The OLYMPIC GAMES IMPACT SUMMARY REPORT

January 2013
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Dear Friends,

We are now on the finishing line of the Sochi 2014 Olympic and Paralympic Games preparations. The impact that this process is having on Sochi, the Krasnodar region and the country as a whole, is enormous.

We are putting all our efforts into achieving an ambitious goal: to hold the most innovative Games in history: Games which will express the character of new Russia and bring sustainable, positive change to the whole country. It is impossible to achieve this goal without introducing principles of sustainable development and planning the Games legacy; a legacy that is already evident today.

The Sochi Games will represent a real breakthrough for Russia in terms of applying environment protection technologies, and introducing green building standards. Sochi will become a pilot city in terms of creating a barrier-free environment and altering society’s attitudes towards people with a disability. But perhaps the greatest legacy of the Games will be the volunteers. It is our hope that the Sochi 2014 volunteer program will give fresh momentum to the development of a volunteer movement in Russia and that, with time, up to 25 million Russian residents will volunteer.

The significant successes of the Olympic project have been confirmed by the results of the research in the Report on the Games Impact. This research was carried out using an advanced approach developed by the International Olympic Committee (IOC), with the aim of monitoring the changes taking place in the city, the region and the country hosting the Games, and also to assess the Games impact.

The report allows to track the vector along which the city of Sochi and the region as a whole are developing. Now we already see the changes taking place in the city and the region and the impact the Games produce on the society, the environment and the economy. This allows us to conclude that we are moving in the right direction.

I have no doubt that together we will win!

DMITRY CHERNYSHenko
PRESIDENT AND CEO OF THE SOCHI 2014 ORGANIZING COMMITTEE

Dear Friends,

The Lomonosov Moscow State University came into being several centuries ago as a great innovation, and gradually became a national scientific and educational center, which has had and continues to have an all-encompassing influence on every aspect of modern-day Russia.

The centuries have gone by, and today a powerful innovation of a different kind is changing the face of Sochi; exerting an influence not only on all aspects of life in the resort city, but also on life in the Krasnodar region and Russia as a whole. The case here is not about a grand sporting event, but also about the construction of infrastructure on a huge scale; changes in people's attitudes towards people with a disability; and the appearance of new construction standards aimed at preserving the unique natural ecosystems of Krasnaya Polyana and the Immeretinskaya Valley. All this creates new living standards. The Olympic and Paralympic Games are giving the city, the region and the entire country a brand new image, and facilitating changes in self-perception of people of all regions.

This grand project has drawn in biologists and geographers; mathematicians and economists; lawyers and political scientists; sociologists and physical education specialists and also various organizations; ministries and institutes; along with regional and municipal administrations. As part of the project, experts from various fields have joined together, both at the MSU and in regions of the country. It is at such moments in national projects, we see the experience of the older generation merging with the enthusiasm of the younger generation; the faculties joining forces; the inter-university administrative barriers being drawn apart; skills in interacting with organizations and institutions being acquired; new connections being established and old ones strengthened; and information flows developing.

Little by little, this project is enabling us to unveil a new image of Russia, the Krasnodar region, and the city of Sochi, with its breathless pace of change: a city for which the post-Olympic vision is an all-season resort, a business, sports and entertainment center of Russian and global significance, and the creative heart of Russia. In order to achieve all this, we must not rest on our laurels; we must keep moving onwards, together.

VICTOR SAADVINICH
RECTOR OF LOMONOSOV MOSCOW STATE UNIVERSITY
INTRODUCTION

Olympic and Paralympic Games (hereafter — the Games) impact studies are carried out as part of the Games host city’s obligations to the International Olympic Committee according to the methodology proposed in the technical manual in 2007.

The objective of this study is to identify and assess the Games impact on the country, region and host city where the Games will be staged, and to evaluate the Games legacy for future Games organizers.

The research methodology is based on the concept of sustainable development, and the Games impact is analyzed in the context of three areas of development: economic, socio-cultural and environmental. The focus is on the long-term impact of the Games. Report No. 2 on the Games impact presents the results of the second phase of the study of the Games (2010–2012), in which information was collected according to 94 indicators for the period 2009–2011.

This review was prepared on the basis of Report No. 2 on the Games impact and provides a brief description of the revealed results of the Games impact. The Report on the Games impact provides a review of progress made in the creation of positive long-term social, economic and environmental changes within Sochi, the Krasnodar region and the Russian Federation as a whole.

The Games impact studies were carried out by a large group of specialists from Moscow State University: biologists, geographers, mathematicians, economists, lawyers, political scientists, sociologists and physical education specialists. A number of organizations, ministries and agencies, and regional and local administrations also took part in the studies. These include: OPINIO Center for Sociological Studies; the Economic Development Agency of the Krasnodar region; RUSADA National Anti-Doping Agency; the Caucasian State Nature Biosphere Reserve; the State Institute of Global Climate and Ecology of Roshydromet and the Russian Academy of Sciences; and TNS.

The Report on the Games impact presents results that examine the Olympic project as an innovation that is already having significant direct and indirect effects on all components of the multi-level regional natural-economic and socio-cultural systems. The study aimed to identify the maximum number of impacts of the Olympic project on the natural, economic and socio-cultural environment. To do this, a set of indicators was used to measure and/or estimate the state and dynamics of these systems before the start of the Olympic project, during its implementation and after the Games.
ECONOMIC CHANGES

The Games organizers have been focused on developing the city of Sochi and the regional economy from the very beginning of the Olympic project. At the bidding stage, Sochi 2014’s plans for the Games were developed in synergy with the long–term development plans for the city.

Thanks to the Games, the regional summer resort of Sochi will become a world–class multi–purpose sports center and a year–round business and tourist center with a contemporary social, transport, telecommunications and energy infrastructure.

The Games are a catalyst for the development of the Krasnodar region as a whole, leading to:

- Increase in investment attractiveness
- Growth in business activity
- Creation of a modern sports cluster of federal significance
- Creation of new jobs
- Development of transport infrastructure.

Traditionally, the majority of Games preparation expenditure is spent on the implementation of infrastructure projects and related activities (utilities, transportation and other infrastructure).

The catalyst effect of the Games is calculated using the ratio of capital expenditure on infrastructure and related activities, to the direct costs of hosting the Games (for example, construction of Olympic venues).

In 2011, the share of costs for related activities was 75.0% of total costs. The Games catalyst indicator was 3.0, showing a significant excess of total expenditure on infrastructure development over capital investment in the construction of Olympic venues.

Changes in the economic sphere

Changes in gross regional product and the financial system of the Krasnodar region

The dynamics of the gross regional product (GRP) of the Krasnodar region in 2005 were characterized by an acceleration of growth with a slight reduction in the peak of the economic crisis, and then a return to an upwards trend in 2010. In the indicated period, GRP growth (in current basic prices) increased from 372.93 billion rubles (2005) to 1,008.15 billion rubles (2010) due to the increase in output and employment in the construction and transportation sectors of the regional economy.

The main source of investment funds is the regional target program, “Provision for construction of Olympic venues and the development of Sochi as an alpine climatic resort”. During the period 2005–2011, the effect of Olympic investment flows was most clearly manifested at regional budget level, acting as a factor in the stable annual increase (average for the period: by approximately 10–15%) in the budget revenues of the Krasnodar region, enabling a smooth decline in revenues during the crisis.

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ECONOMIC CHANGES

Over a six year period, the regional budget expenses increased by more than four times (without considering inflation), significantly ahead of the growth rate of municipal levels (Sochi — 2.2 times) and federal levels (more than three times).

An important element in the operations analysis of the Games impact is consideration of the tax effect of implementing Olympic projects. At this stage, it is not possible to reliably determine the particular tax effects of the implementation of Olympic events on local and regional budgets. An indirect indicator of the increase in tax revenues is the increase in revenues generated by contributions from profit tax and individual income tax. The total revenue from these taxes collection since the start of implementation of the Olympic project has increased by 5–7% annually. By 2011, the budget tax effect from the start of implementation of Olympic events became noticeable.

Since the launch of Olympic projects in 2008, there has been a steady increase in the tax base and partial substitution of budget expenditure at the level of the regional financial system, as well as an increase in non-repayable revenues from the federal budget.

Changes in business and investment activity

In preparation for the Games, in 2008–2010 there was a steady growth in the business activity of companies and entrepreneurs in Russia in general, including the Krasnodar region and the city of Sochi. The total number of contractors working for the Sochi 2014 Organizing Committee doubled, and the range of economic sectors and sub-sectors involved increased, confirming the trend of industrial diversification in the economy working for the Games.

Analysis of business activity, as shown by the number of enterprises operating in the Sochi market, demonstrated a steady and significant increase in the period 2005–2010 in comparison with the Russian Federation as a whole (the increase was 178.8% in 2011 compared to 2005 with an average national growth of 101.2%). This demonstrates that the increase in economic activity is caused by the Games. The majority of city enterprises are micro and small enterprises (about 96.2%), and their share continued to increase in the period 2010–2011 (growth rate: 103.7%).

The 2011 investment programs resulted in the Sochi 2014 Organizing Committee employing a total of 686 new and existing contractors (400 Russian contractors, 59 foreign contractors, and 216 self-employed and individual entrepreneurs).

More than 1,000 enterprises supply goods and services to SC Olympstroy. The majority of these enterprises are suppliers of materials (25.4%); equipment and machinery suppliers (24.3%); as well as design engineers and contractors that carry out construction works (22.9%). A number of SC Olympstroy contractors are aimed at bringing innovation to Olympic construction projects by introducing and implementing new technologies (10% of the total number of contractors).

The results obtained suggest that the preparations for the Games encourage the creation of new small and medium-size enterprises. This is evidenced by the fact that many Russian contractors involved in the Olympic project are individual entrepreneurs. Their share increased from 18% in 2008 to 31.5% in 2011. At the same time their total number has increased by 2.4 times.
According to 2005–2011 results, the Krasnodar region is the leading Russian region by the average annual growth rate of investments in fixed assets, and its share in the total investment of the Southern Federal District in 2011 was about 66%. By the volume of incoming foreign direct investment, the Krasnodar region was among the 15 leading regions in 2011.

In terms of investments in fixed assets per capita, the Krasnodar region has moved up the Russian regional ratings from 27th in 2005 to 14th place in 2011. The inflow of investments has determined priority development of the construction industry, which largely contributed to the positive employment trend.

The analysis of indicator components shows a positive tendency: the concentration of the economy in the Krasnodar region and the Russian Federation is decreasing. The concentration index (Herfindahl–Hirschman Index) was consecutively decreasing in 2005–2008: for the Russian Federation from 0.788 in 2005 down to 0.723 in 2009 (there was a slight growth of 0.3% in 2010); for the Krasnodar region — from 0.785 in 2005 to 0.731 in 2005 and 2010 respectively. In the Krasnodar region the reduction rate of this indicator grew significantly from 2007. In the 2009 crisis, the reduction rate of the concentration index lowered significantly in Russia, however for the Krasnodar region it essentially increased.

Investment attractiveness of the Krasnodar region

The investment climate in the region is characterized by stability and increasing investment attractiveness.

During 2010–2011, the Standard and Poor “Stable” forecast assigned to the Krasnodar region was changed to “Positive”.

The national rating agency, Expert–RA, placed the Krasnodar region consistently among the top three territories in terms of investment risk (with an almost unchanged fifth place in terms of investment potential) during 2006–2011 (except for 2010).

Public spendings and revenues

During the research period (2005–2011), at all levels of the Russian Federation budgetary system, there was increase in total expenses that considerably exceeds the inflation rate. Among the geographical zones in the scope of research, the biggest growth was observed in the Krasnodar region. Over six years, regional budget expenditure without inflation increased more than four times, having essentially outstripped municipal (Sochi — 2.2 times) and federal (more than three times) growth rates.

The ratio of government spendings and revenues in the Krasnodar region to the GRP in 2010 was 13.5% and 12.4% respectively. These indicators are lower than the national average values of 20%, which indirectly indicates the minor role of the regional government in the economy of the Krasnodar region (at a level of 10–13%).

Analysis of the share of government spending in the GRP of the Krasnodar region shows that in general, over the period, it slightly increased (from 11.6% in 2006 to 13.5% in 2010).

The analysis of the state and local budget expenses structure carried out helped to reveal the influence of the Games during 2009–2011: from the beginning of the active phase of the Games preparations. Its main manifestations are in the transformation of the city of Sochi’s expenses structure, mainly in the sub–sectors “Transport” (growth) and “Road sector” (decrease due of external sources of financing).

The cumulative growth of the regional budget income from 2005 to 2011 (nearly 300%) outstripped cumulative rates of inflation almost three times. The weight of the regional budget proper income was 60% in 2011. The rates of the general Sochi budget income growth during the period from 2005 to 2011 generally outstripped inflation dynamics (the cumulative budget growth was 119% for the period, deflator — 104%). Direct taxes — profits and income taxes (including personal income tax) are substantial for the city budget — more than 20% in 2011. Property taxes are of high significance, standing at 7.1% in 2010.
Investment in the development of sports infrastructure

Preparations for the Games aim to create a sports cluster of federal significance in Sochi. Traditionally, the bulk of Games preparation capital expenditure is not on Olympic venues, but on the accompanying infrastructure and projects. Establishing the image of the host city of the Games in 2014; improving the quality of the urban environment; updating transport; and modernizing engineering and utilities infrastructure are all much more expensive tasks than the direct costs of preparation of the competition program for the Games.

The preparations for hosting the Games in terms of Olympic venue construction began in 2008. The four-year period of Games preparations has featured a constant annual increase in capital investments whether measured in rubles or in US dollars.

By the end of 2009, the total capital expenditure on Olympic venues reached almost 8 billion rubles (more than 250 million US dollars). By the beginning of 2012, the aggregated capital expenditure on Olympic sporting venues and infrastructure facilities has exceeded 116 billion rubles. Since 2008, the rate of capital expenditure assimilation has been growing exponentially with an annual increase of 3–4 times. According to the Olympic venue construction schedule, the amount of capital expenditure will increase until it reaches its peak in 2012.

Construction of Olympic venues and infrastructure is taking place in accordance with the “Program for construction of Olympic venues and the development of Sochi as an alpine climatic resort”, approved by the Decree of the Government of the Russian Federation on 29 December 2007 No. 991. During 2010–2011, the list of Olympic sports venues and infrastructure was revised to specify tasks and include the development of detailed construction plans. As of early 2012, in accordance with the Decree of the Government of the Russian Federation No. 991, a total of 32 Olympic venues had been built, including sports venues and infrastructure.

In 2011, a total of approximately 73.5 billion rubles (more than 2.5 billion US dollars) was spent on constructing sports venues and infrastructure.

The majority of capital expenditure on Olympic venues was spent on construction (purchase of building materials and construction works). For the reporting period, this totaled over 95% of all capital costs.
Investment in the development of urban infrastructure supporting the Games

Investment in the development of infrastructure supporting the Games includes the costs for developing transport and engineering infrastructure; the construction of health and social services facilities; tourism facilities and housing projects.

The total capital expenditure for related activities in 2008–2011 totaled slightly more than 600 billion rubles (about 20 billion US dollars), exceeding the investment costs for the Olympic venues and their immediate infrastructure by almost 5.5 times.

In 2011, the total amount of capital expenditure on related activities was more than 220 billion rubles (more than 7.5 billion US dollars), slightly lower than the previous year. The decrease in capital expenditure was due to passing the peak of related facilities construction. Transport infrastructure still has the highest level of capital expenditure (more than half of all costs).

2011 was characterized by a significant increase in capital expenditure on related activities, the construction of which is largely coming to an end. The infrastructure needed not only for the Games themselves, but also for construction work and other preparatory activities, has mainly been completed. This caused a decline in the share of capital expenditure for the reconstruction of existing, and construction of new transport infrastructure (from 83% in 2008 to 55% in 2011).

There has been a steady change in the structure of capital expenditure on related activities. In the structure of capital expenditure, a significant role is played by the costs for tourism infrastructure development (their share increased to almost 17%). The share of “energy” investments increases at slower rate (from 7 to 9%); “engineering” investments maintained their position, accounting for over 11% of total capital investment.

Additional measures to develop infrastructure in Sochi
Energy-saving and energy-generation
Engineering infrastructure
Tourist sites
Transport infrastructure
Other

Capital expenditure (billion rubles) for the development of infrastructure for the Games
ECONOMIC CHANGES

Development of transport infrastructure

In order to successfully host the Games, all participants and guests of the Games, spectators and staff need efficient transport services. The transport infrastructure is being developed to ensure timely commissioning of the main venues and transport infrastructure facilities. Projects underway cover all modes of transport, but the main proportion (65 projects, or 79.3% of the total) relate to the development of the Greater Sochi road network.

At the same time the projects that have backbone significance for renewal of the Sochi transport system are projects of combined transport system leading to the Mountain Cluster and to the Alpika Service Alpine climatic resort.

Development of an electrified railway system

The Tuapse–Adler–Abkhazia border railway runs through the city of Sochi. Currently, the railway is fully electrified and double–track for a considerable distance. Within the city of Sochi, this railway features several tunnels for transporting passengers (both commuter and long–distance) and freight. In the city there are also several access railways connected to warehouse and industrial areas as well as two important adjacent areas leading to the airport and the Coastal Cluster.

For 2009–2011, the length of the railways increased by 66.3 km, mainly due to the construction of a second track to the airport and Imeretinskaya Valley. On 15 February 2012, the opening of the airport terminal and regular passenger rail service between the airport and city center took place in Sochi. The new railway from the airport is 2.8 km long.

Development of road infrastructure

Over 1,300 km of roads have been laid in the city of Sochi, excluding the intra–urban road network which accounts for almost 4% of the roads in the Krasnodar region. All road networks are classified as public. 15% of the roads are of federal significance and only 11.6 km are of local significance, while the rest are regional roads.

The road network density in the city is relatively high and reaches 348 km/1,000 km², which is higher than the national average of 39 km/1,000 km² and lower than the regional value of 468 km/1,000 km². This density is explained by mountain terrain and the length of the intercity street road network (1,367.7 km), which is higher than the motor roads length. The total length of Sochi’s motor road network, including street and road network is 2,500 km.

While the city lacks cycleways, there are 46 km of footpaths.

In preparation for the Games in Sochi, and in accordance with the implementation of the Russian Federation Government Decree of 29 December 2007 No. 991 “Program for construction of Olympic venues and the development of Sochi as an alpine climatic resort” (as amended before 2012), the regional target program “Provision for construction of Olympic venues and the development of Sochi as alpine climatic resort”, approved by the law of the Krasnodar region dated 13 March 2008 No. 1405–KZ, and activities co–financed from the federal budget for the Federal Program “Development of the transport system of Russia” (2010–2015); active work on repairing and upgrading the existing transport network and creating new roads and interchanges is underway.

In late 2009, the 17 km long ring road was opened. Much of the city’s transport infrastructure will be operational in late 2013 or early 2014, which will form the stable statistical values on the length of the transport network. In early 2012, the following were introduced and continue to be put into operation: the “Stadium” road transport interchange and a road along Dvadsatsatoy Gornostrekozov Divizi Street (from Transportnaya Street to the junction); a small bypass road near the Krasnodar Ring (from Dvadsatsatoy Gornostrekozov Divizi Street to the bridge over the river Sochi); a motor–road bridge over the river Sochi with a transport interchange near the Krasnodar Ring; the Adler Ring vehicle transport junction; and a highway between Golubyte Bald and the Adler Ring junction.
Development of information and communication technologies

The preparations for the Games are helping to accelerate the development of communication and information technologies in the region. TV broadcasting reaches nearly 100% of the Krasnodar region. The region leads the country in the transition to digital broadcasting. In terms of direct Internet access, the Krasnodar region is the leading region in the North Caucasus.

According to the Department of informatization and communications of Krasnodar region, in 2011, 777 operators were registered in the region with 1,781 licenses for 23 types of communication services.

According to operators, the number of mobile subscribers (active SIM cards) is about 9.5 million, which accounts for mobile penetration of 182%. In Sochi the penetration rate (even only taking MTS and MegaFon subscribers into consideration) is much higher and reaches 248.4%. In the Krasnodar region in 2008–2011, the increase was over 2 million active SIM cards (125.7%); and in Sochi (even without the subscribers of Vimpelcom) there were over 200,000 new active SIM cards (127.8%).

In Sochi, the number of regular WiMAX subscribers is 43,000, and the number of LTE units issued was 47,000. In 2012, MegaFon, the first of the “big three”, gave its clients access to fourth generation (4G) mobile communication in Sochi, and then in Krasnodar.

In the Krasnodar region about 1.5 million people have direct access to the Internet, which is the highest result in the southern Russian regions, but relatively low compared to other regions of the Russian Federation. In the region (especially in Krasnodar and Sochi) wireless 3G and 4G internet is being installed. WiFi points are being installed in hotels, restaurants, bars, sports facilities and other public places.

Television broadcasting covers almost 100% of the Krasnodar region as a whole, and Sochi in particular. 85 TV companies broadcast in the region (14 in Krasnodar, five in Sochi, and four in Novorossiysk). 441 TV channels broadcast in the region (70% are broadcast in Sochi). There are 25 cable distribution networks in the region (six in Sochi).

The Krasnodar region leads the Russian Federation in the transition to digital broadcasting. By 2012, preparations for TV broadcasting in DVB-T digital format were completed in Sochi. The format was launched by the Krasnodar Regional Broadcasting Center. It will be mandatory to broadcast eight federal channels. Work is underway to prepare broadcasting a special regional television channel in Russian and foreign languages which the Krasnodar region is organizing for guests to Sochi during the Games.
ECONOMIC CHANGES

Tourist activity

Until recently, Sochi was a summer only resort so the hotels and Sochi airport were used with pronounced seasonality. The creation of a sports infrastructure for winter sports activities is reducing Sochi’s seasonality.

The creation of the Mountain Cluster, year–round facilities including swimming pools and fitness services, and high level service 4–5 star hotels in 2010–2011 led to a decrease in the seasonality of the occupancy of rooms and accommodation inventory. In recent years, December–January peaks have been recorded in these hotels and the August–September peak has moved.

Analysis of the dynamics of tourists visiting Sochi shows an obvious reversal in trends:

- An increase in the number of tourists from 3 to 5 million people in 2005–2009. Almost all of the increase was accounted for by tourists from other Russian regions 90% of whom had previously visited Sochi. In 2008, the numbers stagnated, and then there was a significant increase in 2009 as a reaction to the economic crisis so part of tourists couldn’t afford the service of foreign resorts.
- The 2010 stagnation, and even a slight decline, in tourist numbers may indicate that some tourists began travelling abroad again or choose to go to other Black Sea resorts that weren’t experiencing capital construction works.
- Reduction in the number of tourists in 2011 to the level of 2006 (3.9 million people). At the same time, the number of tourists from the Krasnodar region and foreign tourists continued to rise amid the sharp decline (by more than 1 million people) of the number of tourists from other Russian regions. As a result, the share of tourists from the Krasnodar region reached 16% compared to the average of 9–12% observed during the previous period.

The duration of stay of foreign tourists increased 2.5 times in 2011. This may be due to the increasing interest in Sochi as the host of the future Games, as well as the growing popularity of Sochi as a venue for a variety of international activities, events and festivals.

City image

Sochi’s image is reflected in mass media publications. The interest of foreign media in Sochi, as a rule, is based on events of the preparation for the Games. Events such as visits of the IOC Coordination Commission, the selection of the Olympic and Paralympic mascots in Sochi tend to draw the most interest among foreign media. In this context, it is natural that Sochi is most frequently described as the “Olympic capital”.

In general, foreign media reports mentioning Sochi in 2009–2010 were predominantly positive. Problematic facts appeared 1.5 times less frequently, and negative stories were rare (5 times less frequent). In 2011, the situation did not change. In general, foreign publications that mention Sochi mostly mention positive facts: a little less than half of all materials (45%), and the number of positive facts/opinions were 2.7 times higher than the number of problematic ones (427 versus 157); the rest were neutral facts. It is worth noting that there is an upward trend in the number of positive facts/opinions throughout the year and, conversely, the falling trend of critical reports number.

In 2011, 92% of materials were neutral to positive, while 14% of those were positive. The number of positive ratings is 1.8 times higher than the number of negative comments.

Analysis of the central Russian media in 2011 showed that the distribution of publications referring to Sochi during the year was fairly even. However, there was a noticeable increase in interest in Sochi during the pre–holiday and summer holiday seasons. The International Investment Forum held in September 2011 was a major boost to the image of the city. In general, the image of Sochi appears in the national press in a neutral–positive way.

The main context of positive mentions of the city in 2011 was “Modernization — new Sochi” (46.4%). Facts, opinions and assessments by journalists on various aspects of Sochi development potentially have the most positive impact on the image of the city. Another important point is the clear increase in interest in Sochi as a resort city. Statistical data shows, that this image of the southern capital is almost as popular as its Olympic status (33% and 40% of publications, respectively).
International events

In 2009–2011, the total number of international events held in Sochi and the Krasnodar region increased by about 70% and more than 50% respectively. This indicates the special status of the region and the city, and the attention paid by the international community in the run up to the Games.

In the city of Sochi, the most significant increase occurred in sporting events. In 2011, there were twice as many sporting events as in 2009. The majority of sporting events were associated with the test events held at the Mountain Cluster venues.

Economic activities represent a high share of the international events (more than a third of all international events held in Sochi, and over 60% in the region), compared with other types. The number of political activities conducted in Sochi increased by five times over two years.

Events tailored to different target audiences produce a significant information and advertising impact on the social and economic development of the region as a whole. It can be argued that one of the trends of modern tourism in the region is event tourism. The main objective of a trip, in this case, is dedicated to some kind of event.

Changes in the labor market of Sochi and the Krasnodar region

The main labor market change indicators that have occurred over the period from 2005–2011 demonstrate the positive impact of preparations for the Games in Sochi. These mitigate the negative social and economic consequences of the financial and economic crisis, which were primarily due to a decrease in the unemployment rate and the growth of total employment in the Games region.

The total number of newly created and supported jobs within the Olympic project implementation increased significantly in 2008–2011. It is a natural consequence of the dynamics of capital investments, which has been increasing exponentially every year.

In this context the start of the Olympic project is confined to 2008. In 2009, the number of jobs increased by more than 60 times compared to 2008, and totaled 33,800. Almost all of them can be classified as “new jobs”, as they are attributed to a new construction works. In 2010, the number of jobs doubled compared to 2009, and reached 58,500, 24,700 of which are new jobs. In 2011, approximately 56,000 people worked on the Olympic construction sites.

As in the structure of capital expenditure for Olympic venues, the main part was represented by construction costs (purchase of building materials and construction works). The majority of jobs were created and maintained in the construction sector, and designing organizations (90%). In 2011, 64.3% of jobs were occupied by skilled workers.

The total number of jobs in the Russian economy created or maintained by the Olympic project, can be estimated 560,300 taking into account the multiplier effect (in complex construction it is considered to be equal to 10).

From 2008, the unemployment rate in the Krasnodar region was lower than in the whole of Russia. This situation remained until 2011 and can be interpreted as an effect of the preparations for the Games.

The unemployment rate in the Krasnodar region is lower than the national average (in 2011, the unemployment rate as defined by ILO methodology was lower by 0.6% than the national average). This is achieved by the introduction of programs aimed at lowering labor market tension. Since 2008–2009 these programs have been financed by the federal budget in the form of subventions for the Russian Federation units. For example, the following programs have been carried out in the Krasnodar region: additional measures aimed at lowering labour market tension in the Krasnodar region departmental target program (2009, 2011); and the Krasnodar region 2011–2013 employment promotion long-term regional target program (2010). The financing of these programs was increased in 2012.
ECONOMIC CHANGES

The positive trend within the labor market of the Krasnodar region will continue up to 2017. This is more pronounced than in Russia as a whole, and is important for the region. In contrast with the majority of Russian regions, the Krasnodar region’s population is rising, and consequently, the demand for jobs is also rising.

Statistical data on the registered unemployment rate in the Krasnodar region and Russia in 2011 showed the positive impact of state policies on the labor market. The level of registered unemployment is a proof of this: 1% and 1.7% respectively.

Changes in wages

The influence of the Games preparations on social and labor relations in the form of wages in the region is shown by the relatively high level of nominal gross wages and salaries in Sochi (in comparison with the Krasnodar region). The growth rate of real wages in Sochi is ahead of wages growth in the Krasnodar region and Russia as a whole. During 2009–2011, Sochi wages in the construction sector were increasing steadily due to the growth of activity in this area and the demand for professionals in this field.

In turn, the high level of wages and their dynamics in the region attracts the additional labor needed for the Olympic venues.

Analysis of the wages growth dynamics and level of unemployment in the Krasnodar region shows the inverse relationship between unemployment and wages growth. In 2005–2008, the unemployment rate has been steadily decreasing against a background of increasing wages. However, after 2008, when the region had minimum levels of unemployment, the wages growth rate began to slow down. This was one of the first signs of the economic crisis. In 2009, the wages growth rate was more than twice as low as in the previous year, and it continued to decline in 2010, despite declining unemployment. However, in 2011, the growth resumed against a background of unemployment reduction.

In 2010, the proportion of people with a cash income below the minimum cost of living in the Krasnodar region accounted for 15.6% of the entire population of the region. A comparison with the nationwide poverty situation shows that absolute poverty in the Krasnodar region is at a higher level. In 2005, this indicator for the Krasnodar region was 26.1%, while it was around 17.7% for Russia as a whole. However, since 2006, there has been acceleration in the pace of absolute poverty reduction in the Krasnodar region, suggesting that the Games preparations have an impact. In 2005–2010, the share of the region’s population with a cash income below the minimum cost of living in the region decreased by 10.5 percentage points (from 26.1% to 15.6%), while in Russia as a whole the decrease was by only 5.1 percentage points (from 17.7% to 12.6%). As a result, there is a marked convergence in the indicator of the region with the average Russian value. So, while in 2005 the difference between them was 8.4 percentage points, in 2010 it decreased to 3 percentage points.

In 2011, the number of unemployed, relative to the previous year, decreased by 19.1% to 2,812.

Changes in average monthly nominal wages paid and level of unemployment in the Krasnodar region in 2005 — 2011 (ILO methodology)
Changes in the quality of life

Quality of life is a complex indicator which includes a system of indices characterizing the level of accomplishment of people’s life strategy and satisfaction of their needs. Quality of life directly depends on the health, social communications, economic and social status of people; their freedom of activity and choice; leisure time; level of education; access to cultural heritage; and the possibility of social and professional self-affirmation.

The transformations taking place in Sochi and the Krasnodar region associated with the Games preparations are bringing changes to the quality of life for the local population. The range of economic activity that the population is involved in has broadened; existing employment opportunities are being optimized, and new ones are appearing; there is an improvement in labor conditions; social infrastructure is being developed; and opportunities for self-fulfillment within society are expanding.

Natural population growth

Between 2005 and 2011, the birth rate in Sochi and the Krasnodar region grew whilst the mortality rate fell.

The birth rate statistics for the Krasnodar region scarcely differ from the Russian nationwide trends. At the same time the birth rate in the city of Sochi grew at a greater pace from 2006 onwards, and stood at 15.5 in 2011 (4.3 per thousand). Since 2010, the birth rate in Sochi has been higher than the mortality rate.

By way of comparison with the figures for Sochi, the birth rate growth for Russia nationwide was just 2.3 per thousand.
Of all the cities in the Krasnodar region, Sochi boasts the most encouraging figures in terms of natural population growth. The last three years have seen natural population growth in 2009, 2010 and 2011 of 1.0%, 1.8% and 1.9% respectively. Sochi has also seen significant population growth due to migration.

The evidence shows that the anticipation of an increase in migration among the population, brought about by the Games, was well-founded. Between 2005 and 2010, the overall levels of migration into the region increased by a factor of more than 5.3.

Migration flow increase in the Games region is clearly confirmed by the migration coefficient value. For example, in 2010 the Sochi coefficient was 2.6 times higher than that of the Krasnodar region and 13 times higher than that of the Russian Federation (migration coefficient value reached 1.3%, 0.5% and 0.1% respectively). Between 2005 and 2011, the migration coefficient for the Krasnodar region and Russia increased by 12 times and twice respectively.

Nutrition quality

The dynamics of Krasnodar region nutrition quality indicators between 2008 and 2011 shows an increase in the majority of values: the number of calories consumed per day and the consumption of proteins, fats and carbohydrates.

In terms of the daily kilo–calories consumption in 2010, the Krasnodar region was above average for the Russian Federation (2650 kcal/day). Basic food consumption indicators are higher for the Krasnodar region than for the Russian Federation as well. On the whole, the nutrition of the Krasnodar region population is of better quality than the average throughout Russia. The population consumes more calories and nutrient materials. The nutrition structure is also more balanced due to higher levels of vegetable, fruit, meat and fish consumption, and lower bread products consumption.

The analysis of the Krasnodar region nutrition quality indicators between 2008 and 2011 reveals an increase in the majority of values monitored. The number of calories consumed per day and the consumption of proteins, fats and carbohydrates is increasing (the latter has a correlation of 1:1:4:4.5 and is more balanced than that of Sochi). The amount of food consumed has also increased in regards to the majority of food categories. The biggest increase was seen in the consumption of fruit and berries (a 43.9% increase), and fish and fish products (a 30.2% increase). At the same time the consumption of potatoes and sugar decreased and is now lower that the national level.

The Sochi nutrition structure features a significant number of dairy products, vegetables, gourds, fruit and berries (this indicator is higher in Sochi than in the Krasnodar region). The proportion of consumed proteins, fats and carbohydrates is far from balanced (1:1.6:5.6 respectively) particularly in terms of carbohydrates consumption.

On the whole, the rise in daily calorie intake and in the consumption of proteins, fats and carbohydrates, which is characteristic of the Krasnodar region, also applies to the residents of Sochi. In the period between 2010 and 2011 alone, the consumption of vegetables and gourds increased by 25%; the consumption of fruit and berries increased by 9.5%; the consumption of meat and dairy products increased by 1.9%; while the consumption of bread and sugar decreased by 4% and 8.8% respectively.
Changes in housing sector

The housing in the city of Sochi is becoming more affordable, against the backdrop of a reduction in the amount of housing that is not fit for purpose.

Within the city of Sochi, construction work is taking place on an area of 5,125 ha (1.4% of the city’s total area). The city does not have much of built-up area as measured per one inhabitant.

All Sochi city districts except Centralny district are dominated by traditional rural settlements with their own planning, which is one of the city’s distinguishing features.

Over the past three years, the population density has increased from 81.0 people per hectare to 82.6 people per hectare due to population growth. One of the most important housing construction trends in Sochi is its refocusing from low floor count buildings to blocks of flats construction. Elite housing which did not exist previously are also now being constructed.

An important result of the last three years (2009–2011) is that real estate prices are stable and have even dropped slightly, proving wrong the skeptical forecasters who predicted an explosive growth in the cost of living in Sochi and the Krasnodar region.

In 2011, the proportion of housing in Sochi lacking amenities being used for residential purposes, reduced in comparison with 2010. There has been a fairly slow reduction in the proportion of housing that does not have central heating, hot water supply, gas or tiled flooring.

The most active phase of housing construction took place in 2010–2011 for the resettlement of people whose homes were situated in the area of future Olympic venues and related infrastructure construction.

Construction of housing for resettled people is taking place in seven areas totaling 94 hectares: 482 private houses in Adler and the Khosta districts; as well as 518 flats and five blocks of flats in the village of Veseloe–Psou of Adler district were commissioned by 2012.

The affordability index of the Krasnodar region is similar to that of Russia while the Sochi index is significantly lower. In the region as a whole, and in Sochi, these figures are showing upward growth, primarily due to the fall in housing prices.

In the Krasnodar region the housing affordability index in the primary market has decreased from 5.9 years in 2008 to more favorable level of 3.5 years in 2010; and in the secondary market from 7.5 years in 2008 to 4.9 years in 2010.

The affordability index in the primary market in Sochi decreased from 9.8 years in 2008 to 4.6 years in 2010; and in the secondary market it decreased from 11.7 years in 2008 to 5.2 years in 2010.
SOCIAL CHANGES

Healthy lifestyle
Sochi and the Krasnodar region could be considered favourable in terms of basic population health indicators.

Sport and physical activities
Throughout the period under analysis, 2005–2011, there has been an increase in the number of people playing sport. The number of people playing sport in Sochi and the Krasnodar region more than doubled between 2006 and 2011, whilst in the country as a whole the number grew by 1.36 times. There is significant growth in the popularity of sport in numbers of athletes and sport disciplines.

The number of Krasnodar region residents who play sport was under 500,000 people in 2006. By 2011 this number was about 1 million people i.e. it nearly doubled.

The number of Krasnodar region residents who play sport in Sochi had exceeded 50,000 people (in 2006 this figure stood at 24,800) so this figure more than doubled.

The number of Sochi residents and 7% of the region population do not engage in any form of sporting activity at all. It is down to sport and physical activities to fill this gap. According to a survey carried out in 2012, 21% of Sochi residents and 23% of the region’s residents play some form of sport. However, only 15% of the adult population of Sochi and 14% of the population of the Krasnodar region practice sport on a regular basis, i.e. several times a week. Children are three times more likely to play sport outside school on a regular basis than adults.

The Games preparations, which include the sport and tourism infrastructure development, led to a sharp increase in the popularity of Sochi and the Krasnodar region as a world-class center for sport. In 2010, at a FIFA general assembly, Russia’s bid to host the 2018 FIFA World Cup Russia™ was approved, and Sochi has been named as one of the host cities for the tournament. In 2010 it was also confirmed that there would be a Sochi stage (the Russian Grand Prix) included in the program for the world’s most prestigious motor racing event, Formula 1, starting in 2014. Sochi is also going to be involved in hosting the Ice Hockey World Championships in 2016.

Tabacco-free Games
Traditionally, the Organizing Committee of a Winter Games actively supports the non-smoking policy. The Sochi 2014 Games will be the twelfth tobacco-free Games. This will protect over 155,000 athletes, sports delegation representatives and volunteers from second-hand smoke every day. As part of the Games preparations, measures are being taken to promote a healthy lifestyle including programs and events aimed at smoking control: the targeted city program “Tobacco Prevention in Sochi” in 2010–2012; tobacco prevention measures as part of the youth policy of the city of Sochi; and also measures aimed at limiting smoking within the regional target program, “Healthy Kuban”.

A public opinion survey carried out in 2012 showed that efforts to promote a healthy lifestyle have delivered their first results. The number of smokers in the Krasnodar region and in Sochi has fallen, and the number of cigarettes that they smoke each day is lower than the number smoked in Russia as a whole.

According to the survey, in early 2011, 37% of people in Sochi and 34% of people in the Krasnodar region were smokers. By February 2012, this had fallen slightly to 33% in the Krasnodar region, and fallen significantly to 28% in Sochi.

With respect to the future prospects of fighting against this dangerous habit, it is worth noting that 80% of the population of Sochi and the region support the authorities’ initiatives to reduce smoking.
SOCIAL CHANGES

Changing attitudes towards people with a disability

According to public opinion surveys carried out in 2009, 2011 and 2012, people in Sochi and the Krasnodar region came to have a fairly settled, positive attitude towards people with a disability practicing sport; to the participation of people with a disability in Paralympic competitions; and to the Paralympic Winter Games of 2014. People relate well to the humanitarian principles behind the Paralympic Movement and believe in its potential and its capacity to improve the lives of people with a disability, for whom many Russians have traditionally felt compassion.

Those surveyed felt that people with a disability still faced the same difficulties in terms of finding a good job, getting a good education or taking part in public or political life, and that their chances of doing so were slim compared to other people’s chances. It is much more difficult for people with a disability to solve housing problems and receive high-quality medical help.

Judging by the answers of those best-placed to know — families with at least one person with a disability — charities providing help to people with a disability are becoming more and more active, particularly in the Krasnodar region (the proportion of people giving that answer rose from 23% in 2009 to 34% in 2012). These results also point to the fact that a clear majority of people with a disability are not yet receiving personal help from charitable organizations.

The results of the survey show that support for people with a disability is increasing. The respondents proved this through stories of their own and others’ deeds. Over 40% of Sochi and Krasnodar region residents today support someone with a disability without waiting to be asked to. According to 2009 and 2011 survey results, less than 30% of people then were taking care of someone with a disability without being asked to. These figures can also reflect social desirability factor.

The direct impact of the Games preparations on people’s attitude towards people with a disability was assessed using eight parameters. Over the last two and a bit years, according to respondents answers, two of these parameters have improved in Sochi: ordinary people began to be more attentive towards, and take greater care of, people with a disability, and public buildings, shops and transport have become more accessible for them.

The total number of people with a disability in the Russian Federation reached 13.2 million people by the end of 2011. In the Krasnodar region the figure was 434,600 people (3.3% of the national value).

The State program “Accessible Environment” was launched in March 2011 in three pilot regions: the Tver and Saratov regions and the Republic of Tatarstan.

Russian legislation and regulations affecting people with a disability are being transformed at the moment. These include amendments to the Federal Law on elections; support measures for people with sight disorders; and the development of a new disability categories codifier by the Ministry of Health and Social Development of the Russian Federation that meets the International Classification of Functioning, Disability and Health (ICF) rehabilitation standards, and is graded by the type of aid required.
Education and employment prospects for people with a disability

Sochi State University had trained 31 people to work with people with a disability by the end of 2011. The most popular education programs were "Therapeutic physical education" and "Special psychology and correctional pedagogy".

The Krasnodar region has two higher education institutions, Kuban State University of Physical Education and Slavyansk-na-Kubani State Pedagogical Institute, which train specialists for working with people with a disability. In 2011 these educational institutions trained 83 people in several specialties related to the education of people with a disability.

In the Russian Federation there are 13 specialized higher education institutions under the authority of the Ministry of Sport and Tourism and 45 higher education institutions under the authority of the Ministry of Education and Science that train specialists to work with people with a disability (as of 2011 — 2,847 people).

Students in specialized higher education institutions include students with a disability. They receive the education that enables them to work in physical education and sport. They receive qualification that enables them to work with people with a disability. In 2011, at least 75 people received this education in the Russian Federation, including 72 people who received education in higher education institutions.

The Ministry of Health and Social Development of the Russian Federation has signed a government contract on two–year training programs for employees on provision of social services to people with hearing disorders. The federal budget has assigned 1 billion rubles for this.

Barrier–free environment (the city and sports venues)

New infrastructure is being created in Sochi which meets international accessibility standards. For the first time in Russia, all elements of the urban landscape are being transformed: streets and parks, hotels and public transport, state institutions and sports venues. In the city of Sochi, this activity is being carried out as part of the "Barrier–free environment" program, which includes a range of measures aimed at providing people with a disability with a comfortable stay in the city, and creating a barrier–free environment.

At the heart of the program lie the concepts of equality, dignity and functionality.

A lot of work is being done as part of the regional target program "The construction of the Olympic venues and the development of the city of Sochi as an alpine climate and balneological resort" (decree of the Head of the Administration (the Governor) of the Krasnodar region No.723 dated 19 August 2009, and edition No.386 dated 13 April 2012). New ramps are appearing on the streets of Sochi with each passing week. They are being installed in a way that takes size requirements and available space into consideration, and so that they can be approached easily by every user. Tactile signs for people with visual impairments are being installed on the city’s streets, along with stairlifts in underpasses and special buttons in elevators.

According to data from March 2012, there are already 15 city buses that are accessible to people in wheelchairs, and there will be another 57 by the end of 2012. By 2014, Sochi will have auditory traffic signals, auditory pathways, and special signs for the visually–impaired.

The number of venues which are accessible to all categories of people with a disability has increased as a result of the large amount of work undertaken to create a barrier–free environment. The statistical base in terms of the number of venues in Sochi’s International Hospitality Zone (IHZ) which are accessible to people with a disability, is continually being perfected. At the end of 2011, of the 1,691 venues in the IHZ, 519 buildings had been reviewed (administrative buildings, airports, underpasses and pedestrian crossings, traffic lights, and also shops, health spas, car parks, restaurants, gas stations and so on).

The venues are most accessible to people with limited mobility and those who have a disability relating to their hearing. At present, the sites that are least adapted for people with a disability are administrative offices, and some social services premises are only accessible to people who are partially sighted and those using a wheelchair.

By 2014, based on data from Sochi City Administration, the total length of roads that will have been adapted for people with a disability will be approximately 40 km. 10 underpasses will be accessible, including the underpasses near the Moskva hotel, the former cinema "Stereo", and Khosta Administration. In the same places there will be pedestrian zones, special routes, and tactile indicators. Barrier–free venues include Sochi City Administration premises, and the Administrations of the Central and Khosta Regions. Approximately 1 billion rubles from the regional budget have been set aside up until 2014 to create a barrier–free environment.
Inclusion of people with a disability in sport

The most popular types of sport that do not require any special adaptation for people with a disability are games-type individual sports such as darts, chess, draughts, billiards and so on.

According to data from the Sochi City Administration Department of Physical Exercise and Sport, the number of people with a disability playing sport during 2006–2007 grew by almost three times.

In Russia as a whole, the increase in the number of people with a disability playing sport during 2005–2011 stood at 71.9%.

All the Olympic and Paralympic sports venues are currently in the final stages of construction and operational launch. The design solutions that are being adopted allow for easy access to the sports center zone for people in wheelchairs; access to the stands for people with a disability; special areas for people with limited mobility; and special toilets. There are also plans to install ramps, specially equipped elevators, and light and sound indicators.

The number of hotel rooms in Sochi that were accessible to people with a disability in 2011 was 432 (under 1%). There were practically no hotel rooms in this category in the city’s mini-hotels and a relatively large number of them in 5 star hotels (around 4%), and 3 star hotels (around 2%).

Between 2010 and 2011, the number of hotel rooms accessible to people with a disability rose by 8%.

The number of hotel rooms accessible to people with a disability in Sochi in 2011.

Between 2010 and 2011, the number of hotel rooms accessible to people with a disability rose by 8%.
Cultural and educational activity

Over the last 20 years, there has been an increasing interest among the population in obtaining a standard or higher professional education. As a result, by 2010 (when an All-Russian population census was held), the percentage of people with a higher and standard professional education had increased by three times in comparison with 1970. The average annual growth rate of number of people with a higher education over the last 30 years is 3.6%.

In 2010, the percentage of people with a higher education in the city of Sochi stood at 31.0%, an increase of over 5.0% since 2002. This is significantly higher than the average level for the Krasnodar region, which was lower than 25%, but the level of growth over the last eight years was practically the same as that of Sochi. Among the adult age groups of Sochi’s population, the age group with the largest proportion of people with a higher education was the 25–34 age group (for which the figure was 45%, as opposed to 37.1% in the Krasnodar region as a whole).

On the whole, Sochi can be characterized as having higher levels of education than the Russian average, and given the nationwide trend of growth in the number of people with a higher education, we can expect to see this increasing by 3–5% by 2014 in comparison with the figures for 2010.

Education program

Preparations for staging the Games include holding numerous Games–related educational activities. By the end of 2011, 168 events had been held at different territorial levels to promote the Olympic and Paralympic Movement values and involve more people (particularly schoolchildren and young people) in physical and sporting activities.

In 2010 and 2011, “Olympic induction” events were held in both Sochi and Moscow. The number of people who took part in these events during 2010–2011 increased by more than 10 times. As part of these activities the target audience is given the opportunity to find out about the history and philosophy of the Olympic and Paralympic Movements, to get a sense of the magnitude and specific nature of the Games and their significance for Russia.

The training of pre-school, secondary and supplementary education teachers to teach Olympic education programs is particularly important. In 2011, Sochi hosted a number of training programs for pre-school personnel. As part of the celebrations marking 1,000 Days To Go until the Olympic Winter Games in Sochi, a grand ceremony was held to open the KubSU Volunteer Center. Since then, some events have been being hosted by volunteers from the Center with the help of the Sochi 2014 Organizing Committee. On 1 September 2011, over 1,500 Olympic lessons were held for more than 50,000 schoolchildren in 30 cities throughout the Russian Federation. The number of Paralympic–themed events is growing. These include the All-Russian Summer Spartakiade for People with a Disability, in which approximately 1,600 athletes from various regions of Russia took part, and the IX General Assembly and Conference of the European Paralympic Committee.
The total number of people attending these events between 2009 and 2011 was over 209,000 people, including over 155,000 people in 2011.

A significant number of events (especially in Sochi) relate to the Olympic education program. The academic side of Olympic education teaches students about the sports industry and is run as a training course within secondary and higher education institutions. The professional education is aimed at training highly qualified specialists in sports management: the Russian International Olympic University was created for this purpose.

Special attention is paid to educational events focused on the Paralympic values; barrier-free environments; the ethics of interaction with people with a disability; and meetings with children and adults with a disability (there have been 20 such events in 2010, and 44 in 2011).

The total number of people taking part in the various 2011 educational events exceeded 150,000; about 35,000 of them took part in events held in Sochi.

During 2009 and 2011, the total number of events increased by a factor of six (in Sochi this was by a factor of almost eight), and the events tended to take place close to the host city for the 2014 Games.

The preparations for the Paralympic Winter Games include efforts to change Russian society’s attitude towards people with a disability. For example, the “Our Champion” program enables Russians to find out about Paralympic athletes who committed real feats on their way to success in sport as the awarding of wheelchair curling team “Granit” in Chelyabinsk Oblast, and the awarding of ice sledge hockey team in the Udmurt Republic.
Cultural Olympiad

In accordance with the Olympic Charter, each city hosting the Games (winter or summer) should also host a Cultural Olympiad. This comprises a number of concerts, art competitions, festivals and exhibitions that take place before the sports events.

The Cultural Olympiad of the Sochi 2014 Games began four years before the Games themselves. Between 2010 and 2014, thousands of events will take place in Sochi, and those taking part will include people with a disability and orphaned children. Each year of the Cultural Olympiad is dedicated to a particular art form, and 2011 was the Year of Theatre so the main events that took place in Sochi in 2011 were linked to the theatre. Among these were plays; the All-Russian children’s theatre competition “A Class for Peace”; and the theatre competition “Textura — Olymp”. In 2011, the Yuri Bashmet International Festival of Winter Art took place once again. In July 2011, a gala-concert took place featuring stars from Russian ballet.

The total number of people visiting Cultural Olympiad events in Sochi was around 35,000. The largest numbers were for the Marathon of Russian regions which was held in Sochi in October 2011. The Marathon was attended by 16,000 people and included a unique open-air concert that lasted for three days (23 hours of actual performances) and featured 2,000 participants from 51 Russian regions. Each band demonstrated the distinctive character of its native region. The three-day open-air concert was meant to demonstrate the cultural diversity and multi-nationality of the Russian Federation. A 100m set provided a venue for both popular musical bands and representatives of outlying regions, as well as for young dancers and musicians.

At a national level, the most important and large-scale event of the Cultural Olympiad was the second annual festival “Caucasus Games”, which took place in the Nart stadium in the city of Cherkessk. The festival helps to preserve national culture and sport, as well as strengthen friendships between the people of the North Caucasus.

The revival of the volunteer movement in Russia and the region

The Sochi 2014 Organizing Committee’s volunteer program not only recruits volunteers for the Games, but also promotes volunteerism throughout Russia. In 2010, an All-Russian competition was held among educational institutions for the right to set up specialist Volunteer Centers. 26 competition winners from 14 Russian regions were selected in December 2010.

The plan is to have 25,000 volunteers at work whilst the Games are being staged.

Post Games, the Volunteer Centers will continue their work to create a culture of volunteering in the Russian Federation as an important part of the Games legacy.
In March 2011, a Declaration of commitment for the restoration of the river Mzymta basin ecosystem was signed to mitigate against environmental consequences. The Mzymta river area is the most vulnerable to change due to the continuous transformation of the area.

The declaration was signed under the aegis of the United Nations Environment Programme (UNEP) by executive managers of the Olympic program (SC Olympstroy, Russian Railways, SC Rosa Khutor, Krasnaya Polyana, Gazprom, FSK UES, and Krasnodar Region Administration) in the presence of Dmitry Kozak, Deputy Prime Minister of the Russian Federation; UNEP head office representatives; head of the UNEP European office, and Dmitry Chernyshenko, President and CEO of the Sochi 2014 Organizing Committee.

In 2011, the total area of altered landscapes (in comparison with the base period of 2007) reached its highest figure as work had begun on practically all of the sites set aside for Olympic venues and infrastructure. The main feature is the joining of previously separated natural habitats stretching from the Imeretinskaya Valley to the Rosa Khutor alpine skiing resort. The only two gaps are the Akhshtynskoye Gorge and a section of the River Mzymta valley from the village of Monastyr to the village of Kepsha. The other trend observed is the growth in fragmentation of the alpine forest landscapes in the Mountain Cluster.

In comparison with the beginning of the study, the area of specially protected natural areas (SPWA) in the Krasnodar region has increased, thanks to the setting up of the new Utrish nature reserve, and a natural ornithological park in the Imeretinskaya Valley in 2010.

The SPNA occupy 1,714,100 hectares of the region’s total area (22.7%). In 2011, measures to annex 19,550 ha of the former Loo Forestry Park land, to make them part of Sochi National Park, continued.

By the Decree of the Head of the Krasnodar region Administration (the Governor) No. 678 of 10 August 2010, a new regional ornithological park with a total area of 211.3 hectares was established in the Imeretinskaya Valley. This was established as part of the implementation of the “Program of construction of the Olympic venues and the development of the city of Sochi as an Alpine climatic resort”. The park borders and partially crosses the Coastal Cluster. In 2011, work took place to increase the area of the ornithological park by 30 ha.

In 2011, reconstruction of the aviary complex was completed, and work is continuing on the reconstruction of the yew and box–tree glade.

Water supply/drainage

There is a fairly high level of centralized water supply in Sochi (the overall length of the street water–pipe network is 775.2 km). The proportion of the Sochi population that is provided with a communal water supply, and has access to hot and cold water, is growing.

It is worth noting that there has been a sustained positive trend in terms of the reduction in both the overall and per capita volumes of water consumption. The figures for water quality have improved slightly. The urban region of Sochi consumes 44.9 million m³ of water (approximately 2% of the total for the Krasnodar region). According to the data obtained, annual water consumption per capita in Sochi stands at 156 m³ (427.4 per person per day), which is roughly equal to the water consumption in Moscow. In many ways this can be explained by the fact that a high proportion of the housing in the city has a central water supply (94.3%), and the proportion of the entire housing stock connected to sewage network is 89.2%, which is a very high figure compared to other Russian cities.

The communal services infrastructure and the infrastructure of the resort complex have an impact on the quality of surface water in the Sochi region. A total of 34 sewage treatment plants are located within the city, deterioration at which constitutes 70–80%. At the end of 2011, the total volume of sewage water generated was 18.7 million m³. As part of the Games preparations, complex projects to modernize and construct new sewage treatment facilities in Sochi districts are underway.

Several large sewage system construction and modernization projects are underway in the city in accordance with the program for the Games preparation and staging:

Modernization of the existing treatment facilities in Adler. The Adler treatment facilities are a complex of facilities for collection, decontamination and disposal of sewage waters from the Imeretinskaya Valley and Adler district, both from the existing and planned housing stock and the Olympic venues. The capacity of new sewage treatment facilities in Adler will account for 100 thousand m³/day, 2.5 times more than the current capacity (40,000 m³/day).
New treatment facilities in the village of Krasnaya Polyana. There was no modern sewage treatment infrastructure in Krasnaya Polyana prior to the construction of new sewage treatment facilities. Many residential homes and other sites in this area were not connected to Sochi’s central sewage network. Prior to the decision to stage the Games of 2014 in Sochi, there was no centralized system of water supply and drainage in the Krasnaya Polyana rural district. The Games preparations program stipulated that two water intake facilities must be build for operations: one on the River Beshenka with a capacity of 11,000 m³/day, and one on the River Zymta, in the village of Esto-Sadok, with a capacity of 14,000 m³/day. The commissioning of sewage treatment facilities will improve the environmental situation in Krasnaya Polyana. The facilities have a capacity of 15,000 m³/day.

Modernization of the existing Bzugu sewage treatment facility. The multi–stage reconstruction of the Bzugu sewage treatment facility involves construction of new facilities, and the dismantling of existing ones without interrupting their operations. The reconstruction of the Bzugu treatment facility will increase its capacity from 32,000 to 140,000 m³/day, which will meet the needs of the Central District of Sochi in full, and will improve the quality of the treated sewage water discharged thanks to the introduction of modern technological and construction solutions.

Modernization of the existing sewage treatment facilities in the village of Kudepsta. In 2011, work began to modernize the treatment facilities in the village of Kudepsta, with total capacity of 50,000 m³/day.

Air quality

In order to assess the state of the urban environment the level of extended air pollution, calculated using the average annual figures for concentration of several pollutant substances, is used, since it is based on objective atmospheric measurements for cities. Using this measurement, Sochi is assessed as having low levels of air pollution.

The average annual concentrations of pollutant substances in 2009 were: nitrogen dioxide (NO₂) — 0.22 MAC; nitrogen oxide (NOₓ) — 0.09 MAC; carbon monoxide (CO) — 0.91 MAC; sulphur dioxide (SO₂) — 0.62 MAC; formaldehyde — 0.51. The figures for average annual concentrations of pollutant substances are approaching the MAC values only for those substances, the main source of emissions of which are motor vehicles (CO, SO₂, formaldehyde). Motor vehicles contributed 95% of total emissions.

An assessment of the trends, in comparison with the initial period of the study and going back to 2000, shows that the concentration of most substances (other than formaldehyde) has increased, which seems to be linked to the construction works.
Green building standards

Green building standards are a tool for minimizing the negative environmental impact of buildings, and improving the architecture quality for the end user.

The Olympic venues are being built in accordance with green building standards. SC Olympstroy launched a corporate green building standard in May 2010, following a year of discussions with those involved in the Games preparations and industry representatives. This was the first time that a thorough investigation into how Russia’s construction industry can be environmentally friendly was undertaken. The green standards adopted by SC Olympstroy are unified requirements imposed on all those involved in construction: the contractors and suppliers of materials and services at each stage from planning through to the opening of the venues. Energy-saving technologies, treatment facilities, and measures aimed at protecting the environment are being prioritized.

This corporate standard is innovative because it is the first standard to be adopted in Russia, and that covers infrastructure such as cars and railways, as well as free-standing buildings. This SC Olympstroy initiative was supported by the other companies involved in the construction of Olympic venues. So the green building standards are supported by Russian Railways. At the venues for which the responsible executor is Russian Railways, 68 infrastructure facilities were put into operation in 2011, whilst separate phases of construction were completed at 29 of other infrastructure facilities.

Within the adopted green building standards, particular attention is paid to the quality of the site and the organization of construction work including:

- The impact of construction on agricultural land and animal habitats
- The effect of the waste water generated on construction sites on water ecosystems and soil erosion
- Promoting the re-use of existing structures, the development of brownfield sites, and the preservation of fertile areas suitable for agriculture where possible
- Maximizing the use of open spaces in the construction zones
- High-quality transport to reduce greenhouse gas emissions
- Reduction in the cars usage, and improved fuel quality
- Measures to prevent dust and solid waste polluting the air.

The key Olympic venues will be certified under the international BREEAM standard.

The Sochi 2014 Organizing Committee, in cooperation with SC Olympstroy, has developed a program to recognize achievements in implementing environmentally effective, innovative solutions in the design and construction of Olympic venues (the Recognition Program). The Recognition Program is aimed at:

- Identifying design and contractor organizations that are introducing environmentally effective, innovative solutions in the design and construction of Olympic venues, and encouraging them to continue doing so
- Identifying design and contractor organizations that are introducing principles for the provision of accessibility and the setting up of a barrier-free environment in the design and construction of Olympic venues, and encouraging them to continue doing so
- Identifying and promoting innovative achievements among the organizations and experts involved in Olympic venue construction, and among the broader Russian Federation’s population.

A Recognition Program award is an internationally recognized confirmation of organizations’ qualifications and full marks of their contribution to the intangible Games legacy.
CONCLUSION

The preparations for the Games have not only boosted the development of Sochi’s infrastructure and its transformation into a world-class, all-season resort with high quality sports infrastructure, but are also having a significant positive impact on the social and economic situation in the Krasnodar region and the city of Sochi.

During the Games preparations, an innovative strategy was chosen for the city of Sochi that would radically alter the main social and economic trends. In Sochi the downward trend in population numbers has already been stopped, and the population is growing. Meanwhile, the birth rate is higher than the mortality rate, and the positive migration figures reflect the increased attractiveness of Sochi and the emergence of a large number of new jobs.

Once the construction phase has been completed, both quality of life and the state of the environment will improve. The transport and communications infrastructure that has been created will make the intra-city space better connected, and help people save time getting around the city. Natural complexes will be restored, and as a result of the modern waste removal and recycling systems, the environmental situation will improve both in the city and in adjacent parts of the Black Sea aquatorium.

The development of the Mountain Cluster, and the ability to hold training events for athletes during the winter, will reduce the seasonal peaks and troughs which have damaged the economy and population of Sochi and the Krasnodar region.

Significant improvements are taking place in the service sector and this is leading to growth in the number of tourists visiting the resort. In turn, this will support the new jobs created, ensure the year-round employment of the population and growth in income in the municipal and regional budgets. Jobs in construction will be replaced by better quality, modern employment opportunities within the Olympic venues, and in the provision of services to tourists and athletes.

The barrier-free environment that has been created is turning Sochi into an attractive holiday and leisure destination for people with a disability. The Games preparations have been the catalyst for a change in attitudes towards people with a disability, both from the state and from society. The events being held as part of the Games preparations are ensuring the further development of the nation and the people living in Sochi, the Krasnodar region and the country.

In the global context, the Games have begun to position the Russian Federation as a leading sports nation.

The sports venues constructed in Sochi will become a new, international center for winter sports. Around this center a renovated city is emerging, with a network of modern roads and junctions; an international airport and a seaport in the Imeretinskaya Valley; eight harbors for coastal sailing; three railway lines and six stations; hotels; business centers; and concert sites. The Olympic construction program is demonstrating the country’s capability and readiness to take on challenging infrastructural projects in line with the best international practices. Another aspect of the Games legacy will be the creation of human potential capable of organizing major international sporting events. These factors, along with the improvement in the social and economic situation, were the guarantees based on which the international community entrusted Russia with the staging of a series of international sporting events:

- Multiple sporting events (of which 21 are test events) between 2011 and 2013
- The Kazan Universiade in July 2013
- Formula 1’s first Sochi Grand Prix in 2014
- The Ice Hockey World Championships in 2016
- The FIFA World Cup in 2018.

Based on research carried out by the authoritative Olympic portal “Sportcal”, Russia was placed among the top three most influential sporting nations in 2012, and was given the status of global leader in sport for 2013–2018.

The preparations for and staging of these major international events will be based on the experience acquired during the Games preparations and staging. The construction of new sports venues and the reconstruction of existing ones, are essential in order to stage these events successfully, and will ensure the long-term development of sports venue infrastructure. This will ensure that Russia can strengthen its long-term status as a leading sports nation.

“The preparations for the Winter Olympic Games in Sochi are giving an incredibly strong boost to the development of sport in our country. The fact that we are going to be hosting a whole range of international sporting events in Russia will justifiably position us as one of the leaders among developed sporting nations. This is one of the most important elements of the Olympic legacy, which even now is helping to develop amateur and professional sport in the country, and is also bringing us tangible results in terms of strengthening our reputation.” Deputy Prime Minister Dmitry Kozak pointed out while commenting on the results of the research.¹

¹ SOCHI, 15 November 2012 /Corr. ITAR-TASS Tatiana Polnyuk/.