It is precisely the kind of “cultura archeology” site referred to frequently by the French philosopher Foucault. While the past can be reconstructed from this site, as one takes off layer by layer, ultimately the whole composition forms the arena of present-day life.

As all other decisions that were actually implemented in Sofia during Communism, architectural solutions were imposed from the central government and addressed Sofia as a capital, rather than a city – i.e. were political, rather than urban-developmental in nature and intention.

The political situation after the Second World War overturned architectural concepts and practice. The resolutions of the Bulgarian Communist Party’s 5th congress (1948) give specific instructions in the field of architecture: “to begin a systematic struggle against modernism and formalism of the arts in Bulgaria; as well as against the adulation of contemporary West European bourgeois art; to support the realism tendencies in creating works with high artistic value ...”.

Even before such clear official formulations, in November 1944 (two months after the Communist take-over), a general competition between Bulgarian architects was announced for a new Urbanization Plan for Sofia. Key members of the jury were the prominent Soviet architects Al. Shtusev, author of Lenin’s mausoleum and other significant buildings, and N.

Baranov, chief architect of Leningrad. This reflected the new political reality of close control from Communist Moscow. Setting the mold for the coming decades, the competition produced no first prize.

One of its elements did, however, enter into the re-construction of the city – the new philosophy of power. The outcome of the competition was a significant re-formulation of the urban manifestation of the power structure. It was decisively shifted away from Parliament square and Alexander Nevski cathedral behind it, in this way emphasising the down-grading of both democratic legislature and religion. The emphasis was placed on the Communist Party and executive power – the “Largo”, enclosed by the building of the Communist Party’s Central Committee, the Council of Ministers and the State Council.

In 1947, a new competition for the city centre architecture was held. The absence of first and second prizes signalled official dissatisfaction with the results. Communist Party leader and Prime-Minister Georgi Dimitrov appointed architect P. Katrandzhiev to design a new detailed plan of Sofia’s city centre, who hired most of the participants from the competing projects in his the team. On 25 December 1947, the resultant project was personally approved by Dimitrov.

The main feature of the plan was the role of the two "rays", the boulevards "Dondukov" and "Ruski" (now "Czar Osвобоditel"), which meet outside the front entrance of the Central Committee of the Bulgarian Communist Party. The concept of the "Largo" was further developed, describing it as a place with a considerable size, but not yet fully shaped architecturally. An extension of this future (inevitably – Stalinist) architecture was planned east along "Ruski", which would entail demolishing the bulk of the historic Viennese-Baroque buildings, including the Bulgarian Academy of Sciences, the Military Club, the Austrian and Italian Embassies. They still survive, illustrating the failure of the plan to “Sovietize” Sofia.

The only idea ultimately taken from the Katrandzhiev plan was the site of the building of the Central Committee of the Bulgarian Communist Party. In the meantime, in 1949, the mausoleum housing the embalmed body of Georgi Dimitrov was built at break-neck speed next to the site, on the south side of “9 September” square, opposite the ex-Royal Palace. Not being part of any bigger plan, and the result of a snap voluntaristic decision of the authorities, this construction also set the tone for the future decades, when sudden construction would be undertaken in response to sudden crises (in this case – the unexpected death of the Communist leader). The architecture of the mausoleum was a smaller-scale replica of the Lenin one in Moscow (1930). Like its prototype, it is an echo of the avant-garde architecture of the late 1920s. Fading European influences are also seen in the building of "Madara" public baths, started before the war and finished in 1946.

In December 1950 a conference of the Institute for Urban Development and Architecture at the Bulgarian Academy of Sciences formulated “socialist realism” as the new orthodoxy. The first act of socialist realism was the competition for a house of the Central Committee of Bulgarian Communist Party on the already allotted place. The winning design was then changed many times, in consultations with Soviet architects, in order to attain the political correctness of the times. The building was the first example of Stalinist “socialist realism” in

Bulgaria. By 1951, it was joined by the architectural ensemble of the entire “Largo” As the result of a new competition for the design of the power centre of the city. As Stalin died and the Bulgarian regime ran out of money, only a small part of the plan was implemented. The multi-storey House of Soviets, supposed to complete the composition on the western side, was never built, and the length of “Ruski” to the east kept its turn-of-the-century architecture.

The “Largo”, as it still stands, was the result of collective creative work under the strong and determining Soviet influence. The scheme is simple to the highest degree – strongly outlined longitudinal axis in direction east-west, strengthened by almost mirror-like symmetry of the facades of the two Ministries. It is the typical for the ensembles of the totalitarian societies ‘plan-ornament’. As a plan, the project is huge ‘ornament’ itself, with an individual meaning of ‘decorative objects’. The architecture of the separate building can be different and changeable, if it suits the place and its role in ‘the symbolic order’ of the political system, with the Communist Party’s house dominating the centre. This house, with the cup above the western façade, is entirely Soviet in spirit, as is its “twin” – the building of the Department of Physics and Mathematics, several kilometres out in the Lozenets residential district, which however remains in architectural isolation. Built along the same lines are the state printing and publishing house on Tzarigradsko Shose Boulevard and the smaller size building of the House of Bulgarian-Soviet friendship on Evlogi Georgiev Boulevard, using adapted Soviet designs. Ultimately, instead of becoming the corner-stones of the new Sovietized Sofia, these buildings remained as isolated outposts, waiting for the reinforcements that never came.

While most of the architectural attention was lavished on the seat of power, sports were not forgotten from the outset – which is not surprising, given the value that Soviet-type regimes placed on physical prowess. Lots of architects and engineers took part in the project of the V. Levski National Stadium in 1953. The Sports palace with a covered swimming pool on Levski Boulevard was designed and finished later. They too are typical of Soviet-derived “socialist realism”. More suited to Soviet globalism and the harsh Russian winter, this architecture failed to catch on nationwide, remaining mostly located in Sofia and being discontinued after 1955. The utopian nature of the style is reflected in the utopian nature of the entire undertaking of the “Largo” project, which remains largely unfinished.

Socialist utopianism also marks the first attempts at new residential architecture. The residential blocks of flats in Sofia, built at this time, remain scattered, again as isolated outposts, along some of the main streets, boulevards and crossroads, although the original intention was quite different – to reconstruct the city’s residential areas as enclosed and self-sufficient “micro districts”. The borders of these districts were to be outlined by monumental and ornate residential buildings, with the districts’ central parts devoted to schools and recreation centres. The blocks of flats would form a wall, passed through via entry passages. The aim of this was to create distinct communities of happy residents, living in a communal way.

The period from 1948 to 1955 is characterized by a lack of free choice and the adaptation of an imported model. It produced a limited number of (admittedly massive and dominating) buildings, which have remained alien to the city.

The radical change in the orientation and architect's creative behaviour after 1956 is again a result of a political changes. The first signal after Stalin's death (1953) came from Moscow (the All-union conference of builders of 1954 and the Second Congress of Soviet architects of 1955), which signalled a departure from previous orthodoxy. The new directions were in the spirit of rationality, expedience and above all, economy. Without saying it out loud, this was a step towards re-integrating "socialist" architecture into the then prevalent Modern style of "the West".

The crucial internal political event was the Communist Party's April session in 1956, which signalled a limited opening of creative energies. After the plenary session, Bulgarian architecture and that of Sofia re-entered the larger process of international architecture, dominated by the ideas of modernism. Unlike the other arts, modernism in architecture was tolerated and accepted by the authorities. The reason was the desire of the authorities to be identified as spearheading humanity's drive to the future. This signified a shift of identity – from "world revolution" to "vanguard of scientific-technological progress". The definition modernism was never and nowhere mentioned officially, because of ideological reasons (it sounded too Western). 'Innovation' became the key word.

This paradoxical situation had a positive and stimulating effect in architecture, where it led to the appearance of real free choice as everyone found their own way back to the modern. The practice from the end of 50s and through the 60s blended the aesthetics of 'orthodox' modernism, the aspiration for 'organic architecture', the beginnings of local interpretations of "brutalism", plastic arts and also, somewhat surprisingly, picturesque Brazilian architecture.

The initial impetus in the development of Bulgarian architecture after 1956 came from Sofia. In 1957, the building of the Sofia City People's Council was built, signalling a breach with "socialist realism" and a recovery of earlier Sofia-urban styles. In 1960, the first television tower of Sofia was completed, an example of modernist classicism. The most innovative and interesting example of the architecture of the time is the building of BTA (Bulgarian Telegraph Agency), completed in 1960, a modernist interpretation of Bulgarian pre-war experience.

The undisputed pinnacle in the modern architecture of Sofia remains "Universiada" Hall (1961). Demonstrating its new affiliation to progress rather than revolution, the Bulgarian Communist Party's congresses left the Stalinist surroundings of Party House and moved to Universiada. This further endorsed the position of the modern tendency in Bulgarian architecture. The building of sports facilities ("Sofia" covered tennis courts) also turned out to be an arena for the ideas of modernism, with premonitions of European and Japanese "brutalism" in the typical combination 'concrete-glass-wood', but without their inherent aggressiveness.

In a few years 10-15 modernistic administrative buildings appeared. Nowadays, almost all of them are accepted as ordinary and even banal, but they define a whole layer of the architecture of Sofia and, unlike their Stalinist predecessors, have become an accepted part of the city's texture. These administrative-business buildings had to satisfy the needs of local

administrations, economic organizations, foreign trade monopolies ('Machinoexport', 'Rodopa', 'Bulgarplodexport').

Hotel construction also took off, in order to give a European look to the capital, to modernize parts of the city and become the nucleus for new public spaces. Such are the Rila and Serdika hotels in Levski square; Pliska hotel and Sofia grand-hotel in Narodno sabranie square.

The ultra-modernistic complex of the University of Architecture, Building and Geodesy was built in the central part of the city. At that time the first big contemporary hospital in the country was finished – Regional Hospital in Mladost residential district. The High School in Lozenets district (1964) stands out among some other buildings of new schools with its striving for connection with the area, in the spirit of 'organic architecture' that was beginning to penetrate the Modern movement.

Residential architecture started taking off in the late 1950s. The Zaimov, Yavorov, Iztok, Hipodruma residential complexes stand out with their imaginative combination of greenery, space and buildings of middle height. At the end of the 60s, Sofia was still well endowed with trees and shrubbery, not yet overloaded by the increasing urbanization. In many of the first complexes, the network of alleys and little streets did not have parking lots for private cars. The architecture was in the spirit of the 'light', 'soft', and 'fresh' modernism without conflicts.

The architecture of the 1970s remained relatively independent from the influences of the home political life. On the one hand, architecture in this country had gained certain positions and recognition on the part of the authorities. The authorities themselves felt stable and self-confident. They began to look for their own glorification on many levels, including in architecture, regardless of particular economic problems, connected with the two world energy crises during the decade.

At the end of the 1960s, competitions started for designing new district Party Houses, law courts, municipalities and other administrative buildings throughout the country and in Sofia. In the beginning of the 1970s, there were competitions for National Historical Museum, Council of State, Ministry of Foreign Affairs, Foreign trade bank. The designing and building of the big government residence in Boyana also started, and remains the first building complex firmly rooted in national tradition, with modernistic elements providing functionality.

The economic and political stability of the 1970s succeeded in bringing the official architecture to a particular, calmed-down, type. The approaches of 'brutalism' were abandoned. The dynamic composition of the volumes and facades were 'soothed' through covering them with light stone coating of limestone, abundant in the nearby region of Vratsa. It is a paradox that the urge came from the USA, from Boston City Hall (1968), with the new Ministry of Foreign Affairs (1970) being its chief imitation, with bay top floors added to signal a continuity with the national style, and the building being organised around an internal courtyard in the "monastic style" with the same intention.

The architectural landmark of the 1980s (designed in the late 1970s), the National Palace of Culture, was built as a multifunctional complex, a contemporary palace – a synthesis of modern architecture with the plastic arts and heavily under Brazilian influence. There is more iron in it than in the Eiffel Tower, under its roof the cultural life of the capital city, as well as the prestigious congress-conference activity, business and political events are concentrated. In this respect it is unique.

By the end of the 1970s, as new government funding came flooding in, in preparation for the grand commemoration of the 1,300th anniversary of the setting up of the Bulgarian state, building continued apace. The building of Bulbank (1972) was completed. With the building of the Higher Military Medical Institute the spacious district of medical institutions was formed, including also the Medical Academy. The building of covered facilities for sports spread gradually, connected with the organizing of competitions for European championships, cups and tournaments.

Tensions and problems unfolded on another level, connected to residential building and the architecture of schools, kindergartens, supermarkets. In the end of 1960s the designing of the residential complexes of Mladost and Lyulin started. “Dormitories” for more than 100,000 residents, these were the first large-scale prefabricated concrete districts. Aiming for speed and economy, builders used the pre-fabricated concrete slabs, which were to become the regime’s most hated feature by the end of the 1980s. Whereas on 1969 the new-built residential housing in the traditional methods (brick) in Bulgaria were about 60%, by 1975 they were only 15%. Compulsory standards of residential space were brought in, one of which was 64 sq.m per flat. As for the number of the rooms in a house, according to UN bulletin, Bulgaria was in last place in Europe with 2.2 rooms in 1980 and 2.5 in 1986.

The influence of the post-modernism and the attempts to approach the “high-tech” aesthetics start in the middle of the 80s. The building of the edifice of “Interpred - World Trade Centre” begins on “Dragan Tzankov” boulevard. This is the only building, carried out by a Spanish construction company, which can claim to approach the “Western-style” high-tech architecture. Not least, as the flow of cheap Soviet oil stopped in 1985 and the economy, entirely dependent on this, began unravelling, government funding for architecture dried up, while private funding was non-existent in a centralised, state-run economy.

The end of the 1980s indicates a conscious rejection of the modern ideas' domination and the presentiment of future changes. The avant-garde designs of young architects (which remained on paper), the stagnation of the older generation, discussions and disputes mark several years of doubts and uncertainty about the future.

### *Outcomes*

Unlike its urban development, Sofia’s architectural development was the outcome of planning and policy implementation. The planning (and the funding) was, however, done at the national level and addressed the city in its capacity as capital. The policies pursued were less policies and more the reflection of specific political choices taken by the Communist regime at different times. Not least was the influence of, and the opportunities created by the consecutive shifts of the self-image of the Communist Party: from being part of the Moscow-led world revolution, through being the vanguard of technical progress, to the 1980s attempts

at patriotic legitimation and the determined effort to exude unshakable confidence at a time when the very foundations of the regime, both economic and political, were beginning to slowly disintegrate.



## 4 PLANNING & DEVELOPMENT AFTER 1989

### 4.1 General outline

After 1989, with the advent of fundamental changes in the social, political, and economical structure of the country, a new crisis situation of the city structure emerged. In 1990, there was an attempt to limit the crisis, when Sofia municipality announced a competition for a new General Urbanization Plan. Following the debacles of the previous decades, the city was still stuck with the 1961 General Plan – the least realistic of all of them, and the one that envisaged a city of 800,000 – a level long-since breached. Five of the 25 projects, introducing different approaches to the problem, were short-listed.

And this was where things stalled. The implementation of the next stages of the process was abandoned because of the inability of urban planners to grasp and describe emerging development trends – and thereby to formulate the basis on which to judge the projects submitted. The city’s decision-making continued to follow the patchwork, case-by-case approach, with a series of modifications continually introduced to the existing General Urbanization Plan and the Development and Regulation Act.

The lack of a meaningful vision for the future of the city became linked, in the public perception as well as in reality, with an obvious lack of capacity in the municipality to address development problems. Until the end of the decade, the municipal administration was almost entirely engulfed by the problematic of privatization and had no capacity to spare. This combination led to another cycle of delegitimation of all existing planning and regulation provisions, which in turn created the typically 1990s atmosphere of a “free-for-all”. As the city sucked in newcomers from the economically desolate hinterland, and as Sofianites strove to move out of the prefabricated concrete districts, a wave of ill-regulated private construction began to engulf the city by the mid-1990s. Much of it was in flagrant contravention to existing rules and regulations and was “legalised” after the event – a process that became the basis of the routine corruption of administrators by developers. The city entered another period of unplanned-for rapid expansion, which placed further pressure on its already straining and elderly infrastructure and amenities.

Severely under-funded, and faced with other problems that took up all available capacity, the city’s administration struggled to patch up degrading infrastructure, rather than embark on bigger schemes as part of some forward-looking strategy. Over a decade, the only major initiatives included renovation of a handful of historic buildings in the city centre (mostly financed by the UNDP), the building of two boulevards linking the centre with the large

western suburbs, and the unveiling of the first half-a-dozen stops on the underground metro system, following delays lasting for two decades.

Increasingly desperate – and, until the end of the century, desperately under-funded – city administrations did not address urban planning in any serious or systematic way, claiming lack of money and concentrating on a string of “crises” that hit a city both expanding and with degenerating infrastructure and amenities. As the peak of privatisation passed and the administration freed capacity for other things, in 1998 it re-started the debate on the General Urbanization Plan. Given that under the Constitution (as in communist times as well) the capital’s Plan requires parliamentary approval, the debate quickly entered the National Assembly, officially beginning in April 1998. On 31 March 2001 Parliament voted a Law on the Approval and Implementation of the Plan, but the Plan itself still lay in the future.

## **4.2 The city and its periphery**

Although the 1961 General Urbanization Plan failed to deal with the major aspects of Sofia’s development, until 2006 it remained the official basis of decision-making. Together with the numerous amendments to it of the 1990s and a major re-haul in 2001, its provisions did underpin what planning decisions were taken at the end of the 20<sup>th</sup> century, while some of its major components formed the basis of the 2006 General Urbanization Plan. It does, therefore, merit some measure of overview.

The Plan divides the territory of Sofia municipality as follows:

1. City region (city proper, “compact city”) – the territory included in the development boundaries of Sofia;
2. City surrounding region - the territory between the development boundaries of Sofia and the administrative boundaries of Metropolitan municipality. Under this, the villages in the city region to the west and north (Obelya, Vrabnitza, Ilyantzi, Orlandovtzi, Malashevtzi, Vrazhdebna, Slatina, Gara Iskar (cargo railway station Iskar) and Darvenitza) have the status of residential districts in Sofia. The villages to the south, on the slope of mount Vitosha (Gorna Banya, Boyana, Dragalevtzi, Knyazhevo and Simeonovo) have the status of residential-resort districts and districts are in place, determining low-rise construction only.
3. The mountains of Vitosha (to the south) and Lyulin (to the south-west), with the official status of parks, as well as the zone of the Metal Works Kremikovtzi to the north, are integral parts of the Metropolitan municipality.

At the very least, such provisions help illustrate one of the basic characteristics of the growth of Sofia: a consecutive incorporation of near-by villages and their transformation into residential districts; a gradual urbanization of empty terrains between the city and these villages, and consequent integration into transportation and infrastructural networks. These processes began in the 1950s and intensified during the period 1980 – 1990, and again after 1995.

The city network of the municipality is made of 34 populated areas, 4 cities (Sofia, Bankya, Novi Iskar and Buhovo) and 4 districts outside of the development boundaries (Chelopechen, Botunetz, Kremikovtzi and Seslavytzi). Sofia city has 3 more districts (Suhodol, Philipovtzi and Trebich), which are inside the development boundaries of the city, but are detached territories.

Particularly dynamic are the processes, during the 1980s, to the north – in the direction of the Balkan mountain range – and around the villages lying to the east, such as German, Lozen, and Kokalyane. After 1995, urban expansion switched to the southern areas, on the slopes of Vitosha mountain (Bistritza, German, Pancharevo, Gorni Lozen, Bankya, Ivanyane and Malo Buchino).

Outside the administrative boundary of Sofia municipality there are two clearly visible urban zones, most easily defined by their high population density. These zones form in effect suburban or potentially suburban rings.

The first zone is formed by the districts of: Svetovrachane (479 residents/sq.km), Kazichene (313 residents/sq.km), Bankya (292 residents/sq.km), Novi Iskar (282 residents/sq.km), Busmantzi (233 residents/sq.km), Pancharevo (210 residents/sq.km). Such density is typical for urban areas in the Republic of Bulgaria, which places them in the category of intensive urbanization processes.

A relatively high population density is also seen in the second such zone, in the following districts, which form a second relatively active (sub)urban ring: Vladaya (165 residents/sq.km), Negovan (162 residents/sq.km), Krivina (140 residents/sq.km), Chepintzi (133 residents/sq.km), Mramor (131 residents/sq.km), Marchaevo (116 residents/sq.km), Kokalyane (110 residents/sq.km), and Zhiten (106 residents/sq.km).

The lowest population rate have the neighbouring villages of Klisura (5 residents/sq.km) and Plana (7 residents/sq.km).

It is a matter of urban planning whether, in line with previous trends, in the future such zones would be taken over by Sofia and included into its administrative boundaries. This looks, however, unlikely in practice, given the convoluted history of Sofia-related legislation. These places are part of the Region Sofia (which encircles Sofia Region / Municipality); and their inclusion would require changes in national-level legislation (administrative division of the country).

### **4.3 Construction and architecture after 1990**

Following the demolition of the Wall and the fall of the Bulgarian regime, the first signs of radical change were visual. People dressed in long sought-after “Western” clothes as imports replaced the drabness of centrally-planned products. The return of property, once nationalised by the state, changed the face of the streets as the new / old owners started putting in modern-looking shops. The flowering of freedom, in turn, resulted in new, long-suppressed individual and group life-styles. As other emerging nations had done before them. Bulgarians – and in

particular Sofianites, the national trend-setters – followed the classic trajectory: new clothes-new car-new flat.

The new lifestyle also and almost immediately transformed the character of the public spaces like streets and squares. From places for regulated and rigidly controlled public life, administrative control and shoddy shops with half-empty shelves, they turned into centres for spontaneous demonstrations about political conflicts, football passions, sexual freedom, ethnic and religious tolerance. The explosive birth of private business, from luxurious boutiques to outdoor cafes, turned the ground floors and facades of the buildings on the main shopping streets into modest copies of the European and American city environments. The city environment started to imitate forms of life hitherto seen only in “Western” movies.

As mass culture exploded all around them, intellectual and cultural circles went into something of a shock, being long used to a gradual and carefully dosed penetration of “Western influence”. They also found bewildering the sudden flowering of choice – the appearance of literally thousands of choices where there were few – in fields like book publishing and visual imagery. As they grappled with the new challenges, the Bulgarian Architecture Association geared up to the appearance of new architecture. It had had over two decades of increasingly “national” modernism, and had begun to dabble in post-modernist facades of public buildings. But there was no clear idea about the coming “market of concepts” in the architecture.

As the private construction boom started in the mid-1990s, architects found themselves in an arena where different tastes and demands clashed with previously unseen intensity. They also had to address the demand for “prestigious” architecture from the newly-rich. What they went for was an imitation of what they understood as “capitalistic”, as seen on TV. Apartment size doubled and tripled to 150-200 sq.m. Two-storey apartments, 2-3 level studios on top floors, previously unheard-of underground parking lots appeared in response to the new social strata. From a psychological point of view, the new owners of shops, small and big hotels, petrol stations, casinos and clubs, i.e. the new “capitalists”, had “European” life style requirements, but didn’t have the appropriate confidence. Their muddled tastes and understandings for “prestige” were implemented by the building contractors and the usually very young freelance architects, to imitate in a banal way the apartments of the rich at the end of the 19th century. The contemporary “popular newly rich” and his architect indulged in imitation of the most vulgar post-modernism in its worst variation, complete with turrets, gables and other striking elements of the façade.

Society in general became the slave of post-modernist manipulation. The architecture professionals took a critical position towards the abundance of angular towers, bays, absurd and non functional „pseudo-Art Deco" balconies and “classical” balustrades. Yet the new situation also offered new architectural freedoms for the profession as a whole. Over several years, mainly in the south part of the capital, a nearly whole new city was built. A continuous band of new construction was formed, situated among the most expensive terrains in the city centre and the prestigious southern periphery.

The architect circles in Sofia, concentrated mainly in the two pre-existing designer organizations (Glavproekt and Sofproekt) stayed quite loyal to modernism until the end of the 1980s and later stayed away from the construction boom, being wary of radical changes.

The first large-scale changes in the city architecture environment after 1989 affected the open public spaces. Vitosha boulevard became the expensive shopping street that it had striven, but been unable to become during the times of state-run economy. In second place comes the entire change in the idea about the housing architecture. In contrast to the intensity of these two processes, the construction of public buildings was nearly brought to a standstill for a decade (1985-1995) because of economic difficulties. After nearly half-century interruption, the construction of small Orthodox churches began anew.

Only in 2005-6 did new major buildings of national significance appear, and – breaking with tradition – they were to do with private initiative, rather than with the state. The great buildings appearing in Sofia were the multi-screen “Arena” complexes, the glass towers of the putative business-financial district along the main boulevard to the west, the several dozen business buildings in Business Park-Sofia to the south-east, as well as Sofia Mall in the old centre. All of these were late-modernist, hi-tech glass-front constructs, counter-weighting the obsession with eclectic post-modernism. The renewal of the modernist tendency is also seen in smaller buildings, appearing in stark contrast to their surroundings in the historic city centre, such as the building of "Festinvest" Advertisement House on "Tzar Ivan Assen II" st.

The political and economic stabilization of 1997 laid down the ground for restoring a larger-scale approach to the city's problems. The citizens started to feel and accept again the city as "my own", where they could expect, demand and participate, and not like "theirs" - belonging to the bureaucracy and the authorities. Significant initiatives were launched for the rehabilitation of abandoned and neglected public spaces: streets, open-spaces and historic buildings. In 1997 began the implementation of the projects "Beautiful Bulgaria" and "Beautiful Sofia", part-financed by UNDP, for the renovation of some of the most beautiful historic buildings: the Officers' club, Bulgarian Academy of Sciences, part of the buildings on "Pirotska" str.

As Bulgaria entered the EU in 2007, a partial solution was finally found to the massive problem of rehabilitating the prefabricated-concrete housing stock, built since the late 1960s and designed on the assumption of forever flowing cheap Soviet oil and gas for heating. Terribly inefficient in terms of heating, and un-renovated for lack of modern insulating materials during socialism, these blocks of flats had been needing urgent attention for many years. Under a government-backed scheme, a group of banks began in 2006 refunding 20 per cent of expenses to owners who insulate their walls and fit in efficient windows. While most owners did not make use of this opportunity due to the heavy bureaucracy involved, the idea of renovation took root and by 2007 the concrete districts presented a patchwork picture of insulated and un-insulated flats. Typically, people went for bright pastel colours (pink, green, turquoise, yellow) for their newly insulated walls, creating facades of multi-coloured designs, interspersed with the surviving gray of socialism.

While private citizens reached the “new house” stage along the clothes-car-house progression, the city itself came to the end of a similar cycle. For most of the 1990s it had the capacity to push through privatisation, resolve some of the arising urban crises and patch up the degrading infrastructure with meagre funds. Late-1990s economic stabilization, turning into rapid and sustained growth, ensured that city planners could again turn to more major undertakings. In 1998, the mayor of the capital Stefan Sofiyanski inaugurated the first underground line, linking the western suburbs to the centre. Sofiyanski also built two new boulevards, radiating out to the west and significantly improving access to the centre from the most populous suburbs. Also in the late 1990s the renovation of the historic (1912) Central mineral baths began, which will be transformed into a City museum, while maintaining and developing further its functions of a hydropathical and health centre. At the turn of the century most of the other degraded historic buildings in the centre were similarly renovated.

### *Outcomes*

Following a decades-long tradition, in the 1990s Sofia continued to expand without any significant regulation being provided by policy, strategy or urban planning. Swallowed up by privatisation, the city’s administration had no capacity to spare for forward-planning of urban development, while the economic turmoil attending the transition from centrally-planned to market economy left the city without funds.

Whereas, under socialism, Sofia received considerable government funds because of its role of capital, during the 1990s this was abruptly stopped. Indeed, under the heavily centralised national budget, which took all income from municipalities and then re-distributed it back, Sofia financed the government, rather than being financed by it.

Sofia’s emergence from the economic downturn of the end of socialism / beginning of transition can thus be traced exclusively to private initiative and domestic consumption. Following the classic progression “clothes-car-house”, Sofianites ensured that private initiative, based initially on the restitution of private property, developed apace to satisfy the new demands that arose out of the lifestyles appearing with freedom from government restraint. This “buzz” of the city attracted migrants from the hinterland and the bulk of what foreign investment was entering a country which, by projecting abroad the image of hesitancy in reform and lack of vision of the future, lost out heavily, in terms of investment, to other post-socialist capitals.

With the rapid economic revival of the late 1990s, as Sofia’s inhabitants reached the stage of “new / renovated house”, the city reached the stage of addressing fundamental infrastructural issues, as well as the renovation of its dilapidated historic buildings. Freed of concentrating on privatisation to the expense of all else, the city’s administration started looking ahead and raised the long-dormant issue of producing a realistic Urbanization Plan to regulate the city’s growth and development.

## **5 SOFIA AFTER 2000: DEVELOPMENT “HARD FACTORS”**

### **5.1 Overview**

There is a certain sense of inevitability about Sofia’s rapid transformation from a dreary industrial capital of a socialist state into a recognizably modern metropolis of the 21<sup>st</sup> century. As the transition from socialism began in the early 1990s, Sofia was the centre of the nation’s political, administrative, financial, industrial, transportation, social and cultural life. As other cities went into steep decline, following the disintegration of the artificial, Soviet-style economy, their most dynamic inhabitants inevitably flocked to Sofia in search for a living, in this way supplying the city with the nation’s most daring, enterprising, mobile and creative labour force. Inevitably, this influx dynamized the city, as the (predominantly young) newcomers began sustaining their desired lifestyle, which stood in contrast with the drab and stifling semi-officialdom of the capital during the previous decades.

In this sense, more striking research challenges would be provided by cities such as Plovdiv which, following a steep decline and bereft of significant resources in terms of “hard factors” or even tourist potential, nevertheless by 2006-7 were on their way to recovery almost solely through leisure and culture.

The political and economic weight of Sofia has resulted in its being identified as a “region of growth” under the new Law for Regional Development. This means that Sofia is expected to be increasingly the engine of the socio-economic development of the country, connected with high technologies, market infrastructure, development of export-oriented productions, service activities with international and regional importance.

By virtue being the national capital, Sofia is the administrative, economic, political and cultural, trade and tourist centre of the country. The presence of the biggest educational institutions, research institutes, financial services, development of service sphere and infrastructure develops further the managerial and intellectual potential of the capital.

Nationally, the significance of the city of Sofia is determined by its participation in the forming of 34.3% of material production, the employment of 13.9% of the workforce in material production and the possession of 31% of the productive capacity of the country.

The macroeconomic situation in the country during the transition and the big crisis at the end of 1996 had a serious negative influence on the development of the investment processes in general, an also on the size of the foreign investments. Recovery began from Sofia, which still gets more than 60% of direct foreign investment. Although moving rapidly to a services-

dominated economy, the capital city continues to be also the biggest industrial centre in the country.

A National Strategy for Regional Development (NSRD) has been worked out for the period 2005-2015, which is the main document for determining the long-term aims and priorities of the regional politics of the country. It gives the strategic directions and levels of the regional politics and is a starting point for obtaining and distributing the funds from the EU when realizing the programs, concerning the regional development.

Sofia is the focus of foreign investment in this country. For the period 1992-2004 more than the half of the direct foreign investment, FDI (about 56%) in Bulgaria is directed to Sofia, and during the period 2002 -2004 their share is almost two-thirds of its total value for the country (about 64 %). The increasing share of the DFI in Sofia is a main factor for the organization and fast development of the local economy, but is also an indicator for the high interest of international companies to invest in the region. It is expected that the flow of “greenfield” foreign investments to be increased in the next years.

Although it is the fastest developing and the biggest region, the prosperity of the city of Sofia remains closely dependent on the general macroeconomic stability and on the measures of the central authorities, directed to steady economic growth and welfare of the nation. Comparatively speaking, Sofia is still far from the economies of the capitals in the other countries in CEE (Central and East Europe). According to the data from 2001, Sofia still produces the lowest GDP per head.

## **5.2 Demographic resources**

The Sofia population can be assessed as a considerable resource, which provides the necessary manpower for the social-economical development in the region. The population density is a result indicator from the combined influence of the natural and the mechanical movement. The natural population growth (births/deaths) in Sofia municipality, average for the period, is in fact negative (- 3.9 ‰). The population increase has been the result of immigration to the capital, which is a demonstration that that Metropolitan municipality is an attractive territory to settle down in.

Population statistics for Sofia are very severely flawed, as had been explained already. While they are hugely misleading in terms of absolute numbers, they do illustrate dominant tendencies, although again under-estimating numbers by up to a factor of 5-6.

The official data shows that the number of the people settled down is considerably more than the number of those who move from the city. The ratio of inflow / outflow continually changes in favour of the inflow, from 13, 394 people (2001) to 19,136 people (2003), forming a net increase of up to 45 per cent in just three years.

Territorially, the demographic development of the metropolitan municipality shows that there is a tendency of gradual increase in the population number of the city proper. In the region outside the city of Sofia, there is also increase in the population numbers by about 4, 000

people, mostly in the villages. The concentration in the capital city is still very high – over 93%, which is a considerably higher proportion than in most European cities of the same class as Sofia, where the part of population, living outside the city proper, reaches 30-35 %. The population de-concentration, envisaged by all Urbanization Plans (approved or otherwise) since the 1940s, is still evidently a trend situated somewhere in the fairly distant future.

Taking into account the trends, revealed by official statistics, and overlaying them with the very precise assessments of polling agencies related to absolute numbers, the picture of a mega-polis in the making emerges. The physical number of people permanently (i.e. also during week-ends) residing in Sofia has long since breached the official figure of 1.3 million and is currently in the region of 1.8 million at least. This number is swelled by another up to 700,000 people during week-days and by a further 300,000 on Mondays. It is impossible to say how many of these are tourists, shoppers, short-term business visitors or commuting working people. At least 20,000 are indeed tourists, according to polling agencies. What we know of the others is that most of the cities (within 1.5 hours' drive) in the South-Western Planning region, of which Sofia is the centre, provide migrant labour for the capital.

Whatever the exact figures, it is clear that Sofia routinely attracts a weekly migrant population equal to 1/3 of its population size. At the same time, the explosive – and increasing in rate – growth of the population size of people permanently settled in Sofia is entirely due to the city's capacity of sucking in outsiders, given its own negative birth-rate. What planning is henceforth done on the basis of such figures would face the urgent task of encouraging population de-concentration out of the overloaded city proper, where more than 9/10 of the population lives.

Sofia may be, like the entire Bulgarian nation, still in the grips of a demographic crisis as far as the birth/death rate is concerned; but overlaying this trend is the simple fact that in any given work-day there are three times more people in Sofia than there were in the late 1980s – many of them migrants from the hinterland, Europe and the world. This influx is hardly likely to slow down, as more and more national borders open and as Sofia's industries continue to easily accommodate all newcomers.

*The gender structure* of the population in the Metropolitan municipality does not differ very much from the structure of the country and of the other regions. The number of men is approximately 47.7 %, and the number of women is 52.6 % - a ratio that has not changed since 1992.

*The age structure* of the population is significantly more favourable than it is in the rest of the country, but evidence of an ageing population is observed here as well. In 2003, the under-18s form 13.6% of the population, people in active working age - 65.2%, and the elderly – 21.2%. At the end of 2003 every fifth person in the region was an old-age pensioner. The prospects are, however, less dire than for the rest of the country. While the under-18ths have shrunk (15.3% to 13.6% between 1998 and 2003), the proportion of people in active age is increasing – from 62.2% in 1998 to 65.2% in 2003. There is also a process of decrease of the percentage of the population in beyond-active age, from 22.5% in 1998 to 21.2% in 2003.

With the death-rate still outstripping the birth-rate, in spite of recent signs of recovery, the Metropolitan municipality will continue to count on a demographic “influx” of active population from the rest of the country.

### **5.3 Economic development factors**

There are various factors and conditions that predetermine the relative good standing of the region. Among the positive stimuli we can pinpoint the following:

- Favourable location of the whole region and of its centre – Sofia city;
- Sofia’s functions as a connecting hub with a well-developed transportation network and communications. Compared to the rest of regions, the capital city is most accessible both in terms of transport and of communications although it is far behind other big and capital cities in Europe;
- Very efficient and technically well-developed general territorial infrastructure;
- Accumulated experience and traditions in the development of industrial and service sectors;
- A significant quantity and high quality of human resources and labour potential, which is characterized by high qualifications and rich production experience;
- Established facilities of significant capacity in all industrial sectors;
- Availability of a high number of graduate schools and scientific research centres and institutions, which encourage innovative development of the city and provide an opportunity for establishing technological parks and other forms of merging science with production;
- Investment attractiveness of Sofia municipality for the implementation of projects in the sphere of manufacturing, trade, tourism, high-level services, etc. Sofia leads nation-wide in terms of volume of foreign direct investments.
- Rich and varied culture and leisure opportunities. With most of Bulgaria’s cinemas and theatres concentrated in the capital, which also has more entertainment night-spots (music clubs, style bars, late restaurants etc) than the rest of the country put together, Sofia provides the style of life that is closest to “Western” trends and thereby appeals to modern and creative people. The rapidly increasing complexity of its ethnic and cultural mix, as well as the presence of a student population of some 40,000 provides the city with additional “drive” in terms of lifestyle.

Apart from the factors and conditions that encourage the social and economic development of Sofia, there are some that are of a restrictive character:

- Not well operating or unreliable connections with the new European and international economic activity and entrepreneurship concentration centres, which is a reason for increased prices and the need for regional industry to exert more efforts in order to achieve commercial and investment market penetration as well as to secure a place for itself on international markets that are expected to expand;

- Shortage of markets for production realization, which is due to the insufficient absorbing capacity of the internal market, limited solvency of consumers and low compatibility of manufactured goods and services;
- Lack of technological, market and entrepreneurship modern infrastructure capable of activating the business sector and position favourably the country and the city in the hectic international regional and urban competitive environment with the aim of attracting investments, prestigious activities and modern productions to act as catalysts of general development;
- A definite necessity for restructuring and modernization of manufacturing industry, development of innovative and competitive productions that would consume a significant investment capital.
- Lack of modern-type utilisation of available leisure resources, such as the two big water reservoirs, the string of lakes to the north of the city, Mount Vitosha and the other mountains and hills surrounding the capital (Lyulin, Lozen, Balkan etc).

#### **5.4 General characteristics**

Officially, on the territory of Sofia city and Sofia municipality in 2001 there were 41 710 small and middle enterprises with 248 399 employees and a total of 8 627 million EUR revenue. In 2003, their number increased to 47 545, of which employed were 295 126 and total revenue was 13 722 million EUR. However, operational expenses of enterprises have also increased: from 8 450 in 2001 to 13 080 million EUR in 2003.

One of the main micro-indicators that illustrate the condition of the social and economical characteristics of Sofia Region is GDP (gross domestic product). In 2002 GDP for the territory of the whole region was 4,823 million EUR, which is about 29.1% of the total national GDP. In the period 1998-2002 there was a noticeable GDP increase – from 2,623 million EUR (1998) to 4,823 million EUR (2002), i.e. a growth of 83.8%.

Another indicator that demonstrates the economic development of the region is “economic revenue size”. The economic revenue size of the enterprises in 2003 was a total of 19,035 million EUR, of which 50.4% came from commercial activities, car repairs, personal items and domestic utilities and 3 744 million EUR (19.67%) came from the processing industry. Net revenue was a total of 17.832 million EUR, of which 52.55% came from commercial activities, car repairs, personal items and domestic utilities and 19.34% came from the processing industry.

The amount of profit in Sofia city municipality has increased from 320 million EUR (1999) to 1,124 million EUR (2003), which is 3.5 times higher profit. At the same time, there have been accumulated losses of 322 million EUR, of which 28.3% came from commercial activities, car repairs, personal items and domestic utilities, 17.14% - from the processing industry, and 12.22% - from transport, warehousing and other industries. This is a proof that the most important sectors in the economy of Sofia city municipality are industry, commerce and manufacturing services as well as transport and communications.

Another indicator is the size of investments for acquiring of tangible fixed assets. In 2002 they were 1 691 million EUR, and in 2003 – 2 025 million EUR.

The dynamics of investment capital size indicates a tendency towards a continuous increase – from 772 million EUR (1998) to 2 025 million EUR (2003), which is more than 2.6 times. There is one important specific: out of the total investment volume, 52.8% were in the private sector. For comparison, in 1998 and 1999 investments in private sector were, respectively, 39.2% and 36.8%.

Sofia city municipality is characterized with a high concentration of fixed assets. Fixed assets per capita in Sofia city municipality are twice as many as the nation-wide average estimate. Another indicator of the high volume of capitals in Sofia city municipality is tangible fixed assets per square km, where the municipality occupies first position for the whole country. The concentrated funds per square km here are almost 25 times more than the average nation-wide estimate.

**Table 5.1**

	<b>GDP per head (euros) in Bulgaria</b>	<b>GDP per head (euros) in Sofia</b>
1991	462.4611	
1996	932.9238	
2001	1923.293	3572.6808

#### *5.4.1 Primary sector*

Sofia region agriculture is oriented towards plant growing and stock breeding. It is specialized in the production of fodder, meat, milk, vegetables and potatoes. There is an agricultural zone that has gradually formed around the city of Sofia itself and its produce has been covering some of the demand of the capital's citizens of fresh vegetables, milk and milk products.

For 2002 agricultural produce comprised 0.7% of GDP of the region and the tendency is for that share to further decrease. The number of people employed in this sector is also small – they comprise only 1.2% of total number of employed people and even this percentage is on the decrease. Notwithstanding the indicated data, which point at the more modest share of the agricultural sector within the overall social and economic profile of the region, this sector will play an important role in the future development of the territory. This is linked with the utilization of land resources and the provision of agricultural produce and employment opportunities as well as a source of income for the population.

Agriculture in Sofia region has developed according to available land resources, established manufacturing infrastructure, and the tradition and experience of the population in the agricultural sector.

Total size of cultivated land in Sofia city municipality in 2000 (this is the last year, for which there is any statistical information available) was 52 thousand hectares (ha), of which the cultivated land was 43 thousand ha and it is about 29.4% of region's territory. Most cultivated land is in the northern and less urbanized part of Sofia region – in the areas of Novi Iskar, Kremikovtsi and Pancharevo. Out of the total area of cultivated land fields are 35 thousand hectares, natural lawns – 7 thousand hectares, and perennial plants – one thousand hectares.

The dynamics of farming land structure over the period 1988 – 2000 indicates that there has been an increase of its total size from 38 thousand hectares (1998) to 43 thousand hectares (2000).

Cultivated land structure is also undergoing changes – its total area has increased from 32 to 35 thousand hectares; the same applies to the total area of natural lawns – from 6 to 7 thousand hectares. Farming land has been decreasing in size: from 23 thousand hectares (1988) to 15.3 thousand hectares (2000).

Forest resources on the territory of Sofia city municipality are limited and of no substantial industrial purpose. Ever since 1995, the utilization of timber has been on the increase and this will to a high extent satisfy the needs of Sofia city. Additional usage are for pasture (with a permissible load of 0.64 cattle heads per 1 ha and 4 small farm animals per 1 ha) as well as hay harvest.

#### 5.4.2 *Secondary sector*

*Industry* has a very prominent role for Sofia city municipality economy, as it provides about 20% of income from activities in the material sector, involves approximately 16% of all employed people and has at its disposal 45% of all industrial facilities of the country. These basic parameters of industrial development of Sofia city municipality are better than the average for the country.

In 2003 the industrial enterprises were 4,518, of which 31 were in the extractive industry and the other 4,487 – in the processing industry.

The sector structure of industrial enterprises indicates that out of the existing in 2003 a total number of 4,473 enterprises in the processing industry, 3,385 (75.6%) are in 6 sectors. The high number of these industrial enterprises in the separate sectors is a proof that a significant percentage of them are micro- and small enterprises with a small number of employees.

This also explains the significant increase in the number of industrial enterprises over the period 1998-2003. The dynamics in the number of industrial enterprises for this period indicates that for the last 6 years there has been a growth rate of 131%. A better understanding of the place and significance of the various industrial development sectors is provided by the data on production realized by industrial enterprises (acc. to different sectors). In 2003 the industry of the region realized a production at the total amount of 3,652 million EUR.

Sofia city industrial profile is comprised of the full range of sub-sectors with the exception of the oil and gas industries.

Main enterprises of the sector „Metal processing and manufacturing of metal products” in the region are "Kremikovtsi" joint-stock company and "O.TS.M." joint-stock company. Sofia occupies third place in the country with respect to volume of non-ferrous metals production. The prospects of this industry are, however, in severe doubt, as Kremikovtsi continues to generate losses in spite of several changes of ownership. In February 2007 electricity supply

to the plant was temporarily discontinued because of a backlog of debt to the electricity supplier.

The sector „Machinery and Equipment Manufacturing” is represented by 321 different manufacturing structures, of which around 30 have a structure-forming function for the overall sector. These are the main groups of products: machine tools, steam cauldrons, electrical cars, motor cars, cranes, lifts, household fridges и medical equipment.

The sector „Manufacturing of electronic, optical and other equipment” is represented by the manufacturing of generators and motors, power transformers, copper conductors, piezo, piezoelectric devices, silence products, electronic constructive elements, electronic cash registers.

The sector „Manufacturing of textile, textile products and clothes” is specialized in the production of cotton yarn and fabrics, woollen fabrics, cotton knitwear. This industry’s share has been decreasing within the general structure of Sofia city industrial manufacturing (from 4.9% in 1998 to 4.5% in 2003). In 2003 this sector incorporated 522 production units.

The sector „Manufacturing of food, beverage and tobacco products” is very important for the economic of Sofia municipality as it closes down the cycle “agriculture – food industry”. The number of production structures in this sector is 620, most of which are micro- and small enterprises.

The development of the *construction industry* in Sofia municipality is linked with the demands and the scale of the city and its surrounding territories.

The last years have been characterized by qualitative changes in the structure of construction industry. This transition has been characterized by a sharp decrease in the construction of industrial enterprises and of public service buildings as well as the gradual shrinking of the scope of constructions implemented according to industrial technologies (prefabricated concrete). The current main directions within the construction industry have been connected with the renovation of restituted land and real estate in the central city zone, construction of individual buildings and blocks of flats (mostly in the prestigious city neighbourhoods) and maintenance of urban infrastructure with state budget financing.

During the period 1992 - 2001 there were built 57,128 residences. For the period 2001 – 2003 residences increased with 3,468 more, and the population - with 30,357 people. In 2003 there were a total of 519,426 residences in the region.

#### 5.4.3 *Tertiary sector*

The employment-related analyses and assessments that have been carried out make it possible to draw the following conclusions:

- During the period 1998 – 2003 the official number of people employed in services has been increasing – from 355.2 thousand people to 430.5 thousand people. The tertiary sector in Sofia municipality has a higher relative share of the nation-wide total number

of employed people. This situation has been maintained over the last 6 years. In other words, if in 1998 the employed in the tertiary sector were 71.4%, towards 2003 they comprised 75.6% of the total number of people working in the sector of Sofia city economy;

- The capital status of Sofia is among the main reasons why there is a significantly higher percentage of employed people in the state administrative and governance structures, the judicial system, security and public order, etc., as well as the concentration of sites of national and regional significance (graduate schools, university hospitals, national health centres, central institutional hospitals – the ones affiliated with the Transport Service, the Ministry of the Interior and the Military Institute of Medicine).

In 2003 the private sector comprised 65% of employment in the tertiary sector of the capital city's social and economic structure. Understandably, this is not present at all in the "State Governance" activity line, while it is more than 94% in such branches such as trade, public catering, etc. The employment data indicate that some of the specifically social sectors such as education, healthcare, culture and others, by 2003 there were employed a significant number of people. For example, only in the sphere of education in Sofia municipality there have been employed 35.3 thousand people, and in the sectors of healthcare and social activities – 31.7 thousand people.

A significant budget has been provided yearly for the development and ongoing support of social activities and branches – both from the state budget (from the respective ministries' budgets) as well as from the municipal budget. The available information concerning only the municipal budgetary expenses for Sofia municipality indicates that over 1999-2003 there has been a significant increase of budget funds – from 43,8 million EUR (1999) or 19.1% of total budget expenses to 68,2 million EUR (2003), which constitutes 54.6% of total expenses of Sofia municipality.

In 2004 r. the share of central budget subsidy in the budget of Sofia Municipality was decreased down to 34.6%, which is 39,1 million EUR less than in 2003.

For healthcare and social assistance figures are, respectively – 41.2 million EUR (1999), i.e. 18.3% of the budget and 29 million EUR (2003), or 14.7%. The decrease in relative share of budget expenses for healthcare is due to the fact that part of pre-hospital costs has been covered by the Health Insurance Fund. Budget expenses for the branches from the tertiary sector are actually higher than indicated figures. The costs for vocational training, graduate education, scientific research work, centrally state-governed hospitals, theatres, national museums, art galleries, etc. are covered by the budgets of respective central state institutions, for which there is no available relevant information.

## **5.5 Business infrastructure**

The business-supporting infrastructure includes banks and other credit institutions, insurance companies, real estate agencies, customs institutions, regional development agencies, business

incubators, stock exchanges and specialized commodity exchanges, duty-free zones, fairs, specialized exhibitions and shows, and others.

The degree of development of business structure is measured by the number of employed people in respective branches and activities. The data on people employed in business-supporting activities during the period 1998 – 2003 indicate a tendency towards an ongoing and stable increase. In 1998, in the business-supporting activities there have been involved 74.5 thousand people, which in 2003 reached 95.9 thousand people, which is 16.8% from the whole working force in Sofia municipality. The significance of the business infrastructure in Sofia region is also demonstrated by the fact that the people employed in this sphere are about 54% of all people involved with business activities in the country, which is related to the localization in Sofia of HQs of all banks and insurance companies, customs and tax administrations and other business structures.

Financial and credit institutions' infrastructure includes commercial banks and non-banking financial structures (credit providing or broker). In 2003 in Sofia there were to be found the HQs and networks of branches and representative offices of the 29 licensed commercial banks, 6 branches of foreign banks and 4 mixed banks (Bulgarian and international participation). The biggest network of branches on the territory of Sofia municipality is of DSK Bank – 28 branches; Post Bank – 6 branches and 24 representative outlets in post offices; “Biochim” Bank – 7 branches, and others.

The insurance market also includes business-supporting institutions. In 2002, according to data by Insurance Control Agency, in Sofia municipality there were 32 licensed companies. The HQs of insurance companies are also in Sofia.

Tax administration authorities are also linked with the development of market relations and can be seen as an element of market infrastructure. The network of tax offices in Sofia city municipality incorporates sites that are located in the various districts of the capital.

The employment market incorporates units that are de-concentrated structures of the Ministry of Labour and Social Policy (National labour Service, respectively). These are the so-called Labour Bureaus. There are 9 such bureaus functioning on the territory of Sofia city municipality. In addition there are also two stock exchanges – the Bulgarian Stock Exchange and Sofia Stock Exchange.

There are three representative units of customs authorities in the capital city of Sofia: Central Customs Administration, Regional Customs Administration of Sofia, three customs offices and four customs bureaus. Sofia Commodities Exchange is the leading among all commodities exchanges, which also include the so-called commodity markets. The biggest among them are Trade Centre “Ilientsi”, Vegetable Market Exchange “Slatina”, Books Commodities Exchange, the Constructions Materials Exchange, the Metal Products Exchange and others.

Other important institutions that are of significance for the market infrastructure are the Bulgarian Chamber of Commerce, the Bulgarian Chamber of Commerce and Industry, the Bulgarian Supervision Institution, various advertising agencies, and others.

## 5.6 Labour market

### 5.6.1 Employment

Again, official statistics are able to only show trends, rather than absolute values. To arrive at optimum verisimilitude, one is bound to compare such figures to other sources, such as polling agencies, professional associations and private information providers.

The official average annual number of the employed people in the Sofia municipality in 2003 comes to 569, 432 people. This is 24, 891 people more than in 2001 – an increase of slightly less than 5 % over two years.

*Sector structure of employment.* The employment of the population in the metropolitan municipality is characterized by great levels of participation of the employed in the tertiary (services) sector. The figures show that 75.6% of the total number of the employed people are occupied in the branches in the tertiary sector of the region in 2003. As numbers and percentage of the employed, the tertiary sector dominates heavily over the other two sectors (manufacturing and agriculture). Services have simply swallowed all labour released from manufacturing and soaks up all newcomers. The service boom is traceable to the early years of the transition. A number of service activities developed after 1990, such as: finances, credit, insurance; investment services; real estate operations; communal and public utilities and others, as well as in trade, transport and others.

This level of employment in the services sector has not increased during the last three years, in spite of the growth in the work force. The main reason for this is increasing employment in the manufacturing sector, which is rapidly recovering from the aftermath of the 1990s economic dislocation.

The percentage of the employed in the private sector has increased from 3.9% in 1990 to 71.7 % in 2003 and continues to climb. The tendency for increase of the part of the employed in the private sector in the Metropolitan municipality coincides with that of the rest of the country.

In the public sector, however, the percentage of managerial, analytic and applied specialists is very high, and in 2002 they are two times more than those in the private sector – respectively 63.4 % and 31.3%. The opposite picture is observed in qualified workers, who form 6.8 % of the employment in the public sector, and 14.1% in the private, and also in workers with low qualification – respectively 6.4% and 10.7 %.

The employment in the capital city in terms of gender equality shows that for the observed period the correlation between employed men and women is changing to a little extent, with the percentage of men employed in 2004 being 50.8 %, and that of women – 49.2%. Opportunities for male employment increase due to the ongoing boom in traditional male industries, such as construction, transport and some of the branches of manufacturing industry.

*The age structure the workforce.* The age figures for the employed, about which there is statistical information, show that the percentage of the employed according to age groups is as follows:

- from 15 to 24 years of age – 7.8 % out of the total number of employed;
- from 25 to 49 – 72.4%;
- over 50 – 19.8 %.

*The educational structure* of the employed indicates that high employment levels go together with high education levels. The biggest percentage in the socio-economic complex of the capital city are the employed with higher education degree – *university and college education*. In 1998 these were 38.31 % of the total number of employed, in 1999 they were 37.12%, and in 2002 – 44.6%. This percentage is two times higher than in the rest of the country.

The percentage of labour force with low education level in the region is not high. In 2003, the working people with secondary, elementary and lower education was just 4.7% out of all employed. For comparison, it can be pointed out that this percentage for the country is 16.8%, in fact 4 times higher.

The data for the dynamics of the educational characteristic of employed in the region show that in comparison to 1998, there is a tendency for decrease of the number and the percentage of employed with lower education status. The percentage of the employed with secondary and lower education is decreased almost two times – from 8.1% (1998) to 4.7% (2002). The indicated data show the presence of high-quality characteristics of the labour force in the capital, which have to be efficiently used.

### 5.6.2 Unemployment

The dynamics in the number of unemployed and in the unemployment level during the period 1998-2004 indicates a tendency of increase during the first three years, while after 2001 a new increase had started, followed by a drop. The reasons for that are in the consequences from the structural reform in the real industrial and tertiary sector, which was carried out in 1998-2000.

Officially, the number of the unemployed in the Metropolitan municipality in 2004 was 59.4 thousand people, forming an unemployment coefficient of 10.4%. According to this index the region has the lowest unemployment coefficient among the other 27 regions in the country.

Here again, access to representative polls is necessary in order to obtain a fuller picture. It is to be expected that, when asked by officials, people working in informal contexts would claim to be unemployed, in this way putting up the unemployed figures. Polls show that the unemployed are in fact considerably fewer (under 48,000) than the official figures, and the workforce – considerably bigger (some 800,000 full-time, plus 280,000 part-time, rather than the claimed total of 569,432) than any census can reveal. Simple calculations reveal a real unemployment rate of slightly more than 4 % - something which tallies with the everyday experiences of both employers and employees.

The registration period of the unemployed in the labour market office is short – about 5 months, which is two times shorter than the average for the country. The percentage of the long-term unemployed (16%) is the lowest in the country.

Sofia lacks the usual discrepancy, in terms of unemployment, between villages (high unemployment) and urban areas (lower unemployment). The structure of the unemployed according to their place of residence (city-village), as well as in the number of the unemployed and in the unemployment coefficient is not laden with considerable disproportions. The reason for this is that in the capital city a big part of the population from the villages and the other three cities in the region find a job.

*The gender structure* of the unemployed in the Metropolitan municipality has more different parameters than the average for the country. The percentage of the unemployed women in the capital city is nearly 8 points over the average for the country. There is a slight tendency of decreasing the number of the registered unemployed women. With the registered unemployed men, the opposite tendency is observed. Their number is increasing, which leads to improvement of the structure of the unemployed in terms of *gender equality*.

*The age structure* of the unemployed in 2003 is changing inconsiderably in comparison to that in the previous years. Essentially, the tendency the predominant group of the unemployed to include people between 30-44 years of age is preserved. The unemployment among young people (includes the unemployed up to 29 years of age) is also one of the problems at the labour market in the region. In 2002 it formed 22.4 % out of all registered unemployed people. The municipality implements policies as regards the group of the unemployed over 50. These are 30% of the registered unemployed in the capital municipality and, with the ongoing gradually increase pension age, it is expected that their percentage in the next years will increase.

*The educational structure* of unemployed in the Metropolitan municipality shows that a considerable part of them have high or higher education. According to figures of the Regional service of employment – Sofia, in the region among the unemployed those with high and vocational education make up 36.2 % of all unemployed.

The conclusions can be formulated thus:

- Employment in Sofia is the highest in the country. This is a result of the presence of all the branches and activities of the economy;
- The percentage of the employed in the services has rocketed, which is a step to employment structures, characteristic for countries with developed market economy;
- There is a tendency of reflux of the employed in the state sector and their movement to the private sector;
- A characteristic feature of the labour force (employed) is the biggest number of the people with high degree of education in comparison to the rest of the country;
- The unemployment in the region is negligible;
- A mis-match of skills (required/offered) nevertheless exists in Sofia, as well as the rest of the country. While many people with higher education, having however no marketable skills, are unable to get the jobs desired and move down the professional and qualification scale, employers continue to complain of numerous unfilled vacancies for managerial positions;

## 5.7 Income

The main components forming income of the population are *the salary*, *pensions* and other social transfers (maternity pay, social aids and others), *domestic economy and entrepreneurship*.

The dynamics in the development of these components show that in the last 5 years in the Metropolitan municipality the percentage of income formed by salary is decreasing – from 55.3% (1998) to 51.1% (2004).

This clearly expressed tendency, compared to the tendency for increasing the absolute average annual amount of the salary – from 1,292 EUR (1998) to 2,167 EUR (2003) shows that the percentage of other income sources is increasing.

Notwithstanding the decreasing significance of *the salary* as a source of income for the households, it is still keeping its leading positioning the income of the household budgets. The average annual amount of the salaries in the particular branches of the socio-economic complex varies within broad limits. In 2003, its lowest level is in agriculture, hunting and fishing - 1,330 EUR, while the highest is in the branch of financial services and real estate deals – 4,485 EUR.

*Pensions* play a significant role as a source in the income of the households in the Sofia municipality. In the last years (1998-2004) they have kept their importance in the household incomes – about 23-25%. The average annual amount of one pension in the region is 638 EUR (2003). The increase in the amount of the pensions for the examined period is much smaller than that of the salary. For the period 1998- 2003 the average salary has increased with 60%, while the pension increase is 50%. The other basic income sources for the households in the region – domestic economy and entrepreneurship don't show significant dynamics.

This means that the income growth is due mainly to the increase of the amount of the average salary and the increased amount of the pensions.

The percentage of food expenses in the households is still too high. This is an indication for not very high standard of living of the population. In comparison to the figures of the other regions and the average for the country, in the Metropolitan municipality there are a little bit higher percentage of expenses, connected with satisfying intellectual needs and necessities of spiritual character.

## 5.8 Public health

*The number of medical specialists* in the health institutions, functioning on the territory of Metropolitan municipality in 2003 comes to 6, 171 people, and that of dentists – 1, 562 people. In the last years (2000-2003) there is no considerable dynamics in the number of physicians, which remains the same – 6, 131 (2000) and 6, 171 (2003). In 2003 one doctor attends 196 people, while one dentist – 774 people of the population in the region. The number of *dentists* is definitely decreasing – from 1, 781 (2000) to 1, 562 (2003).

The leading national hospitals and medical centres are located in the city of Sofia. This includes multi-profile hospitals for active treatment (MHAT), as well as specialized hospitals for active treatment (SHAT). After 2000, the number of hospitals in the region is the same - 46. In this period there is a tendency of decrease the number of hospital beds –from 10,305 (2000) to 9,044 (2003). The reasons for this are in the policies pursued for intensifying the preventive activity and for decrease the hospital stay. Thus a higher turnover of the hospital beds is achieved, which is a contemporary tendency in hospital care.

The infrastructure of public health of the region at the end of 2003 includes 46 medical institutions for hospital care with 9,269 beds, including 10 multi-profile and 32 specialized hospitals with 9,004 beds and 4 dispensaries with 40 beds. Some of the specialized hospitals are of national importance and serve the population of the country.

At the end of 2003, the infrastructure of the public health in the Metropolitan municipality includes 268 medical institutions, mostly outpatient clinics.

## 5.9 Housing and residential properties

According to March 2001 census data (population and residential property statistics) the housing situation is as follows:

- Total dwellings in Sofia municipality: 516 502;
- Total dwellings in Sofia city: 468 947;
- Total dwellings in Sofia surroundings: 47 555;

The predominant percentage of dwellings is brick buildings. There are a significant number of prefabricated buildings in the city – 42%. The structure of housings in the city is quite unfavourable in terms of the number of rooms in one apartment: 20% are one-room apartments (according to current nomenclature, these are studios) and 40% are two-room apartments.

The ratio housing / residents is the following:

- Average ratio for Sofia region: 2.27 residents per dwelling;
- Average ratio for Sofia city: 2.34 residents per dwelling;
- Average ratio for Sofia surroundings: 1.64 residents per dwelling.

Diversification of demand has also led to the appearance of a new kind of residence – the “enclosed”, environmentally-friendly residential areas, designed for the upwardly-mobile young families. These are mostly situated in the south, and increasingly enter the foothills of Mount Vitosha.

It may seem that there are few housing problems in Sofia city municipality, but there are disturbing processes under way that bring about deterioration of residential properties and housing environment, growing deficits and higher territorial disproportions.

*Degradation* of the housing environment is particularly alarming due to the fact that in the next 20 years both the city and, to a significant extent, the surrounding zone, will mostly rely on the current residential properties available. These properties, however, undergo constant

degradation because of the slow process of replacement of its depreciated parts, the lack of basic maintenance practices and the fact that 205,000 dwellings are in prefabricated buildings. The same housing degradation can be observed in the villages around Sofia, where people live in buildings not renovated in several decades.

Current shortages relate to:

- Total dwelling area per resident (22 – 27 square meters, whereas European standards require 40 square meters);
- Number of rooms (there is a serious shortage of dwellings that have 2 or more rooms (these comprise only 40% of all housing in the city).

These shortages are due to a number of economic, managerial and town planning-related reasons:

- Housing availability is more and more limited;
- The State has been neglecting its economic responsibilities to residential properties (when it comes to providing dwellings to disadvantaged people, as well as securing proper infrastructure);
- Budget allocations for housing are insignificant;
- Town planning has slowed down and covers smaller and smaller parts of the city while at the same time the inadequate regulative framework does not provide enough opportunities for diverse dwelling formats, including a higher percentage of one-family houses.

The public sector as represented by the State and the municipalities does not have a clearly formulated housing policy and thus there is no such state policy currently in force. There are no well-developed housing legislative system and relevant regulatory framework. No state or municipal institutions have been established for the governance of this sector. There are no relevant non-government structures either. There are no specific economic entities to regulate the acquisition and management of land resources and the subsequent building of infrastructure and public utilities so that these lands become attractive for housing projects. There is no efficient management of condominiums, which comprise about 70% of all residential properties.

There are also problems at the level of regional structures:

- Serious territorial disproportions and precarious irregularity in terms of space utilization;
- Danger of over-urbanizing of certain areas and related degradation of natural environment;
- Contradiction between attractiveness of certain suburban territories with respect to inhabiting and housing, on the one hand, and their inefficient infrastructure maintenance and difficult access for transport, on the other;
- Critical, and in some cases disastrous economic deterioration and depopulation of some suburban areas.

The problems at the level of individual residential units of the compact city are strictly area-specific. The most noticeable concerns are those of the downtown area. Most old neighbourhoods are crumbling (especially those to the north of *Todor Aleksandrov*

Boulevard): what we see is dilapidated and badly maintained buildings, deteriorated infrastructure and neglected environment.

Residential areas are generally characterized by lack of functional, communicational and special integration within the current city structure. The technical infrastructure has not yet been finalized; public services networks have not been efficiently developed; underground parking lots are still to be built; there have not yet been designed urban plans for a number of large lots that continue to be neglected and not maintained – all these aspects paint a picture of a non-attractive and depressing housing environment.

Serious structural-planning problems were created as a consequence of restitution of land plots (frequently, between blocks of flats) which brought about a co-existence of privately-owned housing with municipal ownership of the land. This makes it very hard to organize any type of maintenance of open spaces. Also critical is the situation of the prefabricated buildings, because of their deteriorated operational, heating technology-related, sound-absorbing and aesthetic qualities and the depreciation of engineering installations.

The problematic neighbourhoods (ghettos) are mostly populated by the Roma minority. They are to be found not only in some districts of the compact city (the districts of Hristo Botev, Fakulteta, Filipovtsi and the north-western part of the central area) but also in the towns of the active impact zone (Dragoman, Slivnitsa, Kostinbrod, Bozhurishte, Svoje and Elin Pelin). The style of living and the housing standards of these neighbourhoods are unacceptable for a European capital. These areas need a general restructuring initiated by the public at large and taking into account their social, economic and demographic specifics.

The so-called “Vitosha Mountain Foothills”, i.e. the “green” southern parts of the city experience serious structural problems as well. Although this is the zone with most intensive market activity, the lack of an adequate sewerage system and water-supply capacity, as well as hectic market developments, threaten to degrade the positive aspects of this residential environment.

The so-called “Northern town” also presents specific problems within the compact city as such. This general zone is in an unprivileged position compared to the “Southern town” in terms of transport accessibility, environmental conditions, market activity, price levels, social and economical profiles and other factors. An important prerequisite for doing away with this general zone discrepancy is to eliminate the very serious pollution caused by “Kremikovtsi” metal giant and the conversion of northern industrial areas of the town. A good chance for elimination of the discrepancy in the development of the Northern and Southern zones is the building of the collective trans-European transportation corridor, which will be passing to the north of the city and in this way will represent a northern axis of economic activities linking the two zones.

Alongside the problems of the compact city, the towns in the suburban area and the active impact zone there are also issues that need a solution and that are specific for the small city:

- A process of replacement of permanent residence by temporary (seasonal) residence;

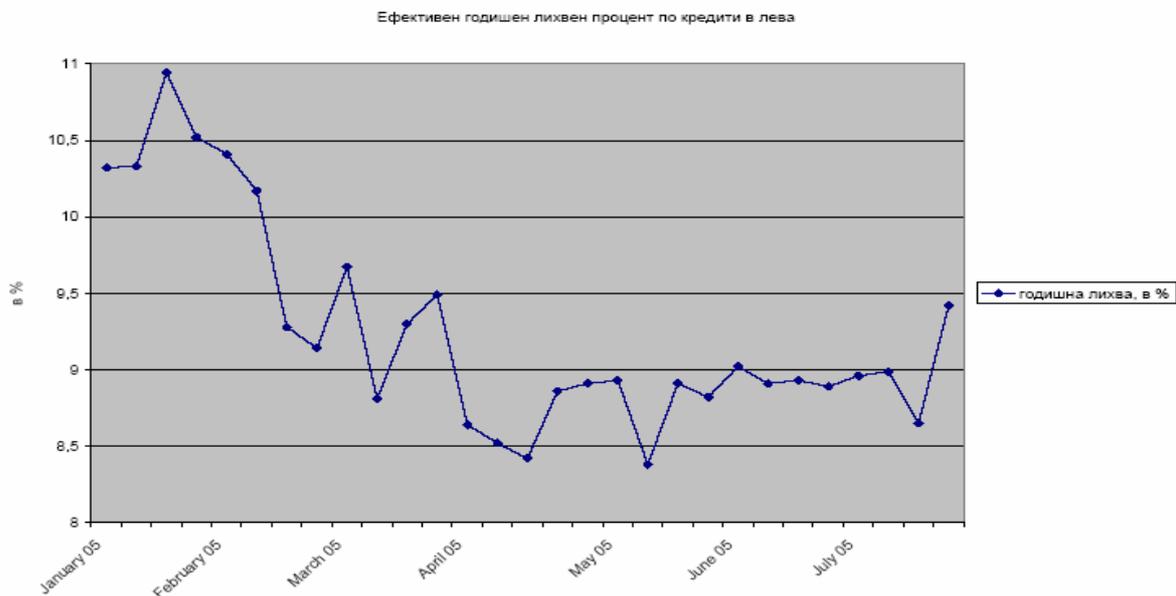
- A replacement of traditional architectural profile and functional and spatial specifics of these city that exhibit a potential for rural tourism development.

Given Sofia's historic development path, it is highly unlikely that solutions in the sphere of housing will emerge as the result of public policy. The only evidence of some policy impact since 2005-6 has been the start of renovation and insulation of the old pre-fabricated concrete housing estates, given an impulse by a government-backed scheme to subsidise such works up to 20 per cent.

The conditions exist, on the other hand, for solutions provided by private enterprise. Under the impact of economic growth and migration into Sofia, housing prices doubled between 2003 and 2006 as competition in the banking sphere resulted in increasingly attractive mortgages.

Such trends have attracted developers, who are now increasingly active precisely in the crumbling central city districts (housing stock from the early 20<sup>th</sup> century) that analysts had long been seeing as examples of failed public policy. As a major new wave of incoming investment and employment gathered, following Bulgaria's entry into the EU in January 2007, such developments are likely to continue apace.

**Figure 5.1 Dynamics of interest rates on housing mortgages**



Source: Bulgarian National Bank

## 5.10 Public transport

The transportation system of the capital is well-developed, but continues to be overloaded at peak times; and is an important part of the national transportation network. In Sofia there are in operation all types of transport with the exception of water transport.

The underground railway (metropolis) is the backbone of public transport, although there are to date only 8 stations along a single line, linking the western suburbs of Lyulin, Obelya and Zapaden Park to the centre. There is envisaged the building of two main diagonals: *Obelya Residential District-Centre-Mladost 4 Residential District* (with a detour to Sofia Airport) and a second diagonal: *Nadezhda Residential District-Center-Manastirski Livadi Residential District*.

The underground system will have a number of main connections with the railway network in the vicinity of Sofia Airport, which provide an opportunity for integrated operation of underground and railway. The current level of development of the underground infrastructure does not permit it to implement its functions in a full-fledged manner, although the percentage of underground passengers is gradually on the rise.

From 2005 on, the new Mayor, the most popular individual in the country Boyko Borisov pushed ahead with the underground, expecting to add another 8 stations to the current 7 by 2009.

The tramway system has been developing and being restructured to implement the functions of transporting passengers to the metropolis and at longer distances. New routes have been constructed and others have been closed down as their functions will be taken over by the metropolis. The overall structure of the tramway network takes into account the development of the underground.

There are still many people who travel by bus. Bus transport will be developing mostly for serving the peripheral areas. Trolley-bus transport will evolve through expanding its lines network as its main functions are also supporting to the main transportation means in the city. However, being an environmental-friendly mode of transport, the trolleys will be probably substituting some bus lines that have a full 24-hour passenger load (mainly the ring lines). Less and less people use public transport compared to those with cars. The introduction of more comfortable public transport vehicles has partly improved the quality of transportation services although according to 57% of respondents the transportation services are not efficient enough.

### 5.10.1 Railway system

Sofia is the most important railway centre in Bulgaria, as it is responsible for the operation of the connections with the interior of the country alongside 5 directions. There have been built 8 railway stations (*Central Station, Sofia North, Ilientsi, Poduene, Iskar and Zaharna Fabrika*)

together with respective engine and wagon depots. Sofia is also the administrative centre of Bulgarian State Railways Company.

Compared to the average national situation, the railway infrastructure of Sofia is comparatively well developed. However, compared to other European cities this is a more quantitative than qualitative development. There are 3 times heavier freight transport going through Sofia railway station than the amounts the region itself receives and sends (consumes and produces). The relative ratio of transit cargo has been increasing. While Sofia “provides for” the railway network about 3-4% of overall traffic, 20% of transit railway traffic for the whole country (loaded in-shore or off-shore) goes through Sofia hub.

These facts define Sofia region as a railway transit centre and are one more proof of the strategic location of Sofia city and its locality, which has not been exploited efficiently as yet. It is necessary for the railway network to be more oriented towards providing around-town and in-town transportation services.

### *5.10.2 Bus system*

The current state of bus stations is unsatisfactory. Some of them should be reconstructed anew and equipped in a way that corresponds to EU requirements. The goal of these modifications is related towards the creation of a common transportation system, the components of which will complement each other and function harmonically and in synchrony. It is necessary to close down some of the present inner-city bus stations so that the respective lots are vacated for more attractive activities. These bus stations will be moved into the city periphery and in the immediate vicinity of underground stations, railway stations and tram stops so that connections are established with the public transport system, railway network and the underground.

## **5.11 Telecommunication**

The telephonic network is a major component of the information and communication infrastructure of Sofia region. The whole territory of the region is incorporated into a unified telephonic network, i.e., subscribers utilize services under equal conditions. It is a mixed analogue-digital type of network. However, a process of replacing the analogue stations with digital ones has been under way for some time already.

The total number of subscribers is about 720,000, which represents a telephonic density very close to the upper permissible level. Almost 40% of all subscribers are still integrated into duplex (shared) telephone lines. There are in use about 12,000 public telephones of two types – with coins and with prepaid cards. There are about 75,000 more applicants in the waiting list – most of them are from the city peripheries.

The digitalization rate is measured by means of the following indicators:

- Digitalization of stations - 50%
- Digitalization of connection network - 80%
- Digitalization of connections with the national and international networks - 100%.

The disproportion between installed capacity and utilized capacity is a result of the created conditions for dismantling analogue capacities and replacing them with digital ones.

There is in place an Optic Network, which interconnects all production and technologic buildings of the Bulgarian Telecommunications Company as well as the points of agreed interfaces with other licensed operators and big corporative clients.

Since January 2003 there has been undertaken a liberalization of voice telephony and telecommunication infrastructure, which provides an opportunity for new operators' participation and establishing of a competitive environment. Local authorities are those with the capacity – through various forms of partnership – to direct the interests of operators towards achieving of the strategic goals of the information and communication infrastructure.

The development of information and communication technologies has had a negative impact on telegraphic messaging. The functions of the telegraphic network of the Bulgarian Telecommunications Company (telex and teletype) have been losing their importance. Since 2006, there has been started a gradual replacement of current forms of telegraphic messaging by fax-messaging and specialized Internet applications.

The market of cable TV systems has been completely liberalized. This sector's development has been chaotic, tempestuous and unregulated. There have been issued about 40 licenses for projects related to providing cable TV services for Sofia Region. There are about 30 cable systems currently in operation. Total number of users is around 350,000. Some operators offer broadband Internet access, as well. Under the current situation the present cable systems cannot be regarded as a component of the perspective information and communication infrastructure.

The period after 1998 has been characterized by a rapid development of mobile communications. To date, three licensed mobile operators cover the territory of Sofia: Vivatel, MTel and Globul. During a period of almost 3 years "MTel" was practically a monopolist company, which allowed it – also on the basis of the indisputable technological advantages of the GSM standard – to achieve an exceptionally high development rate. The second GSM operator – "Globul", started with an aggressive policy and within a year also succeeded in obtaining a significant market share. Thus there was formed a "duopolistic" type of configuration, which led to high prices and lack of stimuli for modernization and, in particular, for providing higher-speed Internet services.

Numbers for Sofia mobile users are not easily available, but it is likely that mobile density is considerably higher than the national average (4.5 million of Bulgaria's 7.4 million people have mobile phones).

Internet access is a type of service where price and quality of service provision are main criteria for the degree of development of the information and communication infrastructure. The market in this sector can be defined as chaotic and unregulated. The Internet providers' approach is short-term – they are looking for a quick realization and speedy return on investment together with a large profit. There have been undertaken no efforts for

development of an appropriate infrastructure with adequate international connectivity (for example, international sites' access is 4 times slower than the access to national sites).

Sofia city-based subscribers are estimated at 120 – 150 thousand, of which about 70 thousand are households.

The widely spread cable TV systems are an important component of the information and communication infrastructure. A significant percentage of them are based on optical cable networks and have a potential to function not only as TV cable operators but also as alternative broadband Internet networks covering the whole territory of Sofia city. As an outcome of the liberalization of the information and communication sector, there are many more participants in the market, which requires of an efficient regulatory framework for introduction of clear and transparent rules for consumer protection.

## 6 THE “CREATIVE CITY”

### 6.1 Soft factors and indicators

Sofia team, following several discussions with LOPs, has grouped the “soft” factors in a way, which somewhat diverges from the usual approaches. Rather than trying to define the aggregate of “soft” factors by focusing on *creative industries*, we found ourselves focusing on *creative individuals*. In this sense, we broke decisively with the philosophical underpinnings of 20<sup>th</sup> century sociology, which defined people by what they *do for a living*; and tried to operationalise the observable “post-industrial” reality, in which people are defined by the *lifestyles they lead*.

Grounding this in Bulgarian reality, Sofia team defined as creative individuals people who not only work in “creative industries”, but also:

- “Lead more than one life at the same time”. Typical would be a software CEO who is also a concert musician; a cultural tour operator, who is also a recognised poet and so –forth. The idea here is that the “second life” is more than a hobby, but is rather a peer-recognised occupation.
- Do not stay put in one place – but are constantly on the move, and possess (or are striving to possess) a fully-fledged second home outside the metropolitan area.

Such individuals, we decided, are absolutely beyond doubt “creative” – they form the core of the “creative class”, with other, less clear-cut categories forming the shaded transitions to other social groups. A creative city would, therefore, beyond doubt have to serve the demands of this indubitable core.

So it was that, on top of classic “soft factors” (sub-cultures, ethnic mix and tolerance, environment, water etc.) we added some of the factors, connected with transport (usually seen as a “hard factor”), to the “soft mix” appearing below. Tourism we have also included into the “soft” category (and the list of “creative” industries”) because, while not creative in itself, by providing a colourful mix of strangers to the fabric of the city, tourism contributes very seriously to the formation of the creative environment that creative individuals demand.

**Table 6.1 Criminal statistics**

Total number of recorded crimes per 1,000 population	25.6281
Number of murders and violent deaths per 1,000 population	0.0733
Number of car thefts per 1,000 population	4.195

### 6.1.1 *Mobility matters*

The *transport-communication* system of Sofia is formed by the historical development of the city of Sofia, its location as an international crossroad of transcontinental and regional connections. Sofia is a unique crossing of four world transport lines and is determined for railway transit centre with strategic position. Economic turbulence between the mid-80s and the late 90s has, however, ensured that roads in and out of Sofia are still mostly degraded, with only the exits and entrances to the south being relatively painless, with comfortable exit roads leading seamlessly into a motorway. To the west, south-west and north, two-lane roads ensure congestion, while the ring road's reconstruction and widening, the first for 30 years, was started only at the end of 2006. During 2007-8, work is expected to begin on constructing motorways to the south-west and west.

The development of the transportation and communication system in Sofia region has been undertaken in such a way so that conditions are created for its interlinking with the European highway infrastructure. In this respect, it is necessary to interconnect this international corridors network with the transportation and communication network of the city and the region through a reconstruction of existing and building new connections.

*Air transport* is represented by the biggest airport in the country – Sofia Airport, as well as the airbases in Musachevo, Dobroslavtsi and Bozhurishte. The new Sofia airport parameters are in compliance with international standards for passengers' services, Class C, Category III, according to ICAO instructions. However, the current Sofia Airport, even with its second terminal opened in 2006, cannot operate as an efficient transcontinental and international airport and a new location is needed for an airport close to Sofia. The current one can still be used for national, some international and charter flights. The airbases in Musachevo and Dobroslavtsi will be used for sports activities – air-tourism, parachute jumping, etc.

*Roads and cable lifts to Vitosha Mountain* are a crucial factor for the environment-seeking creative individual.

Although among Europe's capitals Sofia stands out with the absence of a navigable river, it does, uniquely, possess a whole mountain – Mount Vitosha – as integral part of its municipal territory, forming its southern boundary. Together with the smaller mountains, ringing Sofia to the west, Vitosha provides a focal point for recreational activities. For the time being, what is on offer is highly un-imaginative – traditional hiking, walks and ski-ing in winter.

There are two main roads for accessing the Vitosha Mountain either with a car or by bus: the tarmac highway Boyana – Zlatni Mostove (9.5 km) and the highway Dragalevtsi – “Aleko” Tourist Lodge (14 km).

The public cable lifts that can quickly and easy bring tourists to the mountain are:

- Cabin cable-lift “Kniyazhevo – Kopitoto“;
- Two-seat, two-stage cable-lift “Dragalevtsi – Bhai Krastyo – Goli Vrah“;
- Cabin cable-lift “Simeonovo – “Aleko” Tourist Lodge.

In the vicinity of "Aleko" Tourist Lodge there are two more cable-lifts:

- Two-seat cable-lift "Romanski – Malak Rezen Peak", which provides services to skiers and tourists that go to Cherni Vrah Peak;
- Three-seat cable-lift "Akademika".

### 6.1.2 Education

Sofia is a recognized academic centre providing opportunities for acquiring all types and degrees of education available nation-wide.

Sofia municipality's educational infrastructure is of a significant scale, encompassing 306 academic institutions (general education schools, vocational schools, arts and language schools, colleges and universities, etc.). For the last six academic years, the number of academic institutions has not changed drastically but remained in the range of 306-308, of which the highest percentage (70.9%) is of general education schools – 217. Next in number come vocational schools - 65.

Private entrepreneurship has also demonstrated interest in the sphere of education. In 2003, there were 49 private schools, of which 32 provide general education and 17 – vocational training.

The national demographic crisis has also had a negative impact on the structure of education in Sofia City Municipality. It has brought about a decrease in the number of students in all types of school. At the initial stage, this might prove beneficial as it provides an opportunity for a general introduction of "one-shift" academic schedule in all general education as well as vocational schools. In time, however, it may turn out that the original infrastructure capacity is not exploited to the full due to the shrinking numbers of school students.

The capital city is also the biggest graduate studies centre in Bulgaria with a total of 19 universities and specialized colleges, which comprises 45.2% of all graduate schools in the country, among which the biggest state university – Sofia University "St. Kliment Ohridski" and the biggest private university – New Bulgarian University.

The significant role of Sofia in the sphere of university and college education is also proved by the fact that most of universities and specialized graduate schools here have national functions and long-lasting traditions. 44% of all graduate students in Bulgaria study in these Sofia-based universities. The total number of teachers in the graduate studies field is 10 127.

### 6.1.3 Environment

In terms of environment, the priority tendencies, which have central place in the policies for protecting the environment in the region of Sofia, are directed to decreasing the emission and diffusion of substances and accumulation of waste. Along these lines the following measures are being taken:

- to monitor the composition of the air constantly;

- the central heating systems in the city are completely changed from solid and liquid fuel to natural gas, which allowed a sharp decrease of the emissions of noxious substances in the atmosphere;
- a process of providing the buses in the public transport in the capital with catalysts has been started;
- several purification facilities are being built for waste water and for drinking water;
- together with the Ministry of the environment, strategies are developed for terminating or re-basing activities, which are aggressive as regards to the air, water and soil.

The environmental tasks, which are facing the region are in all possible directions – from storing and recycling the household and industrial waste and control of air pollution, to purifying industrial waste water and improving the qualities of surface waters. As a result of actions undertaken during the recent years, the ecological situation in the region of Sofia is considerably improved in spite of the exploding number of private cars, whose numbers have doubled in 10 years, and the frequency of use per car has tripled, according to the Ministry of the Interior.

Severe problems continue with the Municipality's inability to find a sustainable and long-term solution as regards the depositing of household waste, with the result that periodic "rubbish crises" hit the city as temporary waste storage terrains fill up. Given that funding is, unlike the 1990s, accessible, the waste-related problems are to do exclusively with bad management and lack of transparency in procedures, leading to incessant lobbying and blockages.

#### *6.1.4 Demographics, tolerance and multi-culturalism*

With religion running skin-deep, and with a history of living with other cultures and ethnicities, spanning a millenium, Bulgarians as a whole – and Sofianites in particular – are tolerant, open-minded and easy-going as far as cultural differences are concerned. Issues which usually form the basis of intolerance – such as abortion, homosexuality, religion, nationhood and ethnicity – have not produced sectarian divides or inter-group hostility. Bulgaria was the only German ally in Europe to refuse to deliver its 80,000 Jews to Hitler's concentration camps, and has been the only country on the Balkans to avoid the inter-ethnic civil wars of the 20<sup>th</sup> century.

Being better educated also helps, in the case of Sofia. The educational level of the Metropolitan municipality differs sharply from that of the other regions in the country. If the children under 7 are excluded, the percentage of the population with higher and college education is increasing up to 28.9% of all the population, compared to less than 20 for the rest of the country.

*Important factors for the concentration of high percentage of highly educated population in the Metropolitan municipality are the concentration of universities. The biggest research centre is also situated here, Bulgarian Academy of Sciences. The presence of institutional structures of high level (executive, legislative, judiciary), cultural and others, in which people*

with high educational qualification are occupied, also contributes to the high percentage of highly educated population in the region.

Sofia's districts show extreme contrasts in the educational level of the population. Five areas can be distinguished, in which the percentage of the population with higher education is on average 40 %, and for the central Sredets district it is 44%. A second group over the average level of the municipality is formed in the areas of Krasno selo (30.6%) and Mladost (25.1%). Nine more areas demonstrate the average level for the whole municipality, while four villages of the surroundings, Pancharevo, Novi Iskar, Kremikovtzi and Bankia, demonstrate from 4-5 up to 10% people with higher education. These villages preserve much of their original peasant characteristics and are still to become fully-fledged components of the metropolitan district.

With the distribution of the population with secondary education to a certain extent the regional differences are evened out. In the big concrete housing districts, the percentage of the people with secondary education is considerably higher, which is connected with the migrations of the 1970s.

The ethnic structure of the region, on the basis of the figures of the population census in 2001, presents a confusing picture. According to official statistics, Sofia is Bulgaria's most ethnically and religiously homogenous area, with Christian ethnic Bulgars representing 96 % of the population (compared to 85 % nationally). Second in numbers percentage after the Bulgarian is the ethnic group of the Romanies. It is only, officially, 1.5% of the population in the region. More compact communities of Romanies are created within the boundaries of the city of Sofia – in Fakulteta, Hristo Botev, Filipovsti residential districts.

Such figures contradict observable reality, in which the city has become home to compact and visible ethnic areas. Again, polls prove a much more reliable instrument (i.e. than official figures) for attaining the picture of reality, as regards ethnic composition. Besides the ethnic groups evident in the census, Sofia in fact also possesses: 93,000 migrants from Asia; 77,000 migrants from the Arab world; 70,000 migrants from Balkan countries (excluding Turkey). Turks prove to be up to eight times more numerous than in the official figures, being almost 50,000 in number. The Roma are also much more numerous, coming in (in representative polls) at almost 150,000. Sofia also has almost 40,000 migrants from non-Balkan European countries. It is estimated that up to half of those are Irish or British migrants.

The total of 480,000 non-ethnic Bulgarians in fact to be found in Sofia presents officials with a paradox. If the official figure of 1.3 million is to be taken at face value, then more than one-third (rather than the 4 per cent officially admitted) of those are in fact other ethnic / religious groups. The discrepancy between 37% and 4% is so drastic that it indicates an urgent need to re-haul the entire machinery of official statistics – before the implementation of the new Urbanization Plan begins, because otherwise work would be based on entirely false assumptions.

If, more realistically, one plots non-Bulgarian ethnic groups against polling agency estimates of the total Sofia population, one would arrive at an ethnic mixture in which 17 % are of non-

Bulgarian ethnicity or religion. This tallies with observable reality and also situates Sofia as a richly multi-ethnic environment. Estimates for London and Paris indicate 19 % ethnic minorities, which places Sofia in the league of Europe's multi-cultural metropolitan areas. Significantly, 80% of all Jews and half of all Armenians in the country live in the Metropolitan municipality and more particularly in its centre.

The explosive flowering of an “ethnic bouquet”, with the almost overnight appearance of completely new ethnic and cultural groups, is a pointer to a future in which Sofia begins to see itself as a multi-ethnic and multi-cultural metropolis.

### 6.1.5 *Culture and leisure*

There are numerous cultural institutes, churches and cultural monuments on the territory of Sofia City. Most significant cultural sites of structural character in Bulgaria are located in the capital: theatres, museums, art galleries, movie theatres, and so on.

*Theatre houses* (23 in 2000) are a major infrastructural component of culture. Most of them (19) are drama theatres but there are also two puppet theatres, one opera theatre, one musical theatre and a ballet theatre. Most theatre houses in Sofia are to be found downtown and on Rakovski Street. There are also private theatre companies that present their performances on different stages.

*The museums* on the territory of Sofia Municipality are mostly profiled – 21 out of a total of 30. The most significant among those are the National Museum of History, the Archaeological Museum, the Museum of Ethnography, the National Museum of Natural Sciences, the National Museum of Military History, and others.

The films shown at Sofia *movie theatres* are with subtitles in the Bulgarian language, which is very good for foreigners. Over the last few years, there have been built two cinema-complexes “Arena Cinema”, which are among the most high-tech movie theatres in Europe. The total investment was about 30 million euros. Each site is more than 17 000 square meters and incorporating 15 comfortable halls with a total capacity of 3024 seats and equipped with state-of-the-art cinematographic technology. Several other multi-screen cinemas have (one in the Palace of Culture underground passage, and the other in the “Sofia Mall”, opened at the end of 2006) drawn an increasingly large viewing public. These developments have, however, ensured the demise of the old-style “neighbourhood cinema”, with the one of the few survivors (Vlaykova) doubling up as a culture centre, and the other (Cinema House) being basically a viewing club for the cinema professionals and their entourage.

The most recurring component of the cultural infrastructure of Sofia City Municipality is the so-called *Chitalishte* (cultural centre). In the villages of the region the *Chitalishte* is the single compound entity of cultural activities. Out of the total number of 115 *Chitalishta*, 79 are in the capital city, 4 – in Novi Iskar town and 1 – in Bankya town.

There are also many *libraries* – by 2001, in Sofia City Municipality there were functioning a total of 512 libraries, most of which were at schools (211), at *Chitalishta* (116), at various

institutes (41), at universities (29), at healthcare institutions, and others. Among those, the National Library "St. St. Cyril and Methodius" has leading regional and nation-wide functions together with the Central Research and Technical Library and the Sofia City Library.

As regards more contemporary forms of leisure and *lifestyle*, such as eating out, nightlife and club life, and so forth, neither the official statistics, nor the data collected by professional organisations are to date exhaustive. Nevertheless, there are a number of estimates that can be formed, regarding the forms of leisure attractive to the creative class, on the basis of existing Sofia guides.

On an average week, in the city proper more than 200 profiled leading restaurants advertise their existence, coming on top of several hundred further more modest, neighbourhood-only establishments. On top of these come around 20 beer gardens and 80 to 90 up- and mid-market pizza houses, which numbers again come on top of more numerous still modest establishments.

More than 200 profiled night-clubs advertise in the various guides, servicing every possible music and ambience taste. In an average week, some 80 live music acts perform in the "live music" category of these clubs.

#### 6.1.6 *Tourism*

Tour operators expect that, during 2007, the total number of tourists visiting Sofia would for the first-ever time touch 2 million, becoming equal in volume to the tourist population of all Black Sea resorts put together.

The factors that have an impact on the development of tourism in Sofia municipality are:

- The place and role of the regional centre – the city of Sofia – in the tourist destinations. Sofia is both a point of arrival and of departure for the international tourists travelling by air when they come to the winter resorts that are in the active impact zone and outside it (Vitosha, "Borovets" and Bansko). Part of the transit tourists use the tourist infrastructure established in Sofia region;
- The economic functions of the capital are an important factor for the development of business tourism. Another relevant factor is the degree of development of the various in-sector branches that provide catering services, well-educated and qualified human resources, network of so-called "entertaining industry" sites, institutional activities that take care of the security and tranquillity of tourists, etc.;
- Availability of diverse and high-quality tourist resources. Sofia municipality possesses natural – geographical and cultural – historical resources that can easily compete with those of the leading tourist and resort conglomerations in the world. The same goes for the rich cultural and historical heritage: the "Serdika-Sredets" Reserve, the Boyana Church and the Borisova Gradina (Boris's Park), which are models of park and garden landscape artistry, as well as the numerous monasteries from the so-called "Sofia's Mount Athos" and others;

- The fact that there are protected areas in Sofia municipality, which are close to the Nature Park of Vitosha with its two reservations – “Torfeno Branishte” and “Bistrishko Branishte” as well as the natural sights of the Boyana Waterfall and Boyana River, the Waterfall of Samokovishteto on the river of Boyana, the “Duhlata” Cave (the longest cave in Bulgaria), the Pyramids of Katina – earth pyramids in the locality of the village of Katina, the locality of “Golemiya Dol”, “Vrana” Park – a park of garden and landscape art, etc.;
- The already built tourist infrastructure and prepared personnel for the sphere of tourism that are available in the region and others.

One of the criteria defining the status and place of tourist sector within the overall social and economical structure of Sofia region is the number and relative share of people employed in this sector. Data for 1998 indicate that there have been 10,415 people employed in Sofia municipality in various tourist-related fields, hotels and restaurants (minus the self-employed people). In 2003 their number increased to 21,456 people, which is an almost double increase.

Some idea about the tourist interest towards Sofia and Sofia municipality and about their position in the overall structure of tourist destinations in the whole country and in the South-Western Planning Region is provided by the data on number of tourists, number of beds per day and number of accommodations. The statistic information about 2003 indicates that in Sofia municipality there are 62 accommodation places, of which 57 are hotels and 4 are hostels. The number of beds in all accommodation places – hotels, motels, tourist hostels and others - is 9,884, of which in the hotels – 8,949, in motels – 543, and in hostels – 374 beds (279 of which are in the four biggest lodges) and so on.

In all the accommodation places in Sofia municipality there have been a total of 976 thousand accommodations (7.8% of the overall number for the whole country), of which 539 thousand were accommodated foreigners. The comparison between available beds and number of accommodated people indicates that in Sofia municipality, which provides 6.5% of all available beds in the country, there have been accommodated 14.0% of all tourists and this relative share is higher when taking into consideration the foreign tourists – it is 17.1%.

The comparison between available beds and number of accommodated people indicates a certain shortage of beds in hotels. The tourists who spent the night in Sofia municipality registered an average of 2.14 beds-per-day per person. This means that the available accommodation is used for business activities. The analysis of the data in accordance with the listed indicators that characterize tourism in Sofia municipality during the period 1998-2003 indicates a tendency towards increase of the means of accommodation (from 27 in 1998 to 62 in 2003) as well as of the number of nights spent from 656 thousand in 1998 to 976 thousand in 2003.

Data show that in 2003 the accommodations of foreigners were more than those of Bulgarians, while in 1998 it was the other way round.

Apart from the city of Sofia itself, other tourist centres in Sofia municipality are *the town of Bankya* and *Pancharevo*.

## 6.2 Creative / knowledge intensive industries

Again almost by default, by virtue of being the capital city and gateway to the economy, Sofia has become the creative centre of the nation. Whereas other cities continue to lead in terms of visual art (Plovdiv), arts and crafts (Gabrovo, Tryavna) and music festivals (Pirin area for folk, and the seaside cities of Burgas and Kavarna for rock'n'roll), Sofia has been from the start the hub of the new creative undertakings typical for the 21-st century.

The creative industries in Sofia comprise a large variety of fields, such as advertising and marketing, broadcasting, film industries, Internet and mobile content industry, music industries, print and electronic publishing, and video and computer games, to the traditional fields of visual arts, performing arts, museums and library services. This sector is increasingly important from the economic point of view representing already a leading area of the economy Sofia, as Bulgarian capital, with significant values of annual growth rates. Also, the creative sector could bring a significant contribution to the knowledge-based economy as it is knowledge and labour intensive and fosters innovation, with a huge potential for the generation of employment and export expansion.

The prevalence of "types" of individuals likely to be engaged in creative work can be seen by analysing any national / Sofia representative polling data, provided by reputable polling agencies. The pointers for 2007 are clear enough (data provided by MarketTest Ltd.):

- there are in Sofia twice as many (42%) people with higher education in the workforce, compared to the national average, and three times fewer people with basic education (8 years and less school)
- Sofia's workforce has 1/3 more owners of businesses, three times the number of managers and twice the number of self-employed in comparison with the national average
- Sofia has 1/5 greater proportion of people involved with culture and science than is the national average, 1/3 more people working in tourism, double the proportion engaged in banking and finance, double the proportion of employment connected with the arts, and almost double the proportion engaged in trade and services; it also has 50% more people involved in software than is the national average
- more than 60 % of Sofianites get more than the minimum wage, compared to 39% the national average; conversely, the minimal wage and under is admitted to by less than 11 % of Sofianites, compared to 24% for the country as a whole.

In terms of the industries themselves, as is to be expected (given the sorry state of statistics in this country), it is impossible to reconstruct the "map" of creative industries in Sofia out of government-related data. In order to attain a realistic picture, we have based our calculations on the most popular business-related web-site [www.catalog.bg](http://www.catalog.bg). We take the resultant outcome as close enough to reality because of the interplay of two factors:

- the businesses registered in the site are likely to be functioning, rather than simply registered with the authorities, but in reality inactive (such are the majority of Bulgaria's firms)

- these businesses are also certain to be “legitimate” (i.e. not submerged into the “gray economy”), because otherwise they would avoid appearing on the authorities’ radar screen.

The results for Sofia, as a proportion of the national aggregate, clearly point to the emergence of a “creative city”:

- 57% of all Bulgarian gardening and landscape companies are in Sofia
- 52% of all Bulgarian engineering companies are in Sofia
- 49% of all Bulgarian design companies are in Sofia
- almost 50% of all Bulgarian advertising companies are in Sofia
- 40% of all Bulgarian printing companies are in Sofia
- 42% of all Bulgarian fashion design companies are in Sofia
- 50% of all Bulgarian architectural bureaux are in Sofia
- 55% of all Bulgarian antique dealers are in Sofia
- 86% of all Bulgarian music companies (including shops) are in Sofia
- 30% of all Bulgarian cinemas are in Sofia
- 80% of all Bulgarian publishing companies are in Sofia
- 57% of all Bulgarian software companies are in Sofia
- 65% of all Bulgarian hardware companies are in Sofia
- 49% of all Bulgarian radio companies are in Sofia
- 57% of all Bulgarian TV companies are in Sofia
- 59% of all Bulgarian office supply companies are in Sofia
- 54% of all Bulgarian computer service companies are in Sofia
- 70% of all Bulgarian insurance (and 78% of life insurance) companies are in Sofia
- 100% of all Bulgarian market research companies are in Sofia
- 69% of all Bulgarian human resources / training companies are in Sofia
- 100% of all Bulgarian information agency companies are in Sofia
- 98% of all Bulgarian magazines are published in Sofia
- confusingly, less than 6% of Bulgaria’s R&D companies are in Sofia, but since research takes place primarily in Universities and the Academy of Sciences, when added up the figures would again be in the region of 90%.

It is obvious from this data that, on the basis of legal and functioning companies, the bulk – by far – of creative industry is concentrated in Sofia.

Staying with the same data, we see that all of these companies, taken together, form just over 20% of all companies active in Sofia. Although not conclusive, this points to a very serious presence of creative and knowledge intensive industries in Sofia – and that data does not take into account more traditional indicators, such as educational institutions.

### **6.3 Challenges**

Super-creative, compared to the national average, Sofia may be, but it needs to face the new competition, in which it finds itself particularly after EU membership (2007). While unarguably the national leader, the city has now found itself in fierce regional competition, setting itself against powerful competition from similar cities, such as Athens, Bucharest,

Budapest and Zagreb. This new reality will expose the in-built limits to Sofia's ascendance. "Creation out of chaos" – free reign for private initiative against the background of weak public policy – has worked well as far as national leadership is concerned. For the future, however, concerted policy will be needed if Sofia is to be internationally competitive. While the felt need for such policy is in existence, the entire development path of the city since the 1940s militates against this. If public policy is to appear and be successfully implemented, Sofia will confront the need to break with tradition and engage in active policy-making and implementation.

The key requirements for continued success include the following:

- New ways of mapping. New forms of local research and monitoring are needed to define local aspirations, desires, actual and potential problems and trends.
- New ways of describing things. Descriptions of problems, solutions and ambitions may make more sense if the old vocabulary is cleared away and less jargon used. The language of traditional geography and urban planning is increasingly inadequate to identify resources such as atmosphere, the quality of public and social life, cultural vibrancy and other characteristics of the 'soft infrastructure' of places.
- New forms of research and development. Private sector businesses would die very quickly without an active research and development budget. Sofia city government should encourage experimental and pilot projects. Failure should be tolerated, and analysed in a critical but constructive way.
- New selection processes. These must be put in place to select, exploit and evaluate ideas for the future of the town. Making these ideas public at some stage is vital. This could happen in the same way as ideas and projects for new buildings and public spaces are made public through exhibitions following architectural and design competitions.
- Removal of obstacles. The various structures and bureaucracies which prevent or discourage creative thinking should be dismantled or at least neutralised.
- Orchestration. The tempo and style of pulling ideas and actions together is not that of a perfectly rehearsed symphony, but more like that of a jazz jam session. Innovation and improvisation are all-important to the creative result in Sofia.
- Sense of direction. There must be a strategy which provides impetus and encouragement, but leaves the city space to develop naturally as well.
- Monitoring. Different forms of monitoring must be put in place to check on progress and enable cities to share and learn from their experiences. Situations may be different, but there is no reason for Sofia to have to reinvent the wheel.

Even the most cursory evaluation of development plans and activities, such as they are, since the late 1990s reveals that urban planners continue to think in terms, traditional for the second half of the 20<sup>th</sup> century. Such an approach places excessive emphasis on "hard development" factors and continues to conceptualise the urban dwellers in the classic modern categories. Sofianites are seen as people who are what they work, where they live and what they do on the week-end. There is an obvious failure to internalise the thinking in terms of "the creative class" that is supposed to bring in the high-value activities connected with the "knowledge economy".

Planners seem to be convinced that people work either industrial, or administrative jobs, come home at the end of the working day and take walks in the park during the week-end. The idea that modern urban dwellers of the creative kind define themselves above all in terms of the lifestyles they choose to lead – and require a city capable of satisfying the demands arising out of the chosen lifestyles – is foreign to urbanization thinkers. Their ideal type of urban dweller is the 20<sup>th</sup> century producer of low value, rather than the vastly more complicated creative type of the 21st century, playfully producing high value in new professions.

For this reason, urban planning does not at all focus on “creative class” themes such as: ethnic and cultural diversity; water-related leisure; various kinds and grades of green areas; creative housing and so forth. In so far as such developments do take place, they are the result of private initiative and follow the set development path of “creation out of chaos”.

The unprecedented professional, mental, cultural and geographic mobility of the creative class – defined by the Sofia team LOPs as “individuals who lead more than one life at the same time, and tend to be existing in more than one place concurrently” – is also something which figures only incidentally in urban planning. At the very basic, this kind of mobility requires a more dispersed and diverse city, linked with an efficient transportation infrastructure, and providing the opportunity for painless and rapid exit to, and entry from the rest of the country and the world. Whereas isolated elements of this approach do exist in the planners’ minds, they have not conceptualised such elements as necessary components of a coherent system to deliver to creative people the conditions that they require, in order to follow their chosen lifestyle and thereby – produce more high value in their work.

The absence of sensitivity to the problematic of the “creative class” is the fundamental defect of Sofia’s governance. Over recent years market forces have ensured, in a largely policy-free environment, that the creative class and its artefacts have congregated on Sofia. The further cultivation of this resource requires, however, targeted policies that continue to be unavailable.

## 7 PLANNING FOR THE FUTURE

### 7.1 Overview

The city of Sofia will continue to play the role of an economic centre of Bulgaria. It is necessary that the city uses the opportunities for localization of activities at a subsequent stage in view of the necessity for making more environmental-friendly the economic structure and the development of productions that have a higher added value. The implementation of such a policy depends on the regional and municipal local authorities, which need to propose a strategy and accompanying measures for an adequate and novel structural development.

The main prerequisites that need to be taken into account when planning the development and territorial localization of industry in Sofia city are related to the avoidance of productions that pollute the environment. In this respect, the municipal authorities have the most important role.

The specific decisions for restructuring of production and building of new enterprises should be based on market interests. In this respect, it is necessary to develop new market strategies. The rapid evolvement of the private sector should be sought through privatization and mass construction of new and competitive small and medium enterprises.

Regardless of the changes that have taken place with respect to the potential of city, the city of Sofia will continue to develop as a dominant industrial centre of local, regional and national importance. The existence of not only industrial activities but also of another structural infrastructure in the fields of education, science, market institutions, communications, and so on, is an important precondition for the city to develop as an economic centre of a sub-continental importance on the Balkan Peninsula and South-eastern Europe.

What is also important is the creation and restoration of economic interests outside the central city but also in the small towns and provincial areas as well as the creation of conditions for an internal regeneration process.

The activating of the comparative advantages of the city in local, regional, national and international aspects as well as the stimulation of the specific factors and conditions supporting their economic development would help for the restoring and accelerating the process of economy restructuring. The transition to market economy increases more and more the value of the “space” factor as well as of the spacious diversity, which can bring about a different dynamics in the development of the separate regions. Space will become an actual

factor of development and modelling of spacious structures as well as an active means for controlling the development and protection of the environment.

The development of a well-organized market infrastructure is a stimulus for economic development and increased investment attractiveness of each and every territory.

The restructuring of industry should also include multiplication of industrial activities on the territory of Sofia city, which gravitate around or are being created by the current structure but “direct” the structural renovation towards the production of high-tech, innovative, European-style and internationalized industries and companies.

Taking into account the new role of the transport-related and geographical location of Sofia city there should be added an impetus to the development of productions that have a higher import-export function.

There are, however, huge variations of various territorial indicators – an indicator of weak planning and policy:

- Serious territorial disproportions and precarious irregularity in terms of space utilization of the compact town, the surrounding area and the active impact zone;
- Danger of over-urbanizing of certain areas and related degradation of natural environment and of its most important components, respectively;
- Contradiction between attractiveness of certain suburban territories with respect to inhabiting and housing, on the one hand, and their inefficient infrastructure maintenance and difficult access for transport, on the other;
- Critical economic deterioration of some suburban areas.

During the last few years there has been a significant increase of investments activity in the southern part of the ring road (new transportation and warehouse facilities, petrol stations, etc.) as well as in the neighborhoods at the foothills of the Vitosha Mountain where there have been built numerous high-category permanently inhabited villas. This is related to utilization of agricultural and forest resources and is a threat against the ‘green connections’ of the city with the Vitosha Mountain, which are very important from environmental and spatial point of view. At the same time, these territories’ technical infrastructure has not yet been completed, which creates additional risks and problems related to their planning and utilization.

When developing new territories in Sofia over the last few decades the speed of *construction of main communications* have been too slow. There is no synchrony among the urban planning elements. The non-implementation of structurally significant routes is an obstacle to the normal functioning of the city. Most of the streets have not been built with the necessary size and traffic load capacities. Street pavement low quality and the cars parked in the traffic lanes create additional problems for the city traffic. Due to the increasing wear and tear of cars and their expanding usability there is a more and more significant problem with parking. The overall assessment of the environment, taking simultaneously into account the impact of all unfavourable factors indicates that most of the population in the region lives in an unhealthy environment.

The *environmental tasks* that the region needs to solve cover all possible spheres:

- storage and processing of domestic and industrial waste;

- measures against air pollution;
- cleaning of industrial waste waters;
- improving the quality of surface waters;
- improving the acoustic environment;
- solving environmental and urban planning-related problems;
- protection and development of the green system.

## 7.2 Policy and planning for the 21<sup>st</sup> century

### 7.2.1 Administrative region level

Since the late 1940s Sofia's development has not been based on strategic urban development plans. During the socialist period (to 1989), the city was strait-jacketed into an unrealistic urban development Plan which looked forward to a medium-sized, de-centralized city quite at variance with reality. The main development initiatives, such as industry and housing, that took place were the outcomes of case-by-case decisions taken at the national, rather than the city level. During the first decade and a half following the end of socialism, with the disintegration of central planning and continued absence of a realistic urban development plan, the city burgeoned and developed solely due to unregulated market forces. It was only in the middle of the first decade of the 21-st century that, following 45 years of unplanned and / or unexpected development, policy documents emerged that attempt to place the future of Sofia on the basis of public policy.

The main aim of the regional development of Sofia region until 2015 is formulated in the *Regional Development Plan*, in force since December 2005. Rather than dealing with the city's prospects, this takes Sofia in its capacity of one of the 28 regions of Bulgaria. Nevertheless, it sets some aims and development outlines that further documents were to elaborate.

The main aim set for the development of the region is:

**Providing opportunities for transforming Sofia region in a steady developing metropolitan-region, and economically politically, culturally and scientifically attractive centre with strategic significance for South-eastern Europe.**

This main aim is to be reached by accomplishing the following strategic objectives:

- Maintaining high rates of economic growth in the region and reaching a level of regional development corresponding to one in similar territorial structures (metropolis) in the EU.
- Balanced and steady development for the whole region territory.
- Positioning of Sofia city in the bigger cities poly-centric system in EU as an important centre in the Balkan region, with attractive life and business environment.

*The first objective* can be described as connected with the development and the stability, based on the increase of the regional economic competition in the framework of the European regions (EU-27). This can be reached via:

- Providing opportunities for fast innovations assimilation;
- Transfer, creating and introducing of new technologies;
- Increasing the educational characteristics and professional organization of manpower, according to the needs of the contemporary labour market;
- Development and increase of the infrastructure quality, handling the business and the functional systems: habitation, labour and recreation;
- Establishing of modern, complete manufacture and warehouse zones and bodies, business and trade operating centers, etc.;
- Development of modern and ecologically suitable tourist industry, including the sports infrastructure for holding European, world and Olympic games
- Other conditions, influencing the drawing of some investment and business initiatives in all fields of economy. Especially significant in this is the marketing of the city, the effectiveness, and potential of the municipal and state (regional) administration. The maintaining of high economic growth is necessary for reaching of new levels of regional development, with similar territorial structures in the EU. This objective sets a higher development threshold from the average for the EU-25; Sofia region is close to this level and is a force and standard of the regional development of the Republic of Bulgaria and South-west planning region, and sets parameters that have to reach the levels of the economic and regional development, higher than the average of EU-25 and typical for similar territories in the populated areas of EU.

*The second objective* is connected with the surmounting the weak sides of the regional development, and especially the lack of balance in the development of the main body (Sofia city) and the inland region (the surrounding area).

The achievement of the main and the rest of the strategic objectives can be accomplished by using the surrounding area potential, and creating equivalent to the main body standards of life, services, recreation and business, as the practice shows in situations in similar EU regions.

The balanced development has to go beyond the region's boundaries and to expand over the territory of the Metropolitan agglomeration, as set in the project for regional development in the South-western planning region.

The increased and uncontrollable migration towards the centre of the region can stretch critically Sofia city's resources, which would compromise the accomplishing of a regional development stability. For overcoming this danger it is deemed necessary to take the following measures:

- Structural development in the North part of the region (as proposed in the New General Urbanization Plan of Sofia city and Sofia municipality);
- Stimulated development of the buffer manufacture and warehouse zones in the agglomeration territory (east of the Elin Pelin region: Ravno pole and the west one: Kostinbrod, in the Bozhurishte region);
- Construction of secondary service centres, located along the external transport ring (the Ring road).

The accomplishment of these objectives requires a strengthened partnership between the local and regional authorities of the administrative and territorial structures, included in the boundaries of Sofia agglomeration (this is described in the specific objective IV.2. of the regional development project for South-western planning region), as well as forming of a general advisory council.

The balanced development in Sofia region is not local, but a national problem, which needs to be solved through some specialized programmes for purposive influence and partially financed with central government funding.

*The third objective* is connected with the complex development of the system made of functional environments: business, habitation, labour, recreation, and service environments.

The positioning of Sofia in the poly-centric system of the big cities in the EU depends on the environment, transport infrastructure, effectiveness of the administration, life standard of the population, the preservation of the nature and the cultural, and historical heritage.

It is very important for the regional development to achieve a new dynamism of the rural territories. The villages, surrounding the central city, taking a considerable part of the territory of the metropolitan municipality, are also place for social and economic life, organized around the capital city.

The Regional Development Act of 2005, of which the Regional Development Plan is a structural component introduces the definition “areas for purposeful intervention “. These are territories, defined in the boundaries of the municipalities, which have competitive priorities for economic development or have difficulties because of their geographic location and economy specialization.

Sofia municipality is established as a distinct area for purposeful intervention, because of its significance of the capital as a national administrative, economic, and cultural centre. It is characterized with high potential for economic growth, drawing of investments, concentration of colleges and scientific, and research institutes, highly educated human resources and developed technical infrastructure.

For strengthening the positions of Sofia city as a leading economic and cultural centre in South-eastern Europe, the Regional Development Plan stands for encouraging and developing the technological business, territorial diffusion of economic activities in the adjacent territories and establishing of technical and business infrastructure and integrated development of Sofia agglomeration.

The significance of Sofia city as a national, economic, administrative, and cultural centre, is taken into account, as well as its place in the “European capitals “family”; the existing and potential relations between the capital, the other city centres in the planning region, and the rest of the planning regions.

## 7.2.2 Planning region level (South-Western Planning Region Development Programme)

Figure 7.1 The six planning regions, Sofia being the centre of the South-Western region



Sofia's development policies also fall under other national classifications. The city is the centre of the South-Western Planning Region (stretching to the borders with Greece and Macedonia), one of the six Planning Regions that make up the country.

*The main strategic goal*, under the Development Programme of South-western Region, is to achieve a balanced development of Sofia and South west planning region, by growth in the regional economic (which will provide more and better job positions), improving the living standards, preserving the natural, cultural and historical heritage, preserving and restoring the environment.

To achieve the main goal the following strategic objectives are defined:

- *Reaching a steady economic growth, by developing competitive diversified regional economy;*

This goal is connected with the stimulation of economic business activities and the drawing of investments, the improving of the business infrastructure, and the human resources development. The achievement of a steady economic growth, through support for competitive economy development is a key factor in the improvement of the life standard of the local communities. Especially important is the understanding of the significance of developing businesses sensitive to the environment and the efficient use of natural and man-made resources.

The support of local companies and the attraction of foreign investment are very important for the increase of the regional economy competitive power. In the period after 2007 the Bulgarian companies face the challenge to operate in a very competitive

environment, which will motivate them to invest in the technologies, development of the human resources and assets.

The development of the economic activities, based on the knowledge, encouraging the use of technologies, the development of innovative capacity, support in the cluster development and outsource chains are very important for the regional competitive power.

- *Development of the transport, engineering and technical infrastructure*

The goal is motivated by the considerable inter-regional differences on the level of regions and municipalities, municipal centres and peripheral populated areas in relation to the human resources, the infrastructure development, the access and quality of public services. Investment in the basic infrastructure is the basic factor for achieving competitive advantage in the regional economy, and increasing the mobility of the population, as well as use of information and communication technologies. The infrastructure development is an important factor for stimulating the economic and business activities, the drawing of foreign investments and the improvement of the life standard of the local communities.

Meanwhile, a very important aspect of the development of infrastructure is the preservation and restoration of the environment as a key element for a sustainable development and an important feature of the life standard. Improvement of the technical characteristics of the republican and regional road network is planned, which provides access to the International transport corridors; as well as improvement of the technical characteristics of the railway network for increasing the safety; modernization of the passengers and loading facilities, improvement of the servicing infrastructure for increasing of the transit traffic and development of the inter-regional railway transport.

Planned are investments for the rehabilitation of the existing and the construction of a new water supply and drainage infrastructure, and investments for decrease of the public needs of energy consumption, activities which encourage the use of energy saving technologies in the private sector and in the households; and stimulation of the construction of facilities for restorative energy resources as geo-thermal energy, energy from the biomass, the wind, sun and water; stimulation of the transfer of technologies and know-how, including public and private partnerships.

In this context it is necessary to develop an integrated model for control over the water resources, air and soil monitoring, which includes the construction of depots and waste stations, and rationalization of the household waste control; construction of facilities for decontamination of hazardous waste, including dangerous chemical waste, elimination of old contaminations and re-cultivating of the affected areas; introduction of the separate collecting of the household waste and composting for bio-dissoluble waste.

At the moment one of the main problems of Sofia and Sofia municipality is connected with the construction of waste depots and facilities for keeping and processing household waste.

- *Economic and social rapprochement with the other EU regions and improvement of the social environment quality and the life standard in the populated areas*

The objective is directed towards integrating in the European structures, decrease of the differences in the social and economic development on a regional level and participation

in trans-national cooperation networks. The integrated regional development and the pursuing of proactive policy for complex development is connected with securing a quality city environment and stimulating an agglomeration connection between the cities. Particularly important is the location of Sofia city on the territory of the region for the planning and the available unused opportunities for integrated development of the capital and the near administrative regions.

At the same time, the relations between the local city centres and the strengthening of the relations with the adjoining rural area are supported. The investments for improvement of the city environment in the residential districts are significant for the quality of life of the local communities, particularly in the big city centres, where a population concentration and overloading of the environment are fact.

The development of human resources, the development of professional education system, the integration of groups, dropped out of the job market, the social integration of minorities and groups with unequal status, the access to quality educational, health and social services, the preservation of the natural, cultural and historical heritage and participation in cultural activities are the main factors for improvement of the life standard and the charm of Sofia, the region and its populated areas.

### 7.2.3 City & municipal level (General Urbanization Plan)

Until the end of 2006, Sofia laboured under the patchy 1961 Development Plan, which was utterly at variance with reality. It took the city a full 45 years to develop a new Plan and get it passed in parliament, as required by the Constitution. In between the two Plans, the city tripled in size, radically changed its industrial profile (from heavy industry to services) and became home to the “creative class” – all of which developments were utterly unplanned for under the 1961 Plan.

With EU membership, the development of General Urbanization Plan of Sofia city is a key precondition for the integration of the city into the unified European space and its development as a regional centre in the poly-centric structure of the European cities. This sets several fundamental challenges to city planners, which challenges are connected to the functions which the city should re-structure, additionally develop or launch as new initiatives.

On this basis, several fundamental strategic aims have been developed for the city: *functional*, aimed at the restructuring of existing and adoption of new functions of the city; and *urbanizational*, which target the macro-spatial restructuring and development of the city.

The *first* objective is directed towards developing of competitive economic organization on regional and continental level:

- towards connecting Sofia with the European highway infrastructure and transport network and the city’s transformation into a crossroads hub;
- towards developing and strengthening of the city as regional information and telecommunication centre;

- towards further development of the city functions as a national capital and for the development of above national functions until its transformation into a regional administration and business centre.

The development of the city as a regional and European cultural centre is connected with the development of Sofia as a regional scientific, educational and university centre. Together with this, it is necessary also to develop the tourist sector as an independent structural element, based on the city's transformation in a regional, European and tourist destination. The development of Sofia as a regional and European sports centre, as a regional health, recuperation and balneological centre, but also in regional power supplying centre, are one of the main objectives, which will change the character, quality and value of the basic life functions of the city – habitation, labour, recreation as well as the servicing transport and infrastructure functions.

The *second* objective is connected with conditions for effective, balanced and reproductive use of the city's and region's territory resources; it is connected also with the redistribution of the functions between the city and the region for achieving a balanced functional saturation of different components.

Consequently, a restructuring of the existing mono-centric city structure into poly-centric one is of the utmost importance. Although this intention figures in most of the (abortive) development plans since the end of the Second World War, Sofia stubbornly refuses to become poly-centric and renewed efforts in this direction are obviously needed.

Last but not least is the necessity to provide a balanced, qualitative and sustainable development, improvement of the living environment, as well as optimal conditions for habitation, labour and recreation of the city and municipality residents.

The main element of the territorial organization concept of Sofia city in the 21<sup>st</sup> century is achieving of balance in the development of complex urban territory of Sofia city and its surrounding region, maintenance and organizational development in relation to the city and the environment by limiting the expansion of the territory of Sofia city. This is to be done by defining five development lines, with an accent over the dominating line: north-west – south-east. A construction of the north development zone is planned, along the existing ring road with localizing of new productions and services, and development of towns and villages, located north of the compact city and on the south slopes of Stara Planina (Trebich, Mramor, Mirovyane, Novi Iskar, Svetovrachane, Negovan, Chepintzi, Gnilyane, Podgumer, Voynyagovtzi, Lokorsko, Bogrov, and Krivina) which have the optimal weather conditions.

There are three industrial districts differentiated in the city proper, several sub-regions and separate territorial groups of enterprises. Those well differentiated regions are 2 – north and south-east. The third industrial region is a network of industrial sub-regions and housing residential areas – west industrial and residential district.

A number of existing production enterprises in the compact city are incompatible with the sanitation requirements. These productions have to set their activity in compliance with the requirements or to move out of the compact city in stages.

### 7.2.3.1. *Envisaged territorial structure*

The analysis of the territorial structure of the city-proper, together with the ageing and dilapidation of its industrial and physico-geographical environment, leads to the conclusion that the city must set itself the priority of much better use of its underground urbanised space. This involves intensive use of subterranean areas for the needs of transportation, parking, storage and, to a certain extent, industrial production.

From the point of view of the environment, the concept of territorial organization deals with territory structure on one hand, and functional organization, on the other. The territory structure is defined by the development of different green areas, forests and wooded areas, protected territories, waters, mineral resources in Sofia city and in Sofia municipality.

These are the main elements of the city and city surrounding green systems as a recreation infrastructure. Preservation and expansion of all public green areas and above all the big city parks is planned. The most significant expansion of the green system in the compact city is the proposal for situating of a new north-east park (217.2 hectares) – very important for this part of Sofia. Also new area types for recreation, called „theme parks” are put forward, consisting of zones with a different function, with a definite theme and specific requirements towards landscape structure. Such an approach tallies well with what we know of the requirements of the “creative class”, although none of the development plans dealing with Sofia’s future define such a priority.

The territorial structure of the recreation system is currently defined and formed of seven theme parks:

- Vitosha park (Vitosha mountain, Yuzhen park, the Botanical garden, Knyazhevo pine forest, Boyana residence, Vitosha monasteries and churches);
- balneology and health resort „Zhiva voda” (Bankya and the municipality, Gorna Banya, the lake Suhodol, Zapaden park, park “Ovcha kupel” and Lyulin mountain);
- water park „Iskar” (Iskar water reservoir, aqua-park Iskar, the river valley to the gorge, the lake Psarel, countryside Urvich, lake Pancharovo, Iztochen park, Plana and Lozen mountain);
- park „The green memory of Sofia” (gardens at of the central city part, garden Knyaz Boris, cultural heritage);
- sports park „Studentski” (Students’ town, park Vartopo);
- historical park „Sofia Sveta gora” (historical places and monasteries, the south slopes of Stara planina);
- sports and attractions park „Poletoto” (Dobrosavtzi airport, Bozhurishte hippodrome, mineral sources, Severen park, developed city network).

In this context, the theme parks can be foci for investment, depending on the possibilities to organize different types of activities.

With the theme parks, the following is to be accomplished:

- Defining the enclosing mountains and the nature potential of the Sofia region, including the agrarian landscape;
- Reconstruction and further development of the existing green areas in the city and the metropolitan region;

- Renovation and development of the existing areas and centres for sport, recreation and attractions;
- Preservation and adaptation of the cultural and historical heritage;
- The effective use of the mineral waters and hydro-thermal resources, and recreation potential of Iskar river, the smaller mountain rivers and the water reservoirs and lakes.
- The green system of Sofia will be settled as a mixed type system, centered on large park structures, coming in radially from the outskirts towards the city centre and accomplishing a connection with the natural environment of the surrounding mountains. The main components are the currently existing (and neglected in terms of maintenance) parks, such as Zapaden park, Yuzhen park, park Vartopo; and the north and north-east “green” rings.

#### 7.2.3.2. *Sports facilities*

The feature that distinguishes the sport system of the capital from the other municipalities in the country are the big sports facilities, which are various in their character and give opportunity for popular development of different sports.

According to the General Urbanization Plan, the capital has 720 hectares of open-air and 120 hectares of covered area for sport, the total number of the sport sites is 822 (370 open-air, 452 covered). The open-air sports centre consists of 193 mixed sports grounds, 68 tennis courts, 25 football fields, 7 stadiums, 7 swimming pools etc, and the covered sports centre includes 340 mixed gyms and halls, 48 swimming pools, 4 shooting grounds, skating rinks etc.

According to the Plan, by 2020 the recreation and sports areas will develop mainly along the lines: Sofia-Samokov-Kostenec; Sofia-Bankya and Sofia-Novı Iskar and complete development in direction Vitosha, the Students town, Vartopo park and Poletto park will develop as theme parks with conditions for different sport. According to the pessimistic version of the Plan, the sports facilities have to reach 1,100 hectares of open-air and 190 hectares of covered area, and the more optimistic one – 1,380 hectares of open-air and 220 hectares of covered area.

The sports organization in Sofia is complicated because of the diverse forms of ownership over the sports centres and the lack of regulations and regulated forms for renting out for managing by the sports clubs.

There is no multi-functional sports hall in Sofia, corresponding to the European requirements, and more than 20 years not even one sports hall has been built by the state or the municipality. There is no developed mechanism for drawing of private investments for sports construction. The bigger part of the sports facilities are not modernized and are used inefficiently. The cases of demolition of sports grounds and rebuilding with another purpose are quite frequent. The state and the municipality have to oppose to these tendencies decisively.

#### 7.2.3.3. *“City scenery” in the General Urbanization Plan*

Under the General Urbanization Plan of Sofia city, the term “city scenery” is defined as a system of characteristics and parameters of the city environment; determining its perception, assessment, and understanding as a complex specific system of images and communications, in the dynamics of the daily life and constant everyday processes. This specific

communication impact of the city has a significant influence over the mentality of the city residents, the life, and the economy. For this reason, urban theory and practice tend towards researching and regulating the qualities of the city scenery.

In term of space and aesthetics Sofia, is definitely a mono-centric city, with the strong architectural dominance of its central part and an almost total absence of architectural impact in the concrete housing estates of the 1970s and 80s. There are no clearly evident architectural hubs outside of the centre, which impoverishes the urban landscape. There is also no clear architectural pattern to the city's radials.

The separate local compositional structures (or separate composition units, parts of the city) are three basic types: *with natural character*, *“cultivated character”*, and *“urban character”*. The first type includes the areas of the surrounding mountains; the second type includes mainly the “external” zone of the municipality; the third type includes “the compact urban territory” of the city proper.

For the logical differentiation of the separate macro structures in Sofia, particularly important is to keep the separating open-air, park and landscape areas. This is a main objective of the general for the city composition of the General Urbanization Plan of Sofia city. An important characteristic of Sofia is the variety of the different parts, which is significantly historically developed, existing and concentrated on the city. A detailed plan for each part will follow, focusing on the level of differentiation, the characteristics and the prospects for their maintenance or development, as well as dealing with their negative characteristics.

The volumetric and visual organization of Sofia is conceptualised along the following characteristics:

*The first characteristic* of Sofia is its setting in the macro-landscape environment, with strong distinguishing macro-spatial and sky-line characteristics:

- the clearly shaped dominant of Mount Vitosha,
- more generally, a three-part, symmetric sky-line composition of the south, dominated by the three mountains of Lyulin – Vitosha – Lozen mountain);
- the “ribbon on the horizon” silhouette of Stara planina (Balkan mountain) to the north, with the clearly outlined “breaking” of the mountain passes of Petrohan, Iskar and Vitinya.

The mountain passes in the direction Sofia cross either dynamic natural “spatial corridors” (Vladaya, the river valley of Iskar), or high hills (Novi Han), or a combination of the two (Vitinya and Petrohan). This variety will fit completely into the composition of separate city parts. For this purpose, the characteristic views over the scenery are researched and planned to be preserved.

*The second characteristic* of Sofia is that considerable parts of its territory are located over high terrain and therefore fit well into the natural scenery. These are mainly the southern sub-montane territories, but also the area of Bankya, the villages on the northern highlands of Stara planina and those of Lozen mountain and Plana mountain. This allows construction of context-sensitive volumes, but also imposes some restrictions about the height and size of the buildings.

*The third characteristic* of Sofia is the presence of a number of original terrain forms in the city proper and the possibility to accentuate them with new construction – through building or activation of the sights in their direction. First, Lozenetz hill, particularly the western “dome”, but also the hilly areas of Konyovitza, Gardova glava, the bend of Vladaya river, the hill Slatina.

*The fourth characteristic* of Sofia is the belt of housing estates, built in the 1970s and the 80s, which are large, high-rise and have a specific volumetric, spatial character. From most entry points into the city, these concrete volumes compose the skyline of the city and create the first impression; that’s why it is necessary to look for elements (“emblems”) that *individualize* their impact.

*The fifth characteristic* of Sofia is the clearly outlined radial plan of the main trends of spatial development. With the development of the city they receive a new, larger scale and a longer length. At this stage it is important to mark the main composition accents along the radials.

*The sixth, particularly important characteristic*, is the system of “rings”, “transverse” and “tangential” transport corridors, which structure the urban territory. Development projects are expected, on the basis of the Development Plan, for this spatial orientation. Particular compositional significance will have the outline “ring”, surrounding the central city part. Its complete development will define the outline of the city’s old body. The second city-wide ring has a picturesque, indented track, which links the new housing estates. The third ring is formed by the southern part of the ring road and the new northern one. It is important for these corridors to keep their scenic character.

There is a further proposal for the construction of a new, farther-out “circular” track, providing a detour of the suburban parts of the municipality and thereby easing pressure on the metropolitan area. This track will give an opportunity for contiguous access to the landscape and historical sights, defined by the urbanized main body.

*The seventh, particularly significant characteristic* of Sofia is the clear break between the city proper and surrounding open-air areas, and also the considerable territories with low-rise buildings and luxuriant vegetation. To maintain this effect, a scenic reconstruction of parts of a number of streets, boulevards and city thoroughfares is suggested. Although there will be considerable changes in the use of the territory in the future, these characteristic compositional structures must be preserved.

*An eighth characteristic* of Sofia, which partially consists also in the aforementioned, is the necessity of subordination of the entire volumetric and spatial development of the metropolitan area and its interaction with Vitosha mountain. This is accomplished via: more open-air, planted with trees and shrubs and oriented towards mountain recreational areas nearer to people’s homes; lower and “smaller in size” buildings; inventarization and maintenance of the further standpoints and “visual corridors” towards the mountain through the city development.

*The ninth important characteristic of Sofia* is the situation of developed housing districts and villages in the compact city in various micro-landscape conditions and in visual link with

different natural sceneries. These features can be used to develop the various districts' individual image, but necessitate also a requirement for low-rise buildings.

Finally, *the tenth important characteristic*, is the prognosis for the developing of several specific in function compounds in the outskirts of the urban territory. Functionally, these are modern business-parks, light industry, scientific and production zones. And these will be compounds with a new, characteristic silhouette, shaping up the approaches to the city. One of these, the Business Park in the district of Mladost-4 is already evolving along such lines.

#### *7.2.3.4. Pointers to the future*

The social, economic and territory development of Sofia plans fast growth rates of within 5-9 %, where the official permanent population of Sofia municipality, based on controlled migration, reaches 1.3 mln. residents. Ideally, the population in the city proper towards 2020 won't be more than 1,150,000 residents; in the city surrounding region 150,000 residents; 150,000 residents in the area of active influence.

This, it must be again forcefully pointed out, is the kind of blatant statistical nonsense that makes official data un-usable for any practical purposes. The city has long since passed the 2.5 million mark and shows no signs of slowing down. Development plans based on such wildly false assumptions are bound to generate very severe problems and continually crash against utterly unforeseen circumstances and challenges. It seems that, in spite of now being covered by a dense tissue of development plans – national, regional and municipal – Sofia may continue to function along the usual lines of “creation out of chaos”, rather than enjoy planned and regulated development. Getting the statistics right has now become a matter of very severe urgency, but official complacency in this field shows no signs of change.

Ludicrously unrealistic statistics notwithstanding, a future shape of Sofia can be seen in the current development plans. That shape – a de-concentrated, green city – has been in the planners' minds for most of the 20<sup>th</sup> century.

The social and economic development of the city surrounding region and the area of active influence determine the urbanizing of the rural municipalities Bozhurishte-Kostinbrod-Slivnitsa and Elin Pelin-Gorna Malina.

Sofia's further development is a function of the fast construction of the pan-European transport and infrastructure corridors, which are currently ill-served by outdated roads. Once the reconstruction of the ring road (under way) and the motorways going west and south-west are finished, these roads will activate the suburban territories, which will stimulate the activities and functions of the city proper to move out towards the city surrounding region and the area of active influence. This concept confirms the necessity of forming a communication hub close to Sofia airport, which in turn poses the issue of tackling the pollution of Kremikovtzi metal works, the rehabilitation of the surrounding area and its conversion into a contemporary industrial zone without any ecological problems.

In the near future, the city (including its neighbouring areas of impact) will be structured along the following components and functions:

- High technologies, science, techno-parks and others, in directions: Lozen; Bozhurishte-Kostinbrod; Botevgrad-Pravetz.  
With or without planning support, such “hi-tech business parks”, sensitively blended into the environment, are likely to become a dominant feature due to the simple motivation of emulation. In 2007 the first such facility, “Business Park Sofia” was unveiled, close to the foothills of Vitosha, on the site of a previous (illegal) rubbish dump. Entirely the product of private initiative and capital, it is consciously a “creative” zone, with its deliberate mix of companies (aiming at synergy), provision of cafes, restaurants and other public-space facilities, all of this constructed around an artificial lake, with a multi-screen cinema and hyper-markets forming the outer perimeter. In response, hectic construction has begun, two kilometres north-west of it, of a competing “park”, and others are expected to follow soon.
- Healthcare, balneology: Bankya; Svoge-Iskretz; Kostenec etc.;
- Recreation, sport, tourism: Vitosha; Bankya; the south slopes of Stara planina; Samokov;
- Trade and business: main bodies and zones along the infrastructural corridors;
- Industry: Kremikovtzi; Elin Pelin; Pernik-Radomir; Pirdop-Zlatitza;
- Food, wine and tobacco industries and manufacturing industry: Novi Iskar; Svoge; Godech; Gorna Malina etc.;

Cultural and historical: the Sofia Sveta Gora area, mainly the southern slopes of Stara planina, link between the compact city with the cultural and historical boundaries of the city surrounding region, the areas of active influence and the country.

### **7.3 Conditions and factors, which will influence the development of Sofia in the period until 2020**

#### *7.3.1 General conditions*

While private and civic initiative has been able to structure the critical minimum of “soft factors” for development, Sofia’s “hard factors” continue to be a problem, being at the deepest base of a “creative city”. Such factors need municipal- and government-level planning, and can not be expected to be constructed by private enterprise on the “creation out of chaos” model.

The future development of Sofia will be influenced by a number of factors and conditions, which to a great extent will slow down or act as a process accelerators in the city, the municipality and the area of active influence.

*First* are the geo-political and geographic factors, defined by the strategic location of the capital in South-Eastern Europe.

*Second* is the current redistribution of world markets, funds and investments and the defining place of Eastern and South-Eastern Europe on these markets.

*Third* is the development of the new technologies and highly technological productions, which are expected to give a very significant reflection in favourable direction of all big cities and in particular of Sofia.

*Fourth* is Bulgaria's joining the EU in 2007. This fact is assessed as most significant, as it defines a new development prospect for the country.

The demographic factor is very substantial in the future development of the capital, which has a very considerable potential because of its demographic characteristics. Very significant factors are also the transport, and communications.

The positioning of Sofia in the European and world network of big cities is another factor with particular significance. The investment interest and activity depend to a great extent on the place, which the capital will take in the system of big cities.

The economic development of Bulgaria and in particular of Sofia is directly dependent on the geo-political and political processes, in regards of the country's dependence on foreign financing and investments. It is very important when and to what degree the country will take advantage of the appropriated and regional funds of EU. Good use of the funds will stimulate regional development and investments for infrastructure improvement in the country and transport connections with Romania and Greece. Some small part of the funds will be directed towards Sofia. The regional differences in the incomes, the employment and investments between Sofia and the country will decrease.

On the other hand, the stability on the Balkans, after Bulgaria and Rumania's accession to NATO and the EU, considerable private investment will be drawn towards the peninsula. It is not clear, what part of them will be allocated to Bulgaria, but in any case Sofia will draw on part of the investments.

### *7.3.2 Positioning in the world market of funds and investments*

The new economic conditions in the world and in Europe are grounds to presume that Sofia has considerable opportunities for development and growth. Its geo-strategic location creates preconditions for attracting investment, functions, activities, corresponding to the challenges the economic globalization and in the same time to activate the entire economic and social development.

The strong need for new investment in the countries of Central and East Europe has led to competition between the major cities in the region. This applies to Sofia, which is also in competition with the big Balkan cities and capitals Sofia, Bucharest, Belgrade, Skopje, Tirana, Athens, Thessalonica, Istanbul, Varna, Constanta.

Sofia has serious opportunities for attracting investment in the competition with the other neighbouring central and East European cities, provided that it implements the right policies and manages its strategic advantages.

A major advantage is its crossroad location. The anticipated investment activity in the infrastructure field inevitably will draw in financial resources, as well as productions and technologies. The central location of Sofia in the dynamically changing and developing Balkan region, also gives opportunities for taking on considerable regional functions in the economy field, as well as in the social and cultural one.

One of the substantial resource for using all development opportunities of Sofia, is the General Urbanization Plan. Its implementation will ensure that the capital will take advantage of these opportunities.

### *7.3.3 Scientific and technical conditions and factors*

The development of information and communication technologies provokes the transition from an industrial to information society. The main feature of the development of these technologies is the convergence of transferable environment (media conversion for transfer of voice, data, mail, TV and multimedia) and providing universal service, and of the information society – the conversion of all fields of economic and social life because of the information as a newly developed.

The new opportunities to work and deliver services from a distance provides the opportunity for the assimilation of a larger territory outside of the city proper. This de-concentration is connected with taking out of the city existing activities, but above all – with situating new activities over new territories. De-concentration and dispersal also increases the freedom of choice of residence. In this sense, a positive factor is the small numbers of population currently living in region around Sofia.

The purpose would be not to live in the countryside, but to develop new decentralized housing districts set in the natural environment with minimum physical service, maximum electronic services and equipment with contemporary individualized infrastructure (personal heating systems, local power systems, micro--purifying facilities, kitchens with no waste, local wireless telecom centres).

The crossroad location of Sofia gives it the opportunity to be also a crossroad of merchandise and technologies, not only from the European area, but also from Asia and Africa. This process can be seen in such strong integral fields as electronics, communication and telecommunication equipment and technology, investments mechanical engineering, construction industry etc. Additional influence in this direction has also the transport construction, in East Europe and Russia which will move ahead of the West European rates out of necessity. The participation of Sofia in the transfer of technologies can happen also through interaction with other European regions and the countries of the Balkan peninsula.

#### 7.3.4 *Demographic factors*

Sofia, with its facilities, trained specialists and convenient transport and communications relations and traditions in some scientific and production fields, can become a technological bridge between West and East.

The technological revolution in the world economy has made possible new localization strategies of trans-national companies, which is displayed by moving production around different parts of the world. The availability of cheap manpower is not, however, any more the only criteria in investment policies. Capital flows towards countries and cities with good infrastructure, skilled personnel and satisfactory living standards. This means that the skills and qualification of human resources, the qualities of the living environment have increasing economic significance. This fact gives unique opportunities for increase of the role of Sofia's position in the region and in Europe, as the educational and professional structure of the city population is very good. The high rate of economically active persons who have university, college or secondary specialist education (66%) is serious precondition for attracting highly technological productions and technologies.

#### 7.3.5 *Positioning in the transport and communications market*

The present situation in the world and Europe gives a unique opportunity to Sofia to use its big transport priorities and geo-strategic location as a bridge between three continents – Asia, Europe and Africa. For a long period of time, geopolitical realities didn't permit the use of these advantages, which can now be made use of by pushing ahead with Sofia's plans for rapid development of roads and communication infrastructure generally.

The transport infrastructure is significant for the future development of Bulgaria and the countries of the Balkan region and their relations with Europe and the world.

Three of the trans-European transport corridors are crossing in Sofia:

- - corridor № 4 – Budapest – Vidin – Sofia – Thessaloniki (Athens);
- - corridor № 8 - Durres - Skopje – Sofia – Bourgas – Varna;
- - corridor № 10 – Belgrade – Sofia – Plovdiv - Istanbul.

Especially significant for Sofia is the European transport corridor № 8 The Adriatic– Black Sea. It will connect southern Russia and the Caucasus region, and through there Central Asia, with Italy and the southern part of the EU in the possibly shortest and most convenient link. It has the opportunities to develop as a railway, a road, and communication.

Quite significant for the capital is also the development of European corridor № 4. Among the defined Euro-corridors of the Pan-European conference in Crete, this one is indicated as an alternative track of the classic transcontinental way London-Istanbul at the Serbia crossing. The corridor Lom (Vidin)–Sofia–Thessalonica can be defined as a part of the East European corridor north-south (Poland–Belarus-Ukraine-Rumania-Bulgaria-Greece) and it has to develop as such. Particularly big is its significance for the connection of the most important inter-European water way – river Danube, with the Mediterranean Sea.

### 7.3.6 *Positioning in the European network of big cities*

Regardless of the considerable opportunities of Sofia for its forming as a city centre of European scale, we have to bear in mind that it is in a situation of serious rivalry with its neighbouring big cities.

An especially significant factor for expansion of the positions of the big cities in the continental and world city network are the head-offices and sub-divisions of trans-national firms and companies. They, however, have a number of requirements towards the cities, where they direct such type of investments, such as political stability of the state, fast and responding state and local administration, flexible and attractive taxation and other forms of financial commitment on part of the receiving country.

In the international and regional competition of the European cities in the recent years, success has come to the capitals of the first wave of new EU members Budapest, Prague, Warsaw, Bratislava. Sofia remains behind, in its general development as a contemporary city-capital, but also specifically in attracting foreign investment, in spite of its high rating in a number of European analyses and researches, one example of this being the grade assessment of some capitals and big cities, made in the report “Perspectives and strategies for territorial development of the Central European countries, the countries of the Danube and Adriatic region” (Vision Planet), European commission, 1998 Bonn, Germany.

## 7.4 **Toward a creative city?**

During the whole period of its existence as a capital, Sofia has been the most dynamically developing Bulgarian territory. This fact has its economic, political and social explanation. The particularly important location of Sofia in national and regional plan, bearing in mind its impact over the entire social economic growth of the country, is the reason to be defined as “a region of growth” according to the Regional Development Act. According to the adopted definition for “a region of growth”, this is a municipality or a compact group of municipalities, characterized with developed economic and social functions, chosen as a target for special impact, focusing on the available potentials, for accomplishing accelerated and steady growth in nation-wide plan.

The main factors, shaping up the leading position of Sofia in national plan, have to be developed further, focusing on a new in qualitative and quantitative contribution to the national economy and expansion of the regional functions and influence.

Sofia is the administrative, economic, political and cultural, trade and tourist centre of the country. The administrative infrastructure is concentrated here, carrying out functions with international, national, local and city significance and influence in all fields of the social and economic life. The availability of the biggest schools, research institutes, financial services, development of public services field and infrastructure, develop further the administration and intellectual potential of the capital.

These advantages are the basis for future development, together with the increase in importance of “soft” factors, along the lines set out in Sofia’s current development strategies:

- De-concentration and dispersal of housing and jobs outside the core city, in the natural environment of Sofia plain.
- Completion of the green areas and systems in and around the city.
- Completion of recreational strategies, linked to the natural environment, and the development of further policies for recreational use of the severely under-used surface water resources.
- Concentration of investment policies on hi-tech, environmentally friendly creative industries; completion of the “business zones” currently under development.
- Continuing the strategic re-thinking of the recreational role of the three-mountain belt of Vitosha, Lyulin and Plana.
- Implementation of policies to tackle the pollution created by the Kremikovtzi metal works and rehabilitation of its surrounding territory, together with work on the future transport hub linking, in that area, road, rail and air links.
- Determined and resolute progress of road construction and other transportation links, specifically catering to the requirements of the “creative class” for mobility to a degree unprecedented in the 20<sup>th</sup> century.
- More determined policies are needed in the direction of using Sofia’s cultural heritage and sights as a setting for the varied, multi-cultural and profiled tastes in lifestyle that characterise the creative people attracted to Sofia.

If the creativity is the “driving force in economic growth” and that a new creative class” has become the dominant class in the society, Sofia must launch a system of initiatives to attract, keep and support this class. For a start, initiatives are needed to overcome the inability of most members of this class don't see themselves as part of it – something that came up very forcefully from the work of Sofia team. The next step would be to achieve a constant dialogue between a (self-aware) creative class and the urban planners, in order to mould Sofia into a truly “creative city”.

To such ends, Sofia must develop a wide variety of fields of cultural production, visual and performing arts, television, film, music, print. Key to this development is the location of production: whether talented producers are employed within firms or creative work is contracted with outside agencies. Information technology in Sofia must transform work from physical production to knowledge production.

Other major initiatives would also be needed if Sofia is to be a creative city for the 21<sup>st</sup> century. Firms and organizations in Sofia are in desperate need of creative people, yet schools and universities continue to be very good at hammering creativity out of people. The dramatic education reform, long-delayed because of lack of capacity and of public awareness, is a condition sine qua non for the future.

Sofia urban policy and the management and delivery of urban services, in short, should be infused with an understanding of the fine grain of the creative contents and of the cultural resources of the city. By drawing inspiration from the marvellous and ever changing detail of

local culture, Sofia urban policy-makers should be better able to counteract the negative effects of Europeanization and globalisation.

City managers should also give serious thought to including the “creative class” in the decision-making (and policy-making) process via various civic-related mechanisms and initiatives (stakeholder advisory groups, expert and public debates, contracting out).

If “development paths” theories are true, then the entire past of Sofia would militate against such coherent policy initiatives. Far more likely is the persistence of present development trends. Should Sofia become a “creative city”, it is quite likely that this would be the outcome of market forces locally (eg. market-driven development of “soft” factors) and government interventions nationally (eg. education reform, road-building and other “hard” factors).

Based on recent experience, the development strategy of “creation out of chaos” has served Sofia well and should continue to be relied on as far as “creative” elements and factors proper are concerned. Ultimately, the creative anarchy currently in place has proven better at producing results than faulty planning.

Planning must concentrate on “hard factors”, which in turn requires a reality-based, strategic, intelligently funded and sustainable development strategy. Although the city and region is today embedded in a thick web of planning documents, few if any of them can be described in such terms.



## 8 CONCLUSION

Sofia is Bulgaria's major administrative, economic, political, cultural, commercial and tourist center. Here the institutional infrastructure is concentrated with governance and administrative functions at the international, national, local and metropolitan level, with impact on all spheres of social and economic life. The availability of major academic institutions, research institutes, financial services, public services and infrastructure contributes further to the development of the administrative and intellectual potential of the capital city.

In terms of development indicators, however, Sofia comes *last* among EU capitals, including new Member State capitals. In recent years, Budapest, Prague, Warsaw, and Bratislava have joined the international and regional competition among capital cities with increasing success. Sofia is considerably behind them both in its overall development and in attracting foreign investments to boost its economy.

Political stability and attractive tax policy are already in place. Friendly administration will be the end product of the current administrative reform. The meeting of these requirements, no matter how instrumental to the basis for further development, would not be sufficient to ensure a successful capital city fully utilizing the new opportunities of the 21<sup>st</sup> century.

The theoretical model produced by the extended ACRE team in Sofia shows that the development of the city should be reconsidered. In the 20<sup>th</sup> century, Sofia was designed as an administrative and industrial center backed up by heavy industry based on technologies from before WWII. The quality of life of its citizens was of secondary importance as evidenced by the prefabricated concrete apartment blocks of a limited period of exploitation and offering an unsatisfactory quality of life.

The successful cities of the 21<sup>st</sup> century are very different. While in the 20<sup>th</sup> century comparatively low added value was created by industrial production, in the 21<sup>st</sup> century relatively high added value is being created by the knowledge economy. In other words, if high value added is the aim, then a knowledge economy should be developed and the appropriate human resources to work in it should be attracted and retained.

The basics are already in place. The capital city is no longer a heavy industry area – over 70% of Sofia's GDP comes from the service sector. Creative industries are already present in their wide-ranging diversity: software, education, marketing and advertising, media, film industry, investment and stock exchange, Internet, music industry, video and computer games, etc.

The bulk of Bulgaria's creative industries is concentrated in Sofia, and these industries form one-fifth of the number of companies active in the city. The bulk of amenities required by creative individuals – such as ethnic mix, public interaction areas, highly profiled and segmented cultural life, wide choice of lifestyles – is also concentrated in Sofia.

The creative individuals producing high value in these areas are very different from the type of people (clerks and industrial workers) for whom Sofia was built. The extended project team in Sofia sees creative individuals as:

- Highly mobile in geographic, social, professional and private terms. They often change their place of residence (district/neighborhood), job and hobby, and they travel a lot
- Living at least two different parallel lives (e.g. software developer and concert musician, lawyer and published poet, etc.)
- Owning, or having the ambition to own, two houses – one in the city and one outside of the city (in the mountains, by the sea, or at a historical/cultural site)
- Focusing their leisure activities in modern interactive and specialized subcultures (of the clubbing type), therefore requiring from their residential environment the full spectrum of subcultures
- Feeling best in an environment marked by cultural, ethnic, etc. diversity
- Preferring to live in a city with a well-defined historical center (“old city”) and numerous tourists and guests
- Having close contact with nature, strong environmental concerns, willingness to spend much of their free time in environmental and nature-based activities and to live in a natural environment.

In order to attract and keep creative individuals, that is, those producing the greatest value in the world of today, a big city should be able to provide the conditions that will enable them to do all of the above.

Accordingly, Sofia's development plans should be reconsidered in such terms. The existing plans (metropolitan, municipal, district and regional) do address the “hard” factors of development, but there are several very fundamental problems with all Sofia development plans:

- The “historic development path” shows that since the 1940s the city has not developed according to plan. The plans occasionally implemented have always been based on unrealistic assumptions, which have almost immediately made all such planning irrelevant.
- The current development plans at all levels (city, municipality, region, planning region) are based on faulty and unrealistic statistical data and projections, and their implementation may simply continue the imperfect planning heritage.
- Sofia has dramatically re-structured itself (away from heavy industry and to services) and doubled in size, over the 1990s, without any plan. Insofar as we observe the beginnings of “creative city”, these are also entirely due to private initiative. Given that no plans seriously address the problematic of “creative city”, in the mid-term future we expect Sofia's evolution into “creative city” to continue un-planned – “creation out of chaos”.

Existing plans for the development of Sofia City and the surrounding region need to highlight the following aspects to make the city more attractive for investments in creative economy and for those working in it:

*1. Infrastructure.* Investments in basic infrastructure are a major factor in ensuring the competitiveness of the regional economy, improving the population's mobility and the expansion of information and communication technologies.

The extreme mobility of creative individuals involves an additional focus on the main transport corridors, as well as on communication structure.

a/ transport corridors

- Accelerated development of the already-planned system of rings, shortcuts and tangency roads. Particular compositional importance must be given to the ring outlining the city center. Through its consolidation and overall design, the contour of the old city core should be outlined as well. The *second* city ring has a picturesque, shifting route which connects the new residential districts. The *third* ring is to be formed by the southern arc of the existing ring road and the new northern arc. It is important that these roads preserve their panoramic view. Plans should be accelerated for the development of a *fourth* ("remote") ring road that will smoothly connect the peripheral parts of the municipality. This road will also provide smooth access to the landscape and historical sites landmarked by the urban core.
- Development of the so-called North City. In terms of transport accessibility, environmental status, market activeness, price levels, social and economic profile, etc., this area is in an underprivileged position compared to the South City. Preconditions to eliminating this difference would be the limiting, or preventing, of pollution from Kremikovtzi metal works, and the conversion of the northern industrial city zones. One opportunity to change the situation would be provided by the consolidated transeuropean transport corridor which will pass to the north of the city, and, respectively, the realization of the northern economic activity axis which connects them.
- Decisive development, as a major infrastructural priority, of the Bulgarian parts of the following European motorways: Corridor No.4 – Budapest-Vidin-Sofia-Thessaloniki (Istanbul); Corridor No.8 – Durres-Skopje-Sofia-Bourgas-Varna; Corridor No.10 – Belgrade-Sofia-Plovdiv-Istanbul. The construction of these road segments will provide sound grounds for the future development of the city as an easily (and quickly) accessible center not only in Bulgaria but also in the region of South Eastern Europe. Highly mobile creative individuals will be part of the industries and investments attracted in this way.

b/ communication structure and cutting-edge technologies. Remote work and planned remote access to services based on the information society model will result in the development of wider territories outside of the compact city. The building-up and maintenance of good communication infrastructure will enable the deconcentration of production – not so much as the relocation of existing production activities outside the compact city, but as the placement of new activities in new territories.

The reconfiguration of jobs, for example, through remote and mobile opportunities for work, will increase the freedom of choice of the modern mobile individual.

Further, the planned development should be carried out, in the city's periphery, of a compact urban territory consisting of several areas with specific functions and roles. In functional terms, these will be modern business parks, hi-tech industries, research and production zones. In terms of architecture, these will be areas of new, distinctive cityscape which will mark the points of entry to the city.

Generally, the city development policy should support the main idea behind the concept for the territorial organization of Sofia City in the 21st century, namely: *to ensure balance in the development of the complex urbanized territory of Sofia City and its suburbs, preservation and further development of the city's connections with the surrounding natural environment through restricting the compact expansion of the territory of Sofia City*. Five developmental axes will be formed, with an emphasis of the dominant northwest/southeast axis. The northern axis will be developed along the existing ring road with the localization of new production facilities and services north of the compact city and on the favourable southern slopes of Mt. Stara Planina – Trebich, Mramor, Mirovyane, Novi Iskar, Svetovrachane, Negovan, Chepintsi, Gnilyane, Podgumer, Voynagovtsi, Lokorsko, Bogrov, and Krivina.

## *2. Places of residence and leisure (recreation).*

Sofia has a unique location: the clearly shaped dominating cupola of Mt. Vitosha; the tripartite symmetrical composition to the south (Mt. Lyulin / Mt. Vitosha / Mt. Lozenska Planina); the “ribbon” outline of Mt. Stara Planina to the north with the clearly outlined “fractures” of Petrohan, Iskar Canyon and Vitinya. Passages to Sofia follow either natural dynamic “spatial passageways” (Vladaya, the river valley of Iskar) or high hills (Novi Han), or a combination of the two (Vitinya and Petrohan).

This diversity, while noted in development plans, must be further decisively conceptualised as the basis for the new composition of the individual city parts.

Another attractive feature of Sofia City is the fact that considerable parts of its territory are located on elevated relief and, accordingly, are well perceived in a panoramic view. These are mostly the southern sub-alpine territories but also the area of the town of Bankya, and the villages on the northern slopes of mountains Stara Planina, Lozenska Planina and Plana. This requires the development of characteristic architectural compositions, and at the same time limits the height and size of the buildings.

To endow the capital city with an image appealing to the citizens of the 21<sup>st</sup> century, its overall spatial and volume development should comply with the proximity of, and interaction with, Mt. Vitosha. This can be achieved through the following: more open green areas overlooking the mountain the closer they are to it, lower and smaller buildings near its slopes, inventory and preservation through the means of urban construction of remote viewpoints and ‘visual corridors’ to the mountain.

The plans needed for the required future activities are in place: the development plans envisage utilization of the potential of the suburban zone to develop residential, service,

recreational and business conditions matching those in the city core, as is the practice and situation in other similar EU regions.

a/ Outside the city

- The communities of high-tech specialists tend to also seek community residence outside the mass urban environment (the syndrome of the privileged.) In this sense, one positive factor is the sparse populatedness of the area around Sofia, which can therefore take in new residents in the modern decentralized housing zones situated in a natural environment. The planning of the local transport and communication infrastructure should be focused on this as a priority task.
- All plans for the development of basic infrastructure should have at their heart the preservation and restoration of the environment as a key element of sustainable development and an important feature of the living standard.
- Development plans at the municipal and district level should be extended toward preservation of the surface water areas around the capital city and their quick development in line with modern recreational activities based on surface waters. What is meant here are Iskar Dam, Pancharevo Lake, river Iskar, as well as the numerous small fishing lakes (former quarries) in the western and northern Sofia plain.
- One important feature of Sofia is the situation of districts and villages separated from the compact city in diverse micro-landscape settings and in visual connection with the variegated natural surroundings. The potential for the construction of housing establishments with their own clear distinctive image is apparent, but there is also the requirement for the construction of buildings of a limited number of floors.

b/ In the city

- One important feature of Sofia is the existence of a number of characteristic landmarks inside the 'compact' city and the opportunity to highlight them through new construction, or accordingly, through construction or activation of the visual contact with them. Firstly, this is the Lozenets Hill, especially its western 'cupola', but also Konyovitsa, Gardova Glava, the brow of river Vladaiska, Slatina Hill. Construction there (and their use, in part) should be of unique design but one that will also match the terrain and the general surroundings.
- An especially valuable feature of Sofia is the present interspersing of the 'compact' city with open areas, as well as the still existing big areas of low buildings and rich greenery. To preserve this effect, landscape-panoramic treatment of parts of streets, boulevards and in-city road arteries is proposed. This particular feature of the compositional structure should become indispensable to further development so that it can attract creative individuals.
- At the same time, one important aspect of the development of basic infrastructure is the preservation and restoration of environment as a key element of sustainable development and a major characteristic of the living standard.
- Systematic development and maintenance of parks as natural recreation sites.
- Modernization of the city belt of large-scale, comparatively high panel housing in residential districts formed back in the 70s and 80s. In most cases, these determine the cityscape at the points of entry to the city. Therefore, there is a need to seek for solutions that will aesthetically improve their cityscape impact.

- Continuation of activities related to the outlining of the profile of the city's districts. At the basis of Sofia's spatial composition is the development of individual local compositional structures. Out of their 'mosaic' the overall composition emerges. The linking elements here are the city's highways, city's panoramic sites, and - in the future - the underground system. Each individual compositional unit has its own specificity which, through the proposed guidelines for spatial and aesthetical development, is being enhanced and enriched.

### *3. Cultural and historic environment*

- The development of the capital city as a regional and European cultural site is closely linked to Sofia's development as a research and university center. Together with this, the tourist sector should become an autonomous structural unit of development, which will enable the city's transformation into a regional and European tourist attraction. The development of Sofia as a regional and European sports center, a regional medical, recuperational and balneological site, as well as an energy supply center are some of the major goals that will transform the nature, quality and value of the main vital functions of the city - residence, work and recreation, as well as those of the supporting transport and infrastructural functions.

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