

The European Union's 2008 IPA Programme for Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo (under UNSCR 1244/1999) and Turkey

# Infrastructure Project Facility Technical Assistance Window (IPF TA) Western Balkans

EuropeAid/128073/C/SER/MULTI

Sub project: WB4-SER-ENE-04

SERBIAN GAS TRANSMISSION PIPELINE (TO BULGARIA)

Social Impact Assessment Draft Final Report

November 2011



# **COWI • IPF CONSORTIUM**

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SOCIAL IMPACT ASSESSMENT
FINAL REPORT

November 2011

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#### LIST OF ABBREVIATIONS (PLEASE ADD / DELETE AS NECESSARY)

AH	Affected Household
BC	Branch Connection
BIH	Bosnia and Herzegovina
BS	Building Structure
COWI-IPF	The Consortium carrying out the present project
EBRD	European Bank for Reconstruction and Development
EC	European Commission
FDI	Foreign Direct Investment
FS	Feasibility study
GDP	Gross Domestic Product
GMS	Transfer Station
HS	Health and Safety
IA	Implementing Agency
IFI	International Financing Institutions
IMF	International Monetary Fund
IPA	Instrument for Pre-accession Assistance
IU	Independent Unit
LNC	Local Neighbourhood Communities
MoLSP	Ministry of Labour and Social Policy of Republic of Serbia
MR	Metering and Regulation Station
NGO	Non-governmental Organisation
OECD	Organisation for Cooperation and Development
PA	Protected Area
PPO	Spatial Plan of Municipality
PR	Performance requirements
RoW	Right of Way
RSD	Republic Serbia Dinar
SAMP	Social Action and Monitoring Plan
SES	South-eastern Serbia
SFRY	Socialist Federal Republic of Yugoslavia
SIA	Social Impact Assessment
SME	Small and Medium Enterprises
SER	Serbia
STD	Sexually transmitted diseases
UN	United Nations
USAID	United States Assistance for International Development
WB	World Bank

# 1 Synopsis

Project Title: Serbian Gas Transmission Pipeline (to Bulgaria)

Project Number: WB4-SER-ENE-04
Contractor: COWI-IPF Consortium

Beneficiary: Srbijagas
Location: Serbia
Project start date: 14/04/2011
Project Duration: 6 ½ months
Anticipated completion: 31/10/2011

# 2 Non – technical summary

The following study is prepared with the aim to identify, assess and propose mitigation measures to adverse socio-economic impacts – or enhance positive ones - related with the construction, operation and eventual decommissioning of the Serbian transmission pipeline to Bulgaria.

The first chapter will present concise description of the pipeline project. Key documents that were used will be presented, as well as key aspects of the Social Impact assessment (hereinafter SIA) and legal and developmental context on the national and regional level. Categorisation and assessment of potential impacts is also included.

In the second chapter will be described current socio-economic indicators in the districts of Nis and Pirot, namely in the municipalities that are on the pipeline route. The third chapter contains developed Social and Monitoring Plan with detailed description of the impacts and recommended measures for avoidance or minimization of adverse impacts, and taking maximum advantage of positive aspects, as well as the responsibility of the Beneficiary and the Contractor in the execution and monitoring stage. It will present direct and indirect influence of the pipeline in the pre-construction, construction and operation phases.

Influence will be presented in reference to demography, economic processes, social conditions, and the focus will be on the status of population, and vulnerable groups, such as unemployed, women, elderly, poor people, children, Roma, refugees and internally displaced people. Social Action plan will explain to the beneficiary and stakeholders how to prevent possible problems and negative impacts that might arise, as well as how to take most advantage of the positive influences in order to boost development of their local and regional overall socio-economic conditions.

Therefore, the analysis of project- and site-specific impacts was based on current and verifiable primary information that were gathered directly from local neighbourhood communities through field surveys, and from the interviews with local authorities, Centres for social work and Non-governmental organizations in the pipeline route.

# 3 Project Description

# 3.1 Project rationale

The construction of the main high-pressure gas pipeline MG -10 Nis – Dimitrovgrad (Bulgarian border) will enable the inter connection of Serbian and Bulgarian gas transport systems. This will enable the supply of natural gas to the Republic of Serbia from the Republic of Bulgaria, so an alternative will be provided to the gas supply from abroad.

The transmission pipeline will be sited in the South Eastern part of Serbia in the Nisavski and Pirot district, namely Town of Nis, and Municipalities Bela Palanka, Pirot and Dimitrovgrad. This main line coming from the Republic of Bulgaria covers not only the South Eastern Serbian market but also the market of the Central and Western Serbia (see picture 1) namely the areas of Paracin, Jagodina, Cuprija, Novi Popovac, Svilajnac, Cicevac, Krusevac, Kraljevo, Cacak, Gornji Milanovac, Uzice and numerous other towns in that region, including the consumer and industrial sector.

The construction of this pipeline and further development of gas pipeline system in Serbia (Nis – Knjazevac – Zajecar – Bor – Prahovo, Nis – Leskovac – Vranje and Nis – Prokuplje – Kursumlija – Pristina) will provide the gas supply to the far South and far East of Serbia.

Construction of this pipeline has not only strategic, economic and developmental importance for the Republic of Serbia, but the second source of natural gas to the country from Bulgaria provides stability and continuity in the delivery of natural gas as well as it strengthens the energy sector of Serbia that is import dependent. During the winter period reductions of gas supplies to major consumers occur in the existing transportation system and this project should reduce the technical limitations of natural gas deliveries during the winter period.



Picture 1 Existing and proposed natural gas system in Serbia

In addition, this should enable energy efficiency and utilization of cleaner energy source being that in this part of Serbia there is large consumption of coal and wood, as it was discovered in the survey at LNC in the pipeline route (see Annex 2). Electricity is also the most used energy source; however there are great losses of Electro Distribution Company due to obsolete and damaged equipment and lack of system of monitoring, and electricity dependence is using large amounts of energy that could be used more favourable e.g. in industry. Significant importance is in fact that the introduction of natural gas provides clean and healthy environment.

Construction of the main gas pipeline on the territory of Nis, Municipalities of Bela Palanka, Pirot and Dimitrovgrad, and construction of metering and regulation stations for communities in these municipalities, creates the conditions for the construction of distribution pipelines in all towns. This provides a reliable supply of energy, which is economically the most advantageous and environmentally friendly.

# **Long-term social benefits**

The construction of the pipeline is of strategic importance for economic development, environmental protection and increase in the standard of living in these

municipalities. As reported in the field in the Directorate for Economy, sustainable development and environmental protection in Town of Nis, large investments in the industry are planned n Nis. Pirot already has free-custom zone and very developed private sector, so the gas pipeline will enable cheaper and healthier energy supply.

This project creates conditions for economic and industrial development, particularly for attracting foreign direct investments in the manufacturing and processing sectors, for which the imperative requirement is well functioning infrastructure. Along with the Corridor 10 this pipeline should enable strong infrastructure in the South Eastern Serbia that even though it possess natural and human resources is still one of the most undeveloped parts of Serbia and is in dire need for such investments. Finally, overall input from this project should upgrade overall political and geo-strategic position of Serbia.

#### 3.1.1 Labour and working conditions

It is estimated that the number of workers needed will be in average 50 workers per month during the 2 year period, in the initial phase 10-20, then in the peak of the works 80-100 workers per month will be needed, and then in the final phases the need for workers will be decreased to 10-20 per month, which in average is approx 50 workers per month. In total there will be 100 workers involved in the construction.

The operation phase will need 30 workers, which will be the basis for the following assessment and action plan for the operation and maintenance phase.

#### 3.1.2 Pipeline

The pipeline will be 108,5 kilometres long, coated and positioned underground, minimum 1 meter below the ground surface. Pipes will be 12 meter long. Pipeline will be Dn700 on the Serbian side and Dn600 on the Bulgarian side. There will also be following facilities on the ground:

- 1. block line break valve 6
- 2. metering and regulation stations 4
- 3. pigging stations launching and receiving 3
- 4. gas measuring station, one on the border and the one in Nis 2

Each of these facilities will be protected by fence and on secured areas with restricted access. The proposed route is located outside populated areas, except in the village of Jelasnica, Ciflik and Ponor and protected areas. In a zone of 30 meters on both sides of the pipeline construction or planting of trees will be forbidden during the period of operation. 200 meters on both sides will be protective belt zone where the construction will take place.

# 3.2 Regulatory Framework

SIA is an instrument developed by international financing organizations with the aim to identify and assess impacts on society from the construction and operation of large infrastructure projects. Purpose of SIA is to gain information on possible positive and especially negative consequences of development projects in areas. Mitigation measures are defined and implemented with aim to secure protection of rights of local population and to ensure optimal well being for the community during implementation of the projects.

Existing laws and bylaws in Serbia do not oblige to conducting SIA in design and implementation of developmental projects. Every spatial plan contains parts that refer to local population: demographic analysis and projections, spatial distribution and access to public services, and housing. However, neither mechanism for monitoring of implemented spatial plans nor analysis or identification of influences of spatial plan solutions to conditions and quality of life in local communities in the area of plan are yet established.

Local population is informed about spatial plan solutions during Public inspection. Public inspection is ex-post notification of citizens on plan document (most often in the final phase of Draft of Plan proposal). Citizens can give their comments and remarks, but there is no obligation of their adoption. As a consequence, this instrument is not efficient toll for involvement of public and citizen's participation, e.g. all people interested in the activity of planning, arrangement and utilization of space.

National legislation in Serbia foreseen that feasibility and prefeasibility studies should be preformed. Serbian Law on planning and construction (Official gazette RS No 47/03) was brought the Regulation on the content, volume and approach in designing prefeasibility and feasibility studies on infrastructural projects, however it does not say anything about content of the SIA.

In order to ensure social and environmental sustainability in implementation of the project, and to mitigate negative influences of the pipeline construction on the affected communities, regulations and requirements from the EBRD and IFC were followed. Namely, EBRD Performance Requirements for Environmental and Social Policy, International Finance Corporation's Guidance Notes: Performance Standards on Social & Environmental Sustainability (2006), Environmental, Health, and Safety Guidelines for gas distribution systems (2007), Environmental, Health, and Safety General Guidelines (2007), Environmental and Social Review Procedures Manual (2010), Procedure For Environmental And Social Review Of Projects (1998). Based on these guidelines the following social impact assessment will encompass overall socio-economic context of the pipeline construction.

According to EBRD PR 4 the health and safety of communities entail brief consultation with community representatives, including women's groups, local authorities and providers of health and safety services to address their concerns about any critical aspects of a project that may be encountered during the con-

struction phase (e.g. increased traffic, noise, dust, movement of heavy machinery).

For large projects with risks and potentially significant impacts to public health, health care systems and demand for health services, this process involves reviewing existing health and safety conditions, wide dissemination of information through public forums, and consultation with communities in the project area of influence about their health and safety concerns in order to address potential impacts from activities such as the influx of workers during the construction phase and more lasting environmental changes during the operational phase.

Impact of the pipeline construction on the health of the population as well as labour was addressed. Attention was given to possibilities and positive aspects that this pipeline might have on population and how to maximally utilize them.

Consequently, these infrastructural projects have both short term and long term effect in general social and economic development of the country. The following SIA is aiming to ensure that such benefits are considered in improving social and economic conditions in the region where the pipeline is built.

One of the major economic impacts is job creation. EBRD PR 2 recognizes that the pursuit of economic growth through employment creation and income generation should be balanced with protection for basic rights of workers. For any business, the workforce is a valuable asset, and a sound worker management relationship is a key ingredient to the sustainability of the enterprise. Failure to establish and foster a sound worker-management relationship can undermine worker commitment and attention, and can jeopardize a project.

# 3.3 Approach and Methodology

#### 3.3.1 Introduction

Impact identification and assessment was based on both literature search and field surveys. Analysis of documents and field data gathered from public institutions, local self-governments, their strategies and local economic development plans. In order to ensure accurate data on affected communities in the pipeline route extensive field research was conducted.

#### SIA development comprised the following tasks:

- Collect and analyse the data on population in the affected communities,
- ➤ Identify scope and features of vulnerability in affected communities and propose the acceptable programs for the support and improvement of the position of the vulnerable groups,
- ➤ Identify groups which may be adversely affected by the project,
- Quantify impact on the affected communities and propose mitigating measures where possible,

➤ Define the potential stakeholders within the project area and analyse their interests' and power position, as well as potential influence in local/municipal and national level.

#### 3.3.2 Identifying stakeholders

In accordance with EBRD PR 10 the first step was to identify stakeholders and local communities that may be affected by the project directly and indirectly. Special effort was given to those that are directly affected by this project, namely settlements and population that are situated along the pipeline route. The following report is giving special attention to vulnerable groups in the given territory in order to prevent any difficulty that pipeline construction could induce to them. Economic and demographic aspects of this project will be of outmost importance not just for the entire region, but also for the entire country.

# 3.3.3 Primary information – interviews and questionnaires in the field

First field mission was conducted in May 2011 and comprised interviews with municipal officials, Directors and representatives of Municipal Centres for social work. Questionnaires (see Annex I) were constructed and submitted to Municipalities, Centres for social work and local neighbourhood communities (LNC) that are in the pipeline route. Second field mission was in June 2011 and most of the meetings were held with NGOs with the aim to gather information on vulnerable groups and NGOs' activities in that field. NGOs that were visited are:

- 1. NGO "Protekta" in Nis,
- 2. NGO "Ciji sam ja komadic", Nis
- 3. NGO "PIRGOS", Pirot
- 4. NGO "Hendikep" Dimitrovgrad
- 5. NGO "Tedeum". Bela Palanka

Meetings in municipalities and Centres for Social work were held in order to gather filled in questionnaires (see Annex II) and acquire some additional information. Questionnaires included inquiry on current information on overall population, age distribution, and sources of household income, health care, economy, and budgeting, expected benefits from the pipeline construction, vulnerable groups, education, energy sources and social care beneficiaries.

Data on social benefits gathered in Centres for Social work were used in the section 4.13 "Poverty in the rural areas" in order to depict the poverty in the pipeline route, since there was no data available on number of poor people in these municipalities, so data on number of approved social benefits in the past years was used. In the section 4.15 "Vulnerable groups in the pipeline route" were used information gathered from the Centres for Social work and NGOs.

Due to satisfactory feedback from local stakeholders questionnaires and interviews provided thorough and truthful analysis on the socio-economic status of

the citizens on the pipeline route, as well as their attitude on their socioeconomic situation.

Social groups that are more vulnerable to impact from the project were identified. Accordingly, appropriate measures and management strategies are recommended with aim to avoid, minimize, mitigate, or compensate for potential adverse impacts and risks on vulnerable groups, and their access to the resources and services for the community, such as accessibility to education, medical assistance, training, employment, tourism, and consumer goods; and physical accessibility to transportation, schools, hospitals/clinics, work facilities, hotels, restaurants, stores, and other commercial areas.

Information related to the technical part of the project description and the pipeline, as well as anticipated number of labour force and the process of construction was taken from the engineers in the project team.

#### 3.3.4 Secondary information

Secondary information was gathered from public institutions, mainly data in reference to unemployment rates, households, economic and social indicators, health and vulnerable groups in districts of the pipeline route. Relevant data were taken from various national and local strategies, governmental and academic studies.

Socio-economic baseline information for municipalities was obtained from the following institutions:

- 1. National Agency for Employment data on employment from 2008, 2009 and 2010,
- 2. Institute for Public health of Serbia "Dr Milan Jovanovic Batut"- health profile of population—from 2010,
- 3. Chamber of Commerce in Serbia data on number of enterprises from 2008 and 2009,
- 4. Ministry of Social affairs, labour and employment of Republic of Serbia- data on social system in Serbia from 2010,
- 5. Directorate of the Traffic Police of Serbia data on traffic accidents in 2010 on the road Nis Dimitrovgrad,
- 6. Statistical Office in Serbia Census 2002, salaries in Serbia from 2011, income of households in Serbia 2011.

Aiming to avoid possible discrepancies between the data wherever it was possible projections and possible trends for the recent years were included.

# 3.3.5 Gaps in data

Many data were not available on the level of municipalities and settlements, some not even on the district level, such as poverty, education and health. This might create some gap in the information obtained at the local level, but it was compensated with the data from the field wherever possible.

Lack of data on local level was compensated with general information on the specific area on the national level, which could also be used to provide a general picture on the socio-economic situation in the pipeline route.

Since Serbia does not yet have developed Archaeological map of cultural objects, it was not possible to obtain map of the cultural heritage objects in the territory of the pipeline route. However, the Institute for Cultural heritage in Nis provided full list of the cultural object in the municipalities that are on the pipeline route. Nonetheless, appropriate measures will be advised with reference to this matter.

As far as the statistical data, majority data exists for recent periods, however, there are data that come only from Census 2002, and even though these data might be somewhat outdated, especially if taking into account changes in regional and local level in socio-economic conditions, when there were no other official data, Census 2002 was used.

#### 4 Socio-economic Baseline

#### 4.1 Introduction

The following section will describe the project within its demographic, socio-economic and health context. Each headline will briefly describe general situation in Republic of Serbia, and to which extent the situation is applicable in the district, municipalities and settlements of the pipeline route. Intention is to illustrate precisely the living standard and socio-economic circumstances of the population that will directly and indirectly be affected by the pipeline construction and operation, and later in the study in accordance with these data will be identified potential risks and impacts on the population and the best possible measures to minimise or avoid negative impacts, as well as to utilise positive impacts.

The pipeline will be situated in the South Eastern Serbia, namely two districts - Nis and Pirot. This part of Serbia is underdeveloped and as such is in the third category of disadvantaged municipalities according to the Law on disadvantaged areas in Serbia until 2005, except Nis and Pirot. Nis is developed industrial town, with good perspective in industrial development and as the economic centre and crossroad in that part of Serbia.

The pipeline will pass through 6 municipalities and will cover 53 settlements:

- 1. Town of Nis namely Town Municipalities Pantelej, Crveni Krst and Niska banja,
- 2. Municipality Bela Palanka,
- 3. Municipality Pirot
- 4. Municipality Dimitrovgrad.

# 4.2 Country profile

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Serbia is located in the South – Eastern Europe, namely the central part of Balkan Peninsula and is on the main crossroads that connect Europe and Asia. Its territory is 88.361 km2, the length of the borders is 2.114,2 km. On the east Serbia is bordering Bulgaria, on the north-east Romania, on the north Hungary, on the west Croatia and Bosnia and Herzegovina, on the south-west Montenegro, and on the south Albania and FYR Macedonia. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> http://www.srbija.gov.rs/pages/article.php?id=36

Serbia is a transitional country undergoing reform processes. One of the most important strategic aims is EU membership and it is comprised adopting and implementing European values and standards in all sectors. Since transitional reforms are initiated overall political and socio-economic conditions are gradually improving. Average growth of GDP in the last ten years was 4,45% per year. IMF forecast that Serbia will have the biggest economic growth in Central and Eastern Europe

#### 4.3 General indicators

The basic macro–economic indicators for the period of 2001–2007 show that considerable economic progress and improvement in living standard has been made. The average annual GDP growth was 5.5% (in the period 2004–2007 the growth rate was close to 7%). Such results were possible due to the macro–economic stabilization, internal and external liberalization and successful privatization. International donations, soft loans and support by international institutions and organizations (EBRD, WB, IMF) to proceed with market and social reforms also had an important effect.

Increase of GDP per capita was linked with the structural changes of economy. In the period 2001–2007 the share of industrial sector in GDP decreased from 24.5% to 20.3%, while contribution of agriculture decreased from 15.5% to 10.7%. Still, agriculture and food processing industry are an important comparative advantage of the Serbian economy and the leading export sectors.

Beside unemployment, which is 19,2 %<sup>2</sup>, the largest structural problem is low competitiveness of the Serbian economy. The main reasons for low competitiveness are inefficiency of market institutions, underdeveloped infrastructure and macroeconomic instability. The major shortcomings regarding the business environment are political instability, lack of working ethic, inefficiency of bureaucracy and corruption.

# 4.4 Regional differences

Overall socio-economic and political situation is very diverse at regional level in Serbia. In the past regional differences were observed from the aspect of the macro development level, so that their local economic development, social and political repercussions were neglected. Faster development of undeveloped areas was often the goal set to be reached, for the purpose of which certain funds were allocated and stimulating mechanisms were defined.

Regional development goals were defined in a general way and were repeated for years. Incentive policy, as a kind of development compensation, failed to prevent further lagging of undeveloped areas. Such approach was inevitably leading towards deepening of regional and structural development problems.

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<sup>&</sup>lt;sup>2</sup> http://webrzs.stat.gov.rs/WebSite/Public/PageView.aspx?pKey=2

Large and strategically important areas remain depopulated, and their resources unutilized such as the case of South Eastern Serbia.

Social aspects of development are marginalized. Most emphasis is placed on raising economic development through strengthening private sector, which is also very weak. So there is the need to develop economic basis for social development. However, it would be very important to address many social problems at the same time, especially bearing in mind that social problems cost. Negative trends have reached their peak in 2009 (see the table 1).

According to the Report on Development of Serbia in 2009 (Republic Institute for development, 2010) transformation of economical and social system in Serbia is lasting for a decade now. Even that most difficult transition period in economy is over, Serbia has not yet reached its developmental levels of 1989 (Report on development).

Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009
GDP Growth	<5%	<5%	<5%	7%>	<5%	<5%	7%>	<5%	Negative
Unemployment	>20%	>20%	>20%	15-20	>20%	>20%	15-20	15-20	15-20
Wages growth	>10%	>20%	10-20	10-20	>10%	10-20	>20%	>10%	No growth

Table 1 Social trend in Serbia from 2001 to 2009

# 4.5 Demographics

Total population in Republic of Serbia according to Census 2002 is 7.498.001. Tendencies in the period between 2003 and 2008 depict increased negative annual growth of the population in Serbia of -0,35%. According to EUROSTAT total population in Serbia for 2010 is 7.306.677<sup>3</sup>.

In the 1990s, a number of social, economical and political changes affected the population tendencies. The biggest influence on demographic changes had migration trends. The war destruction influenced on a significant refugee inflow into the Republic of Serbia, whereas the economic and political instability affected considerable migration abroad. According to "Analysis of human development report" (2007: Republic institute for development, Belgrade) demography of Serbia is characterized by biological depopulation, constant migration to urban centres as well as regional differences.

Negative population trend is clearly visible from the population census 2002 and indicates overall decrease in population registered in 120 out of 161 municipalities. Municipalities affected by complete depopulation trend are mostly underdeveloped and bordering, including those that are subject of this research. Main reason behind this trend is economical underdevelopment of these municipalities.

<sup>3</sup> 

http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tgs0 0027&plugin=1

ipalities (in social, infrastructure and economy affairs). Projections<sup>4</sup> of population in Nis and Pirot districts for the year 2020 with the current trend of migration and birth rate are presented in table 2:

District	2002	2008	2020	2020 in % of 2008
Nisavski district with- out Town Nis:	131.239	120.158	93.066	77,5
Town Nis	250.518	255.295	264.725	103,7
Pirot district	105.654	97.223	78.752	81,0

Table 2 Projections of population in Nis and Pirot

The median age of population is 40,6 years, with 45% share of the active population. Dependency rate was 34,3% (61,8% female population) in 2002. The projection of future developments shows a constant depopulation and ageing trends. Projections for 2.052 estimate 27% participation of persons aged 65 years and older and 12% participation of the persons 15 years and younger.

The socio-economic development of Serbia marked with the industrialization and deagrarization processes (with simultaneous deruralization and urbanization) significantly determined the framework of trend and dynamics of development of age-gender structure and population ageing. One of the key characteristics of the demographic development in Serbia is an ever growing unfavourable age structure. Changing of the age structure in the period 1971-2002 moved towards a decline in the share of young people with a simultaneous increase in the share of elderly people.

Area	1948	1953	1961	1971	1981	1991	2002
Republic of Serbia	594837	6162321	6678247	7202915	7729246	7822795	7893125
Municipalities	232033	242148	71321	80837	90240	93798	94731
In the pipeline route							
Urban settlements in the pipe-	65244	66549	71321	80837	90240	93798	94731
line route							

Table 3 population trends in Serbia and pipeline route from 1948 to 2002

The trend of increase of the population lasted until 2002 (see table 3), ever since this trend is changing, so the number of citizens is decreasing due to low birth rate and migrations from the country. The oldest district in the Republic of Serbia by all indicators is the Pirot District recording the average population age of 44 years. In municipalities on the pipeline route, with the exemption of town of Nis, there is a constant trend of population decrease below the active age, due to lower birth rate.

http://www.ekonomija.org/index.php?mact=News,cntnt01,detail,0&cntnt01articleid=528&cntnt01origid=67&cntnt01returnid=54

<sup>&</sup>lt;sup>4</sup> Miroslav Zdravkovic

# 4.6 Migration

According to Strategy on Management of Migration in Republic of Serbia, Serbia is facing different types of migrations: external and internal, forces and voluntary, legal and illegal, migration of high-qualified and low-qualified people, immigration and emigration. One of the major issues are refugees and IDPs. The largest group in migrants are Serbian Diaspora, which is estimated to be between 2.500.000 and 4.500.000. <sup>5</sup>

Serbia is facing deep demographic aging, which also means depopulation, which makes Serbia one of the five countries with the oldest population in the world. Continuant decrease of relative part of youth (0-19) in total population and increase of old population (over 60 years old), which also means decrease of active population.<sup>6</sup>

There is increased interest of young people not only for migration from rural to urban regions and towards foreign countries to educate, but also with aim to change their residence.<sup>7</sup> Migration of young peoplehas serious economic and social consequences in Serbia. Motivation for migration are connected to finding a better paid job, securing higher living standard, and achieving better educational and professional accomplishments.

According to Strategy for technological and scientific development of Republic of Serbia significant number of young scientists is leaving the country. However, Serbian government has developed many programes and strategies with aim to create better working opportunities for highly qualified people, as well as for the return of young people who got education abroad. This is the positive aspect of migration of young people because their knowledge is utilised in various sectors in Serbia. Serbia will manage its migration processes in accordance to European values, with respect of its own specific characteristics in order to transform them into positive aspect of socio-economic development of the country. <sup>8</sup>

#### 4.6.1 Migrations during 1990s

According to statistical yearbook of Nis 2009 in the 1990s during the war in Yugoslavia migration from BIH, Croatia, Slovenia was very high, and during 1970s and first half of 1980s was very high inflow of citizens from Kosovo (UNSCR 1244/1999). Refugees and IDPs were in the high risk of poverty and comprised high percentage of the poor population in the 1990s (see table 4).

<sup>&</sup>lt;sup>5</sup> Strategy for Management of Migrations in Serbia, 2008, page 2.

<sup>&</sup>lt;sup>6</sup> Strategy for Management of Migrations in Serbia, page 2

<sup>&</sup>lt;sup>7</sup> Strategy for Management of Migrations in Serbia, page 2

<sup>&</sup>lt;sup>8</sup> Strategy for Management of Migrations in Serbia, page 4

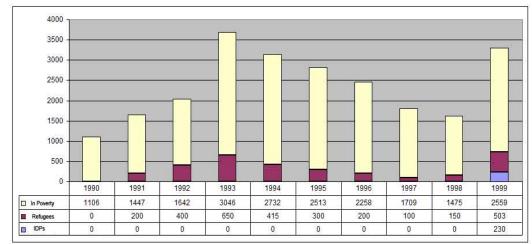


Table 4. Source: Economic sanctions, Health and Welfare in the Federal Republic of Yugoslavia 1990-2000, (2001), OCHA, UNICEF (figures are in thousands of people)

According to the 2002 Census these numbers have been significantly reduced, with 379.135 refugees, or 5% of total population. Highest concentration is in Belgrade with 113.000 refugees (1/3). Also, September 2004 data indicates 207.639 registered internally displaced persons from Kosovo (UNSCR 1244/1999)..

# 4.7 Ethnicity and religion

In this section will be presented ethnic and religious composition of Serbia, and municipalities in the pipeline route. National composition of Republic of Serbia according to Census 2002 is presented in table 5:

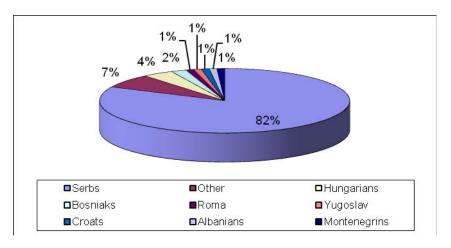


Table 5 National composition of Republic of Serbia according to Census 2002

The national composition in the pipeline route is presented in table 6. The majority of population are Serbs (75,74%), but there is high share of Bulgarians (12,03%) and Roma (8,58%). Bulgarians are situated in Dimitrovgrad where they represent the majority of population. Bela Palanka has one area that is inhabited with Roma.

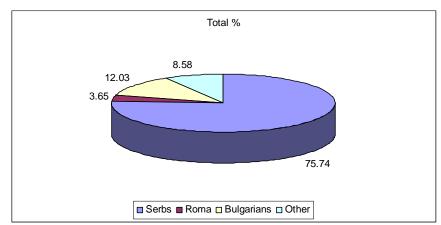


Table 6 National compositions in the pipeline route according to Census 2002

Majority of population in the pipeline route are Orthodox Christians, significantly present in all four areas, with about 90% population. However, there are small Islam, Catholic and Protestant communities within each municipality (see table 7). It is not expected that such national and religious composition of the region will pose any problems for the construction.

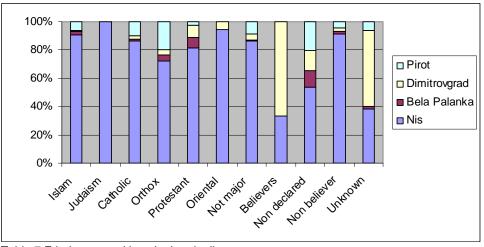


Table 7 Ethnic compositions in the pipeline route

#### Nis

Town of Nis has overall population of 250.518 and the vast majority are Serbs (235.657) but with significant presence of about 20 minorities, where most significant are Roma (5.687) and all the other ranging in size with less than 1.000 population each (largest being Montenegrins, Bulgarians and Macedonians).

#### Bela Palanka

Municipality of Bela Palanka has the clearest ethnical structure with dominant Serbian majority (90,2%), but also larger Roma population than in other municipalities (8,5%).

#### **Pirot**

According to the last census 2002 Municipality of Pirot have 63.791 citizens. Most of them live in urban areas 40.678 while 23.113 live in villages.

Ethnic structure of municipality of Pirot indicates that majority of population are Serbs, but with about 10 other national minorities. Municipality of Pirot is considered to be most tolerant municipalities in Serbia, so it is considered that such ethnic diversity can contribute to mutual understanding and affirmation of national, language and cultural of individuals within society.

#### **Dimitrovgrad**

Within municipality of Dimitrovgrad major difference is significant proportion of Bulgarian minority, because of the proximity of the municipality to Bulgarian border. In overall population Bulgarians outnumber Serbian population at almost double ratio.

#### **Conclusion**

In conclusion, it has been noted in the field that all communities live harmonised life together. Since more than half of the population in Dimitrovgrad are Bulgarians, and also there is large Roma population in Bela Palanka, it is advised to enable some information during Public consultation in Bulgarian and Roma language.

# 4.8 Local governance issues

Local self-governments will be very important stakeholders and major supportive institutions during the construction. They will be the intermediaries between the population and the project. Therefore it is necessary to involve them in the project and in the decision making process in the issues that are related to local policies and citizens.

The initial step in that process of SIA preparation was introducing local authorities to the SIA and inviting them to provide data. They were more than willing to cooperate and demonstrated great interest in the project and its outcomes for the community. Some of them displayed lack of belief that the project will ever start since it has been discussed for years, which makes it highly beneficial to involve local authorities from the start, in order to avoid and prevent any possible misunderstandings or delays. More so local self-governments can help in mitigating some of the negative impacts and ensure maximal utilization of positive impacts.

Inhomogeneous authority on local level is usually comprised out of different political parties. So the decision making process might be slowed down on the local level due to acquiring consensus. Therefore, Public Consultation is an important step in the pre-construction phase.

#### Conclusion

Local self-governments have no involvement in the approval of the construction works, but they do have a role in land expropriation, so it is a good practice to have good relations and to maintain cooperation with them during the project.

# 4.9 Existing infrastructure

South-eastern Serbia borders Bulgaria, and therefore has international public transportation facilities as well as an international and national road network. However, the road network in Serbia hasn't been completely built and therefore cannot provide the adequate level of services according to EU standards in terms of technical capacity. Due to insufficient investments to road network, its maintenance hasn't been regular and adequate. Therefore, a number of roads are in dissatisfactory condition with inadequate elements. The municipal roads are in considerably bad condition and many are unpaved.

#### 4.9.1 Roads network

- 1. Highway E 75 European highway type A is one of the most significant European roads categorized in the Trans European Motorway. It connects North of Europe (Norway) and South (Greek island Crete) and is the longest of European international roads that goes through Serbia. In Serbia- from Novi Sad to Leskovac (through Nis) highway is already built. Under construction is one traffic lane from Hungarian border to Novi Sad, at the bridge near Beska, on Belgrade by-pass and from Leskovac to Macedonian border. This road is in a very good condition.
- 2. Main road E 80 is one of the roads of the international network of Eroads. It starts in Lisbon, Portugal and ends in Gürbulaku, Turkey. This road is in a very good condition yet with some limitations for the transport of cargo due to tunnels among others on the part from Nis to Bela Palanka.

#### 4.9.2 Railway

This area has a well developed railway network that is going from Nis to Dimitrovgrad along E 80. There are railways from Nis to Knjazevac and Zajecar, to Leskovac, Vranje and Skopje, to Prokuplje and Pristina, and from Nis to Belgrade. However, Serbian railways are in general very slow.

#### 4.9.3 Airport

Nis has an international airport Konstantin Veliki. General information about airport<sup>9</sup>:

- Excellent weather conditions during the whole year, with a few foggy and snowing days
- Alternative airport for the airports: Pristina, Belgrade, Podgorica, Tivat,
- This airport was used as an alternative airport by the following airlines: Jat Airways, Aviogenex, Montenegro Airlines, Olimpic Airlines,
- The lowest airport service prices in Serbia.

# 4.10 Income in Serbia and along the pipeline route districts/municipalities

In urban areas average monthly income were 49.189 RSD, and in the remaining areas 44.765 RSD in the first quarter of 2011, according to Statistical office in Serbia. Average household consumption expenses in Serbia are 42.448 RSD, out of which the major part is spent on food and beverage - 41, 3 %. Almost half of the income in Serbia is spent on food. In the table 8 the structure of the expenses in Serbia and EU is presented.

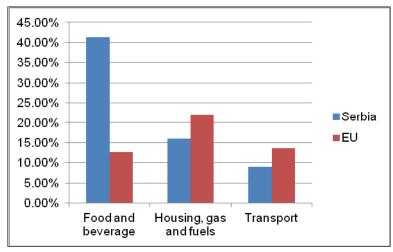


Table 8 Structure of expenses in Serbia and EU

According to the National Statistical Office's most recent data in the first half of 2011 average net salary in Serbia was 36000 RSD. Salaries in Nis and Pirot district are significantly below national average and are in about 13-14% decrease in the last quarter. Net salaries in the municipalities in the pipeline route are very diverse, as presented in the table 9:

Average	Serbia	Belgrade	Nis	Bela	Pirot	Dimitrovgrad	Pipeline
Salary 2011				Palanka			route

<sup>&</sup>lt;sup>9</sup> http://nis-airport.com/en/airport-informations/general-informations/technical-specifications/

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RSD	36.000	44.299	32.164	20.144	31.374	25.435	27 279
INOD	00.000	11.200	02.101	20.111	01.071	20.100	21.213

Table 9 Net salaries in Serbia and the municipalities in the pipeline route

Average salary in Bela Palanka for first half of 2011 is the lowest in Serbia. With 57 % of unemployment Bela Palanka is the most undeveloped of all municipalities in the pipeline route.

According to the field survey from 50% of LNC in the pipeline route, household incomes are largely pensions and employment (see table 10). It is also notable that 2.100 households is dependent either on external family support only, social care only or agriculture which is putting them in the high risk of poverty.

		Pension and	Pension			
Source of	Only	regular	and part	Help from	Social	Only
income	pension	employment	time jobs	relatives	benefits	agriculture
Total	2.992	3.887	3.073	629	609	907

Table 10 Sources of household incomes in the pipeline route

#### Conclusion

It is very important to note that large population lives from agricultural activities, so it is recommended that they get access to their land and crops most extent possible, especially bearing in mind low income in this region. In addition, because of low income of citizens it is quite possible that some households will not be able to afford the price of connection to the gas pipeline network, for which appropriate measures will be presented in the next chapter.

#### 4.11 Economic Activities

#### 4.11.1 Introduction

The average growth of GDP in Serbia over the last ten years was 4,45% per year. GDP structure by components in 2008 was: private consumption 74,3%, public consumption 20,6%, investments 28,6%, exports 30,7%, imports 54,2%. IMF forecast that Serbia will have the biggest economic growth in Central and Eastern Europe. However, high unemployment, closed factories due to bankruptcy and throughout most of Serbia's "peripheral south", socialistic industrialization created isolated activities with few connections to local resources and modest integration in the local economic environment.<sup>10</sup>

In The Global Competitiveness Report 2009-2010 Serbia has been ranked 93rd with the total GCI score of 3,8. It should be emphasized that this is the worst

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<sup>&</sup>lt;sup>10</sup> Strategy for regional development of Serbia, 2007

position of Serbia since 2004. Serbia has deteriorated in basic requirements and innovation and sophistication factors.

#### 4.11.2 Economic environment in the pipeline route

The entrepreneurial activity in a specific region is related to the following: the accessibility of educated labour force, the market closeness, the accessibility to the required raw-materials, regional economic power, the price of labour force on the market, as well as the infrastructural accessibility.

Characteristics that determine economic environment in Nis and Pirot districts are:

- Low income of the population, especially in Municipality Bela Palanka,
- High unemployment rate of 42,7%,
- Mono structural economy system with weak flexibility, no regional centres,
- Great share of agricultural sector, due to lack of alternative economic activities in small municipalities,
- Extensive agriculture with low level of mechanization and low productivity,
- Closing of the enterprises in the transition period and unfinished privatization.

There is a tendency of increasing the number of SMEs in the municipalities on the pipeline route (see table 11). Municipalities in this region are specialized in the following economy activities:

- 1. Nis- main industrial centre in the SES region with tobacco industry, processing industry and trading (formerly big companies such as Electro Industry Nis and Metal Industry, have significantly decreased the number of employees from 30,000 to 1,500 workers)
- 2. Pirot specialized in the rubber industry Tigar, textile industry and industry of agricultural products, namely dairy, meat, and extraction of silicon sand. Pirot is duty-free zone, that has great developmental potential,
- 3. Bela Palanka specialized in production of child footwear and agriculture,
- 4. Dimitrovgrad specialized in trade on the international road E- 80, tourism and textile industry.

Economy of this region has territorial concentration along international road E-80, and vicinity of Sofia and Nis and significant traffic from Middle East to Western Europe plays important role in its development. These advantages are not sufficiently utilized. Economy could develop faster if the possibilities of traffic and geographical position would be better utilized.

Ν	lumber of SMEs (includ-	Nis	Bela	Pirot	Dimitrov-	Total
ir	ng only municipalities in		Palanka		grad	

the pipeline route)					
2008	518	66	417	55	1.056
2009	642	72	418	61	1.193

Table 11 Number of SMEs in municipalities in the pipeline route

#### 4.11.3 Rural development and agriculture

According to OECD rural areas take 85% of the territory, which is populated, with more than half of population, 55%<sup>11</sup>. In rural areas there are most of the natural resources of the country – agricultural land, forests, waters, with rich ecosystems and biodiversity. Particularly valuable potential are people working in different agricultural sectors. Important factor of the rural sector are natural, cultural and historical heritage.

Rate of employment in agriculture is among the highest in Europe, and agriculture has enormous significance in the national economy. About third of the active population is employed in agriculture.

#### 4.11.4 Informal economy

Recent evidence suggests the emergence of relatively large informal economy in many transitional economies including Serbia. The decline in main job earnings, unemployment and under–employment is usually cited as standard explanations for increased activity in the informal economy of these countries. Although informal economy was common in Yugoslavia and other formerly socialist economies, the confluence of political and economic events in Serbia over the last decade created conditions within which it flourished.

Thus, the standard causes of informal economy were strengthened by: (a) the economic crises during 1990's and the slow process of transition and (b) additional non–economic shocks such as the 'break–up' of Yugoslavia, UN sanctions and war in the region. The period of political instability and economic crises resulted in a dramatic downfall of economic activity, especially in the socially owned sector<sup>12</sup>.

#### 4.12 Education

#### 4.12.1 Introduction

In the educational structure aged 15 and over in the Republic of Serbia (2002), the completed secondary school education represents the most common type of

<sup>&</sup>lt;sup>11</sup> Strategy of rural development in Serbia 2009- 2013, 2009

<sup>&</sup>lt;sup>12</sup> Economic, Financial and Demographic background of Social protection and social inclusion in the Republic of Serbia, Directorate–General for Employment, Social Affairs and Equal Opportunities Unit E2

education for both genders (41% of population), while the elementary school education holds the second-place ranking (24% principally older population). In the aggregate population, 6% (411.944) comprise those with college and 4% with tertiary school qualification (see table 12).

	Elementary	Secondary	College	Tertiary school
	school	school		qualification
Educational struc-	24%	41%	6%	4%
ture in Serbia				

Table 12 Educational structure in Serbia according to Census 2002

The highest number of population with college and tertiary school qualifications was recorded in the City Belgrade (21%), the South Backa District (13%), the Nisava District (11,6%) and the Sumadija District (9,5%) affected by the fact that the university centres are placed in these districts.

#### 4.12.2 Illiteracy

In the Republic of Serbia illiteracy rate is rather high 5,7%. The distinctive discrepancy in the level of illiteracy between male and female population can be noted. Higher illiteracy was recorded among female population, whereas during the observed period the discrepancy by gender increased in the favour of male population. In 2002, the share of illiterate female population was 5,7%, and male population 1,1%.

The data from last Census support these facts, namely the highest number of illiterate population is among elderly population aged 60 years and over (80,7%) in agricultural households, as well as in the municipalities in Southern Serbia, such as: Bojnik (15,4%), Gadzin Han (13,2%), Zitoradja (11,8%) and Trgoviste (11,8%). In addition to this fact, about 20% of illiterate population is recorded among Romany.

#### 4.12.3 Early school leavers

"Early school leavers" is the structural indicator of social cohesion within the society registering the real volume of potentially imperilled population in the country. The young population aged 18-24 years due to early school leaving (maximum completed elementary school) is faced with the numerous problems, such as: economic and social instability, social debts, high risk of poverty, inadequate applying for a job on the labour market.

#### 4.12.4 Education profile in the pipeline route

Low education is in positive correlation to poverty, because of limited access to the labour market. Latest information regarding to the educational structure of unemployed in the pipeline route is from 31.12.2008 (see table 11). The majority of unemployed comes from low skilled and semi-qualified population. Between 80% and 90% of unemployed in municipalities on the pipeline route are

below high school education (levels of education 1-4) where unskilled labour with primary school (Levels I and II) represents 25% to 45% of totally unemployed (see table13).

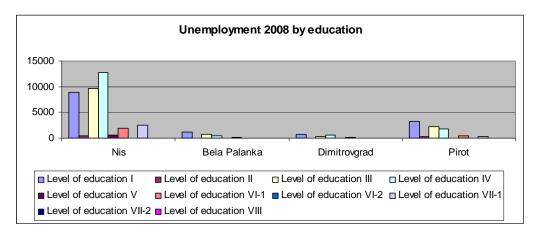


Table 13 Education level in the municipalities in the Pipeline route

#### 4.12.5 Educational facilities in the pipeline route

Each municipality in the pipeline route has a preschool, all of them have primary and secondary schools and only Nis has a University with 13 faculties, while Pirot has only 2 higher education institutions (see table 14).

Education	Preschool	Primary	Secondary	Higher
Nis	1	36	22	University with 13 Faculties
Bela Palanka	1	2	1	-
Pirot	1	4	6	2
Dimitrovgrad	1	1	1	1

Table 14 Educational institutions in the pipeline route

#### 4.13 Poverty

Republic Statistical office released data on poverty calculated for the first half of 2010. Survey on household consumption show the tendency of increased poverty to 8,8 % in 2010 (table 15).

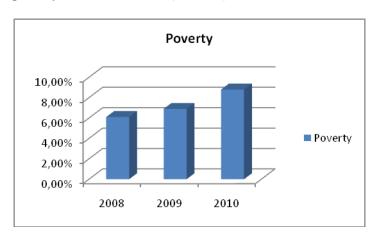


Table 15 Poverty in pipeline route

#### 4.13.1 Poverty in rural areas

The poverty in Serbia is mainly the rural phenomena. The ratio of the poverty between the least poor population (Belgrade 4,2%) and the most poor is n the pipeline route (South-East Serbia) is 1:5.6. The defined factors affecting the standard of living and the poverty are the following: the household demographic characteristics, education, unemployment, type of settlement and regional position.

The transition period brought new underdeveloped municipalities, so called municipalities of "transition poverty" (former industrial centres), such as the case with municipalities in the pipeline route, where major publicly owned firms were privatized and thousands of people left unemployed. Once those firms went bankrupt or privatized causing the number of employees significantly decreases, many people from that region or municipality remained without salaries.

It was not possible to obtain recent and exact number of poor people in the pipeline route because Serbian statistical office does not provide such data on the local level. However in Municipalities in the pipeline route it was advised to use the number of request and approvals for social benefits from the state. So the number of receivers of social benefits in the municipalities on the pipeline route for 2010 is 12.757. The number of requests is much higher - 19.621, which means that 65% of the requests is approved. Looking at the municipal level, all the municipalities have high rate of approved requests for social benefits, expect Nis who out of 15.063 approved only 8.453. This is very high deviation, especially taking into account that in 2009 Nis had 20.741 recipients of social help. These social groups might be at higher risk during the land expropriation for the project.

Owning of the land did not protect many households in the rural areas from poverty. However, households with big agricultural land had significantly lower risk from poverty. Households in rural areas that have less than one hectare of land are facing the greater risk of poverty (13%). These two groups have made 71% of poor in 2007. Serbian law on social protection indicates that one cannot have the right to social benefit if has a real estate over one hectare. This makes the position of rural households even worse because they are not entitled to any kind of social benefits.

The poverty is decreasing in the rural areas. Being that pipeline route covers only rural areas of South-eastern Serbia this problem was mentioned several times by the local officials. There are NGOs in the region such as Pirgos in Pirot that try to influence positive changes in rural development, but it is going very hard.

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<sup>&</sup>lt;sup>13</sup> Survey on living standard of Serbia 2002-2007

In the field was discovered that municipalities organize local public works were they employ between 50-70 people per year. However this is not nearly sufficient to cover the number of unemployed people in their municipalities.

# 4.14 Population Health Profile

4.14.1 This section will describe the health profile of the population in Serbia, as well as in the pipeline route, which should enable better understanding of the health conditions in the region. Construction fumes and noise will create certain impacts on the population, as well as on the construction workers, therefore appropriate preventative measures should be undertaken for their safety. profile will be also addressed HIV and sexual diseases, because in the case of the inflow of outside workforce there will be interactions with the local population, so the necessary preventative measures must be undertaken in order to minimise negative impacts on population and workers. Serbia does not have high level of HIV/ AIDS and with adequate measures (installing condom machines in the close range of workers' camps) this should minimise risks. In addition, the level of traffic accidents in the Nis -Dimitrovgrad road is presented, because it is expected that the increased frequency of traffic will instigate more traffic accident. Introduction

Life expectancy in Serbia for male is 71,3, and for female is 77,1 years. Low rate of infant mortality and death on birth is decreased and is positive indicator.

Population of Serbia mostly dies from cardiovascular diseases, carcinoma and consequences of diabetes. Half of the population is suffering from high hypertension. According to the Institute for public health the most common causes of death in Serbia in 2009 are (see table 16):

Coronary diseases	Malignant cancer	Undefined symptoms	Injury and poisoning	Respiratory system diseases	Other
54,8%	20,2%	5,1%	3,6%	4,0%	12,3%

Table 16 The most common causes of death in Serbia

#### 4.14.2 Coronary diseases

For the last ten years death rate from heart and coronary diseases increased in female for 5% and in male for 0,2%. Even though that increased death rate is partly explained by better diagnostics and recognition of cause of death, it is a

fact that majority of population in Serbia aches and dies out of coronary and heart diseases.

It is known that 75% of heart diseases are caused by conventional risks in reference to the life style, such as smoking, hypertension, high level of cholester-ol, improper nutrition, obesity and physical inactivity. In addition, many socioeconomic studies indicate that low socio-economic status with heart and coronary diseases.

It is important to note that there is very high level of incidence of coronary diseases in Pirot district, over 150 citizens per 100.000 populations, and in Nis district between 110 and 130 cases of coronary disease per 100.000 population.

#### 4.14.3 Malignant diseases

Malignant diseases in Serbia are registered increased incidentals and mortality from all types of malignant tumour, except stomach cancer. Out of all malignant tumours the most represented are lung cancer, then rectal cancer, breast cancer, stomach cancer and cervix cancer. The reason for increased mortality is due to better diagnostics. However, lack of organized programs for primary and secondary prevention unrecognizing risky behaviours and lack of transfer of positive experiences in preventing cancer from developed European countries is the main cause for increased mortality on the last years.

#### 4.14.4 Respiratory diseases

According to statistical yearbook of Nis 2009, it is noted that structure of the morbidity in the department for general medicine shows:

- 1. Tendency of minor increase of the percentage of respiratory system diseases from 2006 till 2009,
- 2. From 1999 till 2009 there had been a constant decrease in patients suffering from tuberculosis and pneumonia.

#### 4.14.5 HIV

HIV/AIDS is spread through unprotected sex and intravenous drug use. There is presently no cure for HIV/AIDS and therefore any potential increase in the incidence due to the Project is considered highly significant.

According to European and HIV statistics<sup>14</sup> Serbia had 4.900 people living with HIV/AIDS in 2009. Although Serbia has a relatively low rate of HIV prevalence which is largely concentrated in the vulnerable and marginalized populations of injecting drug users, sex workers, men who have sex with men, prison inmates and the military, the status of girls and young women is an important factor which could contribute to an escalated prevalence among the general population.

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<sup>14</sup> http://www.avert.org/hiv-aids-europe.htm

As well as being surrounded by countries with advanced epidemics, Serbia's geographical location places it on a well known drug and human-trafficking route. This helps to explain the high rate of injecting drug use and the dangers that this poses to young people in a society which is characterized by high rates of unemployment and the breakdown of state social security.<sup>15</sup>

#### 4.14.6 Sexually transmitted diseases

Taken from the morbidity structure of medical protection of women in Nis for 2008 and 2009 there is a significant increase in the infection caused by Chlamydia which from 2008 to 2009 increased from 461 to 1331 cases.

#### 4.14.7 Contagious diseases

There is conflicting data in trends in contagious diseases in Nis, but in the 2007-2009 there is an increase of patients of contagious disease of 170% from 2007 to 2008, and 100% increase in number of patients from 2008 to 2009.

As showed in the field survey water supply in the pipeline route is well resolved, while the situation is a bit alarming in Bela Palanka. There are settlements that do not even have a septic pool, and in majority of settlements there is sewage system. This indicates unsafe hygienic conditions which joined with weak medical care in the rural parts can create risk to health of the population and workers in the pipeline route.

#### 4.14.8 Medical centres in the pipeline route

Nis has a clinical centre; while Pirot has a hospital, and Bela Palanka and Dimitrovgrad have primary health care centres.

Total number of bedclothes in the stationary facilities in Nis is 2.923 in 2009, and utilization of bedclothes in 2009 is 81, 76 %. Clinical centre has 1.547 bedclothes and 83, 95 % of utilization of bedclothes. It has 616 physicians out of which 549 are specialists. In addition clinical centre Nis has 1.196 of staff with higher and secondary medical education.

4.14.9 Out of 28 surveyed settlements in the pipeline route one third does not have ambulance, while 10 settlements have doctor visits once a week, 3 settlements have doctor visits twice a month, and in one settlement twice a week. Traffic accidents

According to data delivered from the Direction of Traffic Police of Serbia for 2010, out of 72 cases of injuries and deaths 22 happened only in July which

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<sup>&</sup>lt;sup>15</sup> <u>http://www.ippf.org/en/Resources/Guides-toolkits/HIV+Prevention+Report+Cards+-+Serbia.htm</u>

comprise 30% of total injuries and deaths in traffic accidents (see table 17). In August there was 10 and 12 in September, while 7 in December. Evidently due to summer and winter holidays there will be a high risk of increase in traffic accidents especially during construction work.

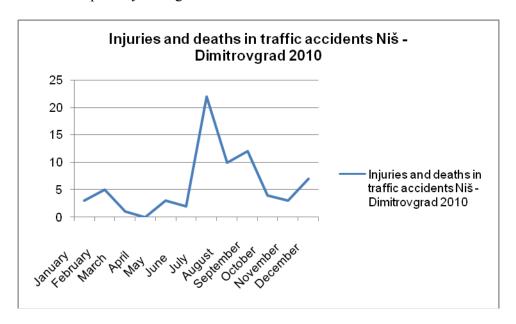


Table 17 Traffic accidents on the road Nis - Dimitrovgrad

#### **Conclusion**

In conclusion, in the field was noted that construction will not have any serious impact on the health of the population in the pipeline route, however it is expected that frequency of the traffic will increase and this can lead to the increased number of traffic accidents, especially in the summer period. Therefore, standard preventative measures for the safety of workers and population during the pipeline construction will be advised and further elaborated in the Chapter 5 "Identification and Assessment of Potential Impacts" and SAMP.

# 4.15 Vulnerable Groups in the pipeline route

In order to have a better perspective on vulnerable groups so that during construction is given special attention to preventing any adverse impacts on them, in this section will be presented vulnerable social groups and their socioeconomic position.

#### 4.15.1 Introduction

Social protection system in Serbia has a broad structure related to the coverage of the needs of the vulnerable population groups. System includes: (1) social insurance contributory based benefits (pensions, unemployment's benefits) (2) social assistance and child protection benefits and (3) a range of social services.

Centres of Social Work are principal entities for delivery of defined rights to social assistance, and are functioning as de-concentrated branches of MoLSP. Their main mandate is implementation of the Law on social care. This law defines set of financial benefits and social services for persons and families in need of social care.

Local self-governments have responsibility for delivery of day care services, administration of the child protection benefits (delegated from the MoLSP) and supplementary social assistance related to the needs of their residents, which include single payments and additional funding of the priority needs.

#### 4.15.2 Social inclusion

The presented analysis of poverty and social inclusion reveals that limited progress is observed in the area of social inclusion. A number of strategies have been developed and their implementation is underway. There has been some progress in enforcing legislation on the prevention of discrimination of disabled persons. The most vulnerable groups are: the population in rural areas of South–eastern Serbia, less educated and the unemployed, the elderly (65 years of age and over), as well as the households with two or more children up to 6 years of age, multi–member households (6 and more members).

Beside persons with disabilities, Roma are social group characterized by low level of activities and high unemployment rates. According to all available analysis social exclusion among Roma is universal problem, not only in Serbia, but also in European countries, where they live in higher percentage. In overall population only 27,2% Roma is economically active and rate of unemployment is 4 times higher than in general population. Major contributing factor is exclusion from education for various reasons -62% don't have complete primary education.

#### 4.15.3 Roma

According to Census 2002 in Serbia lives 108.193 Roma people. However it is estimated that this number is much higher, between 250.000 and 500.000. <sup>16</sup> Estimation on share of Roma in the population of Serbia varies from 1% to 8% which is also important indicator on their inclusion in the society. <sup>17</sup>

According to Strategy for Improvement of position of Roma of Republic of Serbia (2010), it is necessary to reduce unfavourable position of Roma, not only in the area of poverty, but also in the area of social protection and education. Majority of Roma children give up of school in very early stages. In population

<sup>&</sup>lt;sup>16</sup> Strategy for improvement of position of Roma in Republic of Serbia

<sup>&</sup>lt;sup>17</sup> http://www.euractiv.rs/srbija-i-eu/1565-romi-iskljueni-iz-srpskog-drutva

over 15 years old elementary school finalized every third Roma, high school 7,13% and higher education 0,28%. As reported by the NGO in Nis "Ciji sam ja komadic" they have been organizing trainings for Roma parents and their children in order to prevent early school leaving and to eradicate violence. It was very successful, because all the Roma children included in the project continued their education and the level of violence among them decreased.

Another major problem with Roma is that they are dependent on social care, because they have problems acquiring jobs. Many of them are working in informal economy jobs, and every other employed Roma is working simple jobs, for which they do not need any qualifications, such as communal service and in construction. NGO Protekta in Nis is dealing with employment of marginalized groups and Roma, and helping them in getting jobs and directing them how to attain their social rights.

In the field was noted that readmission of Roma people from Western Europe increased number of Roma in the pipeline route, which only multiplied their problems. Roma represent the large ethnic group in the pipeline route. Centre for social work in Bela Palanka reported that almost 80% of the social help goes to Roma population, which indicates their difficult position.

#### 4.15.4 Women

Uneven position of women exists in the area of decision making, education, and health, legal protection from violence and gender stereotypes in the media. Reform laws adopted after 2000 in the area of gender equality were just the first step. In the Republic of Serbia the distinctive discrepancy in the level of illiteracy between male and female population can be noted. Higher illiteracy was recorded among female population.

Women are disadvantaged social group in terms of employment, economic independency and social status. They have difficult accesses to employment and are paid less. Within this group even more are disadvantaged women in rural areas.

Especially marginalized are women in the rural areas of the pipeline route. As reported by the NGO Pirgos in Pirot they are perceived as free labour in their households, property is rarely in their possession, which disables any form of economic independency. However, there are reported initiatives by NGO Pirgos in Pirot namely in economically strengthening women from rural parts, and enabling them to have their own agro-business.

#### **4.15.5 Elderly**

Serbia belongs to a group of countries with predominantly elderly population, that is, people older than 65 years, with a tendency of constant ageing of the population. As reported from the field there is a lot of households with no members less than 65 years ago.

The most vulnerable are poor old people as they cannot rely sufficiently on the state, their families or their own income in order to survive. They live mostly in the rural areas. The other vulnerable group of elderly are older people with disability that are facing particularly difficult problem of obtaining the necessary treatment and medical aids, since many of them are not in the position to address the competent authorities in order to protect their rights.

Serbia is on the top of the list of countries with oldest population. Approximately 100.000 old people lives below the poverty line. It is the hardest in rural old-age households, but even the pensioners in towns have difficulties. Roots of poverty among elderly come from long term omission of enterprises to pay contribution for pension insurance to people who have been working all their lives. According to Serbian law from 2010 the right to old-age pension have:

- ➤ Men: 65 years old with at least 15 years of working experience covered with insurance, or after 40 years of working experience covered with insurance with at least 53 years and 4 months of age,
- ➤ Women: 60 years old with at least 15 years of working experience covered with insurance, or after 35 years of working experience covered with insurance, and at least 53 years of age.

In many cases before the end of their working period people lose their jobs before fulfilling requirements for old-age pension, thus leaving them without any income. In addition to this, it is very difficult for them to find another employment.

#### 4.15.6 Unemployed

The high unemployment rate, high hidden unemployment, low share of employment in private-owned sector and insufficient mobility of labour force characterize the labour market in the Republic of Serbia. The most vulnerable groups in the labour market in Serbia are: Roma, refugees and internally displaced people, people with disabilities, rural population in South-eastern Serbia, rural population that does not possess any land, uneducated persons, women, youth (15-24 years old) and elderly (50-64 years old). Improvement of their living standard is possible by improvement of their employability, as well as their status on the labour market. This is important because status in the labour market is in high correlation to poverty. <sup>18</sup>

Alarming situation with unemployment is in the municipalities in the pipeline route. It ranges from 33% in Nis till 57. 7% in Bela Palanka for the year 2010 (see table 18). Unemployment rates are very high even compared to national average and in constant rise in the last 3 years, with highest rates of unemployment in Bela Palanka and Dimitrovgrad. According to data from National employment service for 2010 the number of unemployed people in the municipalities on the pipeline route is 47.033.

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<sup>&</sup>lt;sup>18</sup> Vukovic, D. and Arandarenko M: Social reforms, content and results, University of Belgrade Faculty of Political Sciences, 2011

	2008.	2009.	2010.
Nis	31%	31,9%	33,9%
Pirot	28,5%	31,3%	33,9%
Bela Palanka	46%	49,7%	57,7%
Dimitrovgrad	43,5%	43,6%	44%
Total	37, 25%	39, 12%	42, 37%

Table 18 Unemployment rates in the municipalities in the pipeline route

Ratio of unemployed women ranges from 46% in Dimitrovgrad to 53% in Nis (table 19).

Municipality	Total unemployed	Women	% of women in unem- ployed population
Nis	34.855	18.488	53,04%
Bela Palanka	2.804	1.318	47%
Dimitrovgrad	1.636	763	46,63%
Pirot	7.738	3.931	50,80%

Table 19 Ration of unemployed women in municipalities in the pipeline route

## 4.16 Cultural Heritage

Nis and Pirot districts have diverse cultural and historical heritage. Its adoption however, is connected to the need of certain number of problems, and major problems are:

- Material preservation attacks of the treasure hunters on archaeological objects, and lack of touristic culture
- Informing citizens and various organizations have no access to information in registers of all cultural monuments. On some places there are no publications of scientific character, and only 5-10 % of places have some touristic information. Lots of places are not showed in published touristic maps. Even the tour operators and touristic organizations do not posses this information.
- Socialization of cultural heritage bad traffic to immobile monuments and lack of appropriate infrastructure that could enable cultural monuments to be socialized and be included in touristic activities. For mobile cultural monuments it is inexistence of exhibition space and inadequate management of the museums. Lack of resources for extensive archaeological examinations and restoration activities, lack of information and international projects are all factors that result in scarce socialization of cultural heritage.
- Human resources in this region does not have enough specialists, archaeologists, experts for protection and restoration, for cultural tourism.
   Potential of human resources is concentrated in district centres. The greatest potential of cultural heritage lies in touristic sphere and all re-

lated activities, such as construction work, production and trade of souvenirs, distribution of touristic material.

It was noted on the field that there are two cultural objects that might be influenced by the construction:

- 1. Roman road, which is protected by the Institute for protection of Cultural Heritage, it is located between border crossings Gradina and Dimitrovgrad. This road is relatively close to the pipeline route, and it is estimated that road goes to Naisus as one of the major Roman military station, there is high probability that during construction Roman road can appear somewhere,
- 2. Monument for the soldiers in the Wars 1912 1912, it is located in Jelasnica and the pipeline route will go near it.

#### Conclusion

For protection of these cultural objects it is of outmost importance to ensure supervised and specialist passing by these monuments. Since there is probability that along the construction route there will be more findings it is advised to have archaeologist present.

## 5 Identification and Assessment of Potential Impacts

#### 5.1 Introduction

The potential impacts of constructing and operating the Serbian Transmission Pipeline to Bulgaria have been assessed in consultation with the local authorities, LNC, Centres for social work and NGOs, and in accordance with SIA requirements. The key social areas that are potentially affected by project construction and operation are as listed, and will be in more detail assessed in the following sections.

- > Temporary economic impacts during construction,
- > Impact on existing infrastructure,
- > Impact on traffic and risk of road accidents,
- > Impacts from noise, dust and traffic fumes,
- > Social impact- presence of an outside workforce,
- > Impact on occupational health and safety,
- > Permanent land take and restriction of use
- > Impact on cultural heritage.
- > Cumulative and combined impacts,
- Impact on income and affordability for vulnerable groups,

## 5.2 Temporary economic impacts during construction

Temporary economic impacts are expected to include damage or loss of crops and possibly some damage to agricultural infrastructure such as fences, bridges and drainage ditches. The impacts may also include loss of access to meadows or areas used for grazing livestock and will definitely include the clearance of areas of forest.

The impacts will occur during clearance of the construction corridor, at the permanent pipeline installations, at pipe layout areas and along all access routes. It is important to emphasise that the details of the construction programme – including the selection of the access roads to the RoW, the number of work fronts, the selection of the sites for the construction camps, etc., will only be determined once the construction contract has been let.

The amount of damage can be reduced through the careful selection of access roads, which will have to be carried out in close consultation with the local authorities, landowners and land users. The timing of the construction programme is another factor that will have to be taken into account: work carried out during the winter will have less economic impact if it is returned to the landowners and users by mid-March. There will be an opportunity to negotiate the specific conditions with land users before construction starts.

The project owner is committed to reinstate the construction corridor, as well as any other areas used during project construction, to their former condition (as far as possible). Compensation will be provided to land owners or users for the loss of income during project construction, as per the national legislation. Depending on the cultivations cleared, compensation may be provided for more than one year.

A number of positive economic impacts are also anticipated, as follows:

➤ **Direct employment**. This is important since there are high levels of under and unemployment in the villages situated along the route of the pipeline. The employment of local labour, typically for jobs not requiring skilled staff, would help to maximise the potential benefits to people living in the nearby settlements.

In addition to employment on the construction sites there may opportunities for direct employment – perhaps through local sub-contractors – in areas such as catering (at construction camps), transport (bringing workers and/or materials to the construction sites) and security. The potential benefits of the project can be maximised either by including a requirement in the tender documents for the contractor/s to hire a certain proportion of non-specialist workers from the districts or perhaps regions affected by the project and/or by requirements in the tender for the contractor/s to publicise job opportunities in the affected districts, using local media (radio and local newspapers) and by providing information to local authorities and village councils.

Some additional jobs could be reserved for the local population, for instance, forest clearance along the RoW and access roads.

➤ Opportunities for income generation. As well as the sub-contracts noted above, the influx of construction workers and/or the increased disposable income available to the local workers employed on the project will have a minor multiplier effect on the economy of the towns and villages situated along the route of the pipeline. There may be an increased demand for rented accommodation, meals and so on. There may also be some opportunities for linkages, such as the provision of food to the caterers at the construction camps, sale of clothing for workers, maintenance of vehicles and so on.

## 5.3 Impact on existing infrastructure

Construction activities, construction vehicles and the movement patterns of these vehicles and equipment might temporarily prohibit access to properties and other amenities in the area, giving rise to an increase in frustration levels. This impact becomes a real concern where such activities occur in close proximity to roads and settlements, as is the case with Dimitrovgrad, Gojin dol, Blato, Trupale, Vrandol, Crvena reka villages, where the pipeline passes through them or

very near them, and in case of Jelasnica, Ciflik and Ponor where construction will go across the settled area.

Construction works will also lead to temporary limiting access from one village to another, which might bring to limiting access of some villages to schools and health care centres.

Such impacts will be minimized by careful selection of the traffic routes, especially for heavy machinery. Along the pipeline corridor, care will be taken to provide adequate crossing points that will allow the population and local vehicles to maintain access to villages, agricultural fields and meadows on both sides of the pipeline trench.

### 5.4 Impact on traffic and risk of road accidents

The project will increase the movement of heavy traffic on roads near the pipeline route. This will include movements of excavators and bulldozers, cranes and other lifting gear, trucks carrying building materials, and buses or minibuses carrying workers to and from the construction sites.

The negative impacts of this traffic flow will be reduced by selecting specific access roads to the pipeline route and avoiding or by-passing the built-up areas of villages and towns and especially avoiding routes that pass in front of schools, old people's homes or hospitals. The access routes — especially for oversized or hazardous loads — will be determined in coordination with the local authorities and will be binding on the contractor/s and sub-contractor/s. This can be enforced by putting up signs to show the selected route and/or the roads where access is prohibited.

The impacts will also be reduced by restricting traffic to certain hours, for instance from 8.00am to 10.00pm and/or by prohibiting heavy traffic on minor roads outside daylight hours. The risk of road accidents will be reduced through strict enforcement of the health and safety policy (particularly in regard to vehicle maintenance), speed limits and the code of conduct, especially in regard to the consumption of alcohol.

## 5.5 Impacts from noise, dust and traffic fumes

The main problems during construction relate to the traffic movements and trench construction and reinstatement. Impacts can reflect on the level of frustration of the local population. All this can be avoided by ensuring traffic is restricted to specific, clearly-defined access roads and by limiting traffic movements outside normal working hours.

Dust may be a problem in some areas, especially during the summer months, or where heavy traffic is moving along dirt roads. It can be controlled by using water spraying from water tanks – although this may make the roads slippery and perhaps more dangerous for light vehicles. Controls on noise, dust and traffic fumes will be addressed in the tender documents.

### 5.6 Social impacts - Presence of an outside workforce

There is a potential for conflict if much of the workforce is brought from outside and is housed in a temporary construction camp or camps near the work sites. Typical problems include disputes with local people and possibly the presence of bars and prostitutes, leading to a risk of fights, accidents, increase in sexually transmitted diseases and so on.

The construction of the pipeline is not concentrated in a single place but is continually moving from one site to another. Since the work requires a number of separate teams on each front and a number of fronts may be working simultaneously, it is expected that the contractor/s will bring the workers to the construction sites on a daily basis, bussing them in from the nearest towns or villages. In this case the workforce is less likely to have a negative impact on villages along the route of the transmission line; indeed many of the less specialised workers could be hired locally and would live at home.

It is essential that the presence of an outside workforce does not adversely affect local people and strict "code of conduct" will be applied that will cover public health and safety issues along with respect for the environment and respect for local people. The application of a "code of conduct" will be contractually binding and will be described in the tender documents and included in the contract drawn up between Srbijagas and the main contractor.

## 5.7 Impact on occupational health and safety

Contractor will construct the Project in accordance with health and safety legislation, applicable standards and design codes. Construction sites will be in line with Serbian requirements and international good practice as set out in IFC/EBRD guidance.

It will depend on the Contractor whether there will be camps or workers will be situated in the local houses. In such case camp rules and workers code of conduct regarding interfacing with local population will be implemented. Workers will be employed as per Serbian requirements on social conditions and international requirements of the ILO. Srbijagas will commit to apply social standards to workforce recruitment.

The Contractor will deliver HS training to all workers and require specific qualifications from drivers and equipment operators (alcohol tests etc.). The Contractor will be responsible for the production and implementation of the Health and Safety Plan. In doing so, regard will be paid to the features listed below to ensure no compromises are made which might jeopardise the safety of employees, contractors, or the public:

- construction work on site;
- hazardous materials and chemicals;
- operating procedures;
- work permits; and

emergency response.

The health and safety performance of the contractors will be the subject of regular reviews by Srbijagas.

Induction training will include the key issues of personal health and safety, environmental awareness, the worker code of conduct, accommodation rules and cultural awareness. Cultural differences within the workforce will be considered in the training to prevent conflicts both within the workforce and between the workforce and local community. The Project will evaluate NGO or community groups to deliver the training.

There may be some benefits with regard to local fire brigades as they will be trained and equipped to respond to oil spills - this increase in competence and capacity will be also beneficial for the communities.

The contractor will create a corporate security unit and may subcontract security companies as needed to permanently secure the tank farm and to patrol the pipeline route. Interfacing arrangements with Police are also envisaged. Srbijagas will insure by the contracts including work instructions and procedures for the security arrangements that regardless if own or contracted security staff, the local laws and regulations will be strictly obeyed and in addition Srbijagas will apply as international best practice standards the Voluntary Principles on Security and Human Rights.

#### 5.8 Permanent land take and restriction of use

Apart from the land for permanent project installations, which will be bought or expropriated by the project owner, no other change of land ownership is anticipated. The pipeline construction corridor, as well as the temporary pipe layout areas, will be reinstated after use and returned to their original owners, while any damage or loss of crops will be compensated.

However, a number of restrictions will be imposed to land use on top of the pipeline, with the aim to safeguard pipeline integrity:

- No deep-rooted plants will be allowed in a zone of 5m each side of the pipeline centreline (safety zone or Right of Way), although the cultivation of annual crops can continue normally
- No individual houses or other buildings will be allowed in a zone of 30m each side of the pipeline centreline

Compensation will provided to project owners for the restrictions imposed on the safety zone, as per the national legislation. The restrictions on building developments will be secured through local planning provisions.

### 5.9 Impact on cultural heritage

Potential adverse impacts to known and unknown archaeological sites are possible along the pipeline route during construction due to disturbance during earthworks

Consultation with the regional archaeological authorities in Nis indicates that the proposed pipeline route and project installations do not interfere with areas of known archaeological or cultural significance and thus the project impact to the cultural environment is anticipated to be limited.

There is always the chance that sites of archaeological interest are discovered during project construction. Therefore, an archaeologist will be present to oversee project activities and assess potential findings.

## 5.10 Cumulative and combined impacts

Cumulative impacts are effects where the project is taking place at the same time as other developments and they have cumulative effects on the same population and environment. Combined impacts are effects that arise from the combination of different effects on specific resource or receptor e.g. noise, dust and traffic congestion all affecting the same group of residents.

At the same time with the pipeline construction there will be Corridor 10 construction. It has been reported that Corridor 10 will be in the last year of construction, while the transmission pipeline to Bulgaria is in its starting phase. This might induce adverse effects on population in cases that these two projects meet at any point, which will increase the level of noise and dust that citizens are exposed to. In addition, this possibility could increase limitations in the movements of citizens, their access to public facilities, access to their agricultural land and communication between villages.

Cumulative impacts due to Corridor 10 motorway construction will be avoided or minimised through appropriate planning of pipeline construction. Appropriate communication between the two projects may even reveal synergies, for instance regarding the use of access roads.

# 5.11 Impact on income and affordability for vulnerable groups

Alarming existential situation of many citizens' raises a question of affordability of connection to the gas network of large number of citizens in this region. Measures in form of credit loans or some benefits to vulnerable groups who cannot afford connection should be introduced. The more citizens using gas as clean source of energy is aligned with sustainable development standards that are requested by the EU in the integration process.

Therefore it is necessary that the Owner prepare procedures for mitigating any adverse impacts caused by tariff increases, which could enable vulnerable people to continue to have a supply of services. These procedures shall include in-

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volvement of the appropriate Governmental institution and gathering of the information on social groups that will particularly be affected by this. EBRD will need to be advised, when these steps have been implemented and also (in annual reports) when the relevant authority has taken measures to address this issue.

### 6 Resettlement issue

#### 6.1 Introduction

Resettlement issue in the project Feasibility Study and Environmental and Social Impact Assessment – Serbian Gas Transmission Pipeline (to Bulgaria), is based on The Environmental and Social Policy adopted by The European Bank for Reconstruction and Development (EBRD) on May 2008, as well as in accordance with Serbian legislation set in:

- The Constitution of the Republic of Serbia,
- Law on Expropriation (Official Gazette of the Republic of Serbia, No. 20/2009)
- The Energy Law (Official Gazette of the Republic of Serbia, No. 57/2011),
- Law on Planning and Construction (Official Gazette RS, 72/2009),
- Law on Pipeline Transportation of Gaseous and Liquid Hydrocarbons and Distribution of Gaseous Hydrocarbons (Official Gazette of the Republic of Serbia, No. 104/09) and
- Regulation on technical conditions and standards for safe transport of liquid and gas hydrocarbons, for major oil and gas pipelines, and gas pipelines for international transport (Official Gazette of the SFRY, 26/85 from 24.05.1985.).
- *Spatial plans (listed in paragraph 4.9.2)*
- Decisions made by highest Serbian Courts and practice of the European Court of Human Rights

Experience and practice gathered during the resettlement and expropriation projects along Highway Corridor 10, financed by the World Bank and European Investment Bank were also used. Other good practice examples of village and household resettlement activities were based on open pit lignite mining practice in the Kolubara lignite basin (Serbia). Particular attention needs to be paid to the status of property and legal rights of owners and of local communities during the planning and construction of the Pipeline.

# 6.1.1 Relevance of the project in development programs, including land use planning

The area/route of the Pipeline is mentioned in the following spatial plans:

- (1) Spatial Plan of the Republic of Serbia 2010 -2020 (Belgrade, Official Gazette, 2011);
- (2) Spatial Plan of the infrastructure corridor Nis- Bulgarian border (Official Gazette, 86/2009), based on the Pan European road network determines a mul-

timodal corridor '10' with division 'C' Nis -Dimitrovgrad- Sofia, which represents an outer ring for the infrastructural corridor Nis - Bulgarian border, and which also determines corridor of the Main Pipeline MG-10 Bulgaria – Nis;

- (3) Spatial Plan of the administrative area of Nis 2021, The Plan outline (Institute for Urbanism Nis, 2011);
- (4) Spatial Plan of Bela Palanka municipality 2009 2024. Concept (Institute for Urbanism Nis, 2011);
- (5) Regional Spatial Plan for Nis, Toplice and Pirot County. The Plan outline (Institute for Urbanism Nis, 2010);
- (6) Spatial Plan of Pirot municipality 2011-2021; (Institute for Urbanism Pirot, 2011);
- (7) Spatial Plan of Dimitrovgrad municipality. The Plan outline (Institute for Urbanism Nis, 2011).

Strategic projects for the development of the economy of natural gas in the Spatial Plan of the Republic of Serbia are based on the National action plan for gasification on the territory of Serbia, adopted by the Serbian Government in 2007. Main Pipeline Nis – Dimitrovgrad has been listed under the 1<sup>st</sup> category of strategic projects of the gas supply up until 2014 (p.219).

The Spatial Plan of the corridor Nis - Bulgarian border identifies infrastructure systems including the Main Pipeline. Page 11of the SP states that belts along which the pipeline corridor is meant to be set do not allow for any structural changes in the use of agricultural land. Section on protective measures (p.29) determines the minimum distance between the gas pipeline from residential buildings, which is 30m on both sides of the axis of the pipeline, and it also sets protection measures in the zone between 30m and 200 m from the axis of the pipeline.

Terms and conditions for the construction of the gas pipeline MG 10 "Nis (GMS Nis) -Dimitrovgrad (Bulgarian border)" are incorporated into all spatial and urban plans of local municipalities and areas through which it passes. Spatial Plan of the town of Nis determines that the main branch connection (BC) Knjazevac' will be built on the Main Pipeline "MG-10 Nis - Dimitrovgrad", from which a pipeline branch MG – 12 "Nis - Prahovo" will also be included. Rules of construction (chapter 3.1.) determine that 'the route of the pipeline (pressure from 16 bars to 50 bars) will be regulated through specific urban documents (general and detailed regulation plans). Whereas location of Metering and regulation (MR) stations for wider use will be regulated by more detailed plans.

Spatial plan of the infrastructure corridor Nis- Bulgarian border should be further developed and implemented through Plans of detailed regulations. These

Spatial Plans defining that separate plans of detailed regulations should be made for:

- Trupale Prosek,
- Prosek Bela Palanka,
- Bela Palanka Pirot and
- Pirot Dimitrovgrad.

### 6.2 Land Ownership and Tenure

#### 6.2.1 Ownership and land use status

Spatial plans of the infrastructure corridor Nis- Bulgarian border estimate that gas pipeline will cover 43,4 km2 of space. Although the gas pipeline will not use all this space, that area can be influenced by gas pipeline either through undertaking additional protection measures or by limitation in future planning process. The length of the Pipeline crossing the municipality is: Dimitrovgrad – 12 km, Pirot – 32,5 km., Bela Palanka – 27,7 km., Nis – 36,3 km. On that huge territory we can expect various types of land ownership, lease rights and servitudes.

The exact data on ownership of the land, as well as information about plots that will (1) be permanently expropriated; (2) be temporarily occupied during construction Pipeline, and (3) acquire the right of servitude<sup>19</sup> will be available after the adoption of the Preliminary project alignment and identification of individual plots in the Protected areas of the Pipeline.

The following data have been collected from municipalities, urban and spatial plans and other sources during the field research.

Following land use can be identified along the route: (1) Village borough agricultural land that will keep its use for agricultural production and will not be converted into land for construction (building land); (2) Agricultural land in villages near the town that may be changed to land for construction; and (3) Agricultural land which has become informal building land where buildings have already been built (with no building permits, but which are in the process of legalization), although it is still officially registered as agricultural land, and its value is determined as such for the purpose of expropriation. (4) Agricultural land that will not change purpose in accordance with the established proposition in the Spatial Plan of corridor Nis - Bulgarian border, which states that 'alongside belts that are meant for the construction of the Pipeline corridor there are no changes in the use of agricultural land' (p.11).

<sup>&</sup>lt;sup>19</sup> There are several terms for this legal institute: Right of way, Right of servitude and Right of easement. The right of way is defined as a privilege of someone to pass over land belonging to someone else and has narrow meaning compared with Right of servitude that implicate limitation of property right of the owner. Right of easement is more used in Anglo Saxon Law and right of servitude is more used in continental legal systems.

Regarding property ownership, in line with the ownership structure of the land for Corridor 10, it can be assumed that agricultural land in the Protected Area is mainly in private ownership. The situation is somewhat different in the suburbs. According to information obtained in the cadastre (land registry service) of the town of Nis, there are all types of land ownership within suburbs through which the Pipeline will pass - state/municipal, private, lease of state land that is recorded, and lease of private land that is not recorded.

By expropriation several types of right could be influenced: It could be more than useful to know what type of rights could be influenced, as for all of them different types of compensation are regulated.

	ompensation are regi		
PROPERTY RIGHT		Land, buildings and other constructed objects (financial compensation or providing similar object or land) If there is no economical reason to use remaining part, whole property should be expropriated. Constructions object on building land	
* Engineers opinion is that we will have just few of those cases		- compensation.  Agricultural land - compensation or providing similar object or land	
PARTIAL (right-of-way) EXPROPRIATION		Can be established in expropriation process in order to allow installation, of gas pipelines.  Obligation of re-cultivation of the land.	
	LEASE RIGHT	3 years maximum! Obligation of recultivation of the land.	
Temporary servitude	or lease	3 years maximum!	
Temporary occupation		Land needed for construction. 3 years maximum. Obligation of recultivation of the land. Temporary construction yards as pipes stock yards or worker camps	
Administrative transfer		Property rights on state or public ownership could be taken out or limited and transfer to the other entity that has rights on public and state ownership, if that is in public interest. If the land that is subject of administrative transfer is in public ownership, titular of the property rights, that established that right without compensation, has the right on compensation only for work and devices invested in that land.	
Preparation work		Measuring, screening. Ministry of finance should approve this motion. Compensation if needed. Construc-	

tion is not allowed

According to information from the cadastre of **Bela Palanka municipality** there are a number of public forests. Restitution will not substantially change ownership over forest land. During the meeting of the Municipal Assembly on 2nd June 1995 it was decided that the MG-10 construction in the 13 cadastre municipalities is in the public interest. In summary the Pipeline MG-10, within the route from 1995, should pass through around 1200 cadastre parcels in Bela Palanka municipality (only one cadastre parcel is in state ownership). The number of owners is somewhat different due to some properties having two or more owners, or one owner has two or more cadastre parcels.

In the **Pirot municipality** during a meeting on 22nd December 1995 the Municipal Assembly Pirot brought a decision that the construction of the Main Pipeline MG-10 Nis-Dimitrovgrad and the Optic fibre cable for remote control of the Pipeline are of public interest. As such one can establish the right of permanent servitude for property in 16 cadastre municipalities. In summary the Pipeline MG-10, within the route from 1995 should pass through around 900 cadastre parcels in Pirot municipality (only one in the state ownership).

In **Dimitrovgrad** the Municipal Assembly held on the meeting on 2nd June 1995 brought a decision on public interest for the construction of the Main Pipeline MG-10 Nis-Dimitrovgrad and established the right of servitude in five cadastre municipalities. The data on the number of cadastre parcels were not available. In Dimitrovgrad municipality there is an agricultural cooperative 'Stocar' that is still in state ownership. This cooperative has land property in all cadastral municipalities in Dimitrovgrad. Other agricultural land is mostly private.

Data on the lease of private land has not been recorded. Even in cases where agricultural and other land is rented the lease has not been registered and agreement is achieved solely on basis of trust of the actors. Based on survey data — gathered in several sections of the route of Corridor 10 Nis — Dimitrovgrad - lease of private land is rarely practiced. Land that was owned by the state or social agricultural cooperatives has been privatized or leased.

Up to now, expected data from Srbijasume (The Forests Authorities of Serbia) regarding public forests governed by Srbijasume were not provided.

#### 6.2.2 Property value

Along the route of the Pipeline, as in other parts of Serbia, there are significant differences in value of agricultural and building land where developments are allowed. Value of the latter is several times higher, because land use is regulated and construction of residential, industrial and other facilities is permitted. A separate category consists of agricultural land near urban settlements, which has already been built on (illegally), but is still formally registered as agricultural land. As such it is valued accordingly when assessing compensation for current owners.

Value of agricultural land, which is not suitable for urban development, along the highway and the Pipeline of Corridor 10 is extremely low - much lower than average prices in the Republic of Serbia. According to expropriations carried out along Corridor 10 the price ranged from 4 to 6 euro per m<sup>2</sup>. This amount is calculated by implementing procedure set by Law on expropriation, Position and rights of residents according to national laws / Expropriation – Compensation Issues.

Such price exceeds a fair market price in the area. In an interview with an owner of expropriated land in Crvena Reka settlement, along Corridor 10, the respondents could not recall the last time a piece of agricultural land was placed on the market. According to thousands of completed acquisitions along Corridor 10 there were only a few complaints regarding the fee. In other words, most of owners are keen to accept the offered compensation for the expropriated land, as well as for expropriated residential and commercial buildings. Such findings indicate that the price given for the expropriation of land is acceptable to owners.

On the other hand, only a few owners along the Dimitrovgrad Bypass route used their right of The Law on expropriation and sought other agricultural land as compensation. They were not satisfied with the land that was offered because it was far away from the municipal centre (these are statements by an owner who did not accept the offered land).

Sale of agricultural land took place only in areas close to urban settlements, which is why this land was sold in fragments and for the purpose of building for housing. New owners built their houses without building permit and then settled with their families. The largest number of residential and commercial buildings in town peripheries in Serbia was built on agricultural land or pseudo-building land. Through expansion of planning of this zone (through the Master Plan) these plots have been formally converted into construction sites. It has now become possible to legalize already built housing, commercial buildings and other built environment, or even get a building permit to build a new facility. By changing the use of agricultural land into land for construction price has been formally settled.

For example, the price of land meant for construction in the suburbs of Nis municipality reaches up to 20 euro per m<sup>2</sup> (see Annex VI - The case of Trupale). Only villages in the peripheral zones of municipal centres can change land usage from agricultural to construction land, as set by the planning regulations that have included those areas into the Master Plan.

#### 6.2.3 Building structures within Protected Areas

Under current legislation that regulates the construction of the Main Pipeline, the scope of expropriation within 30m of the Protected Area (namely permanent change of land use and/or owner) will be significantly small, while most of the route will be used for staff access by right of servitude.

Final SIA 04.11.11

According to the data collected so far and information gathered from Chapter 9 of Feasibility Study and ESIA – Serbian Gas Transmission Pipeline (to Bulgaria), expropriation will only be used for the construction of gas facilities on the area. For the purpose of building these facilities and access roads expropriation will only be applied to land, and not to already build objects. Other land along the route will be used for right of servitude and leased during the preparatory and construction works for the Pipeline.

Preliminary assessment of built structures in Protected Areas (200m and 30m) is based on Ortho-photo recording (Annex I - Table 1: Number of building structures (BS) identified in Protected Area (PA)).

Identification on the basis of Ortho-Photo does not allow objects to be differentiated by:

- Purpose of the facility (housing, auxiliary, agricultural, industrial, etc.);
- Number of buildings on the parcel, or whether the parcel has one or more objects;

Data from the Table 1 in Annex I show an approximate number of objects within the Protected Area (200m and 30m) of the Pipeline route:

	Total	Nis	Niska Banja	Bela Pal- anka	Pirot	Dimitrovgrad
Settlements without BS in PA 200m	28	8	3	8	8	1
No of BS in PA 30- 200 m	545- 575	57	55 - 85	100	210	80
No of BS in PA 30m	38-42	2	10-15	13	5	7

Table 20: Summary of preliminary assessment of BS in PA

In summary: Final data about surface of individual parcels, the number and type of building structure, as well as owners' names, will be available after the preparation of the Main Project of the Pipeline route.

#### 6.2.4 Position and rights of residents according to national laws

The Law on Pipeline Transportation of Gaseous and Liquid Hydrocarbons and Distribution of Gaseous Hydrocarbons (Official Gazette of the Republic of Serbia, No. 104/09) define preconditions for constructing gas pipelines. Although this Law set basic standards the "Regulation on technical conditions and standards for safe transport of liquid and gas hydrocarbons, for major oil and gas pipelines, and gas pipelines for international transport (Official Gazette of the SFRY, 26/85 from 24.05.1985.) is much more relevant.

The Regulation for technical conditions covers various technical questions, from the phase of defining route to the testing phase. This bye-law defines the safety zones of the pipelines. The table below presents safety zones for pipelines planned by this study:

Priority safety zone 5 m	5 meters from each side of the pipeline axis	It's forbidden to plant plants with roots longer than 1 meter or plants that are cultivated by digging more than 0,5 meters
Protected zone 30 m	30 meters from each side of the pipeline axis	It is forbidden to build housing objects in the future.  Regulation doesn't mention situation when there is a building in a distance less than 30 meters from the axis. The Spatial Plan of the infrastructure corridor Nis - Bulgarian border, in the Section on protective measures determines that the minimum distance between the gas pipeline from residential buildings in settlements, is 30m on both sides of the axis of the pipeline
Wider safety zone / Pro- tected area 200 m	200 meters from each side of the pipeline axis	Based on the level of population density, additional protection measures should be undertaken.

Distance from some of the objects that could interconnect with pipelines:

- More than 5 m from outer side of road zone / for regional and local road
- More than 10 m from outer side of road zone / for 1 level roads
- More than 20 m from outer side of road zone / for high ways
- More than 20 m from outer side of train zone / for railways
- More than 5 m from outer side of road zone / for regional and local road
- More than 1 m horizontally from construction objects / from the base of the object, with condition that stability is not under threat.
- More than 50 cm from other installations
- More than 10 m from regulated water systems and channels.

In many of above mentioned situation, additional approvals from various state agencies are needed!

#### PA 30 meters

The Spatial Plan of the infrastructure corridor Nis - Bulgarian border, in the Section on protective measures determines that the minimum distance from

the gas pipeline to residential buildings in settlements, is 30 m on both sides of the axis of the pipeline. All relevant spatial and Master plans have to obey protection measures set in higher ranked spatial plans and planned measures shall be respected in order to get location and construction license. JP SRBIJAGAS representatives and engineers with previous experience informed that in practice, exceptions are very common. As Ministry in charge for urbanism has jurisdiction to grant location license, they will approve different scenario if Beneficiary submit separate project for every situation when objects are closer than 30 meters, with supporting documentation that contain additional protection measures. Ministry of Infrastructure and Energy should issue Energy certificate for construction of energy objects for transport and distribution of natural gas, based on Spatial and Master plan, but practice is similar to the granting of location license.

#### Acquiring land for the construction of the gas pipelines

There are several options to acquire land needed for the pipeline construction. It could be done by:

- Defining public interest and partial expropriation (servitude rights) of the land
- Defining public interest and administrative transfer of state own land
- Purchasing land from the owner.

In order to undertake expropriation, first step would be to declare public interest by the Government or Parliament of the Republic of Serbia. After detailed research in related Municipalities, Real Estates Registries and Courts, the outcome is that public interest for the construction of gas pipeline MG 10 including lay down of an optical cables, has been declared in 1995 by the local Municipalities. It was done by implementation of the previous Law on expropriation (Official Gazette of the SRS, 40/84). It was initiated by the legal predecessor of JP SRBIJAGAS, company called NIS ENERGOGAS. Same company is declared as the expropriation Beneficiary. Having in mind that this important legal fact is solved, we will focus on an outcome of current situation, leaving behind explanation of declaring public interest. More can be found in Annex 4.

Related documents gathered from the Municipalities of Pirot and Bela Palanka; show that before declaration of public interest, owners have been contacted and that all contacted have agreed to declare public interest. Based on those Decisions, Beneficiary initiated procedure for issuing individual Decision of expropriation. It is not possible to determine if valid Decision of expropriation is made by the Municipalities in each and every case, but it seems that it was in the majority of the cases. Decisions of expropriation contain comment that compensation issue shall be solved after validity of this Decision. If Beneficiary missed to initiate expropriation procedure, it will not be possible to start it again, because the 1 year time limit expired long ago.

In 2006 all Municipalities issued Statement to the JUGOROSGAZ – (company that previously had an Energy license), where is stated that public interest is declared and servitude rights have been constituted. Neither one documents mention real expropriation.

Rights of servitudes are not enlisted in Real Estate Registries as they didn't exist in those times and JP Srbijagas will have a duty to submit Request for note on expropriation in the Real Estate Registry, as it is defined by new law. There are neither legal documents, nor personal testimony that any compensation price has been paid or compensation agreement achieved.

New Law state that Decisions of declaring public interest issued before entering into force of new Law on expropriation are valid. New Law on expropriation define that if compensation is not agreed before new Law entered in force, it will be resolved by the provisions of new Law on expropriation.

# Acquisition of land for the permanent installations and correction of previously defined map

Having in mind that previously adopted Decisions of expropriation, didn't mention expropriation of the land for the purpose of permanent installations, it is necessary to explore several options:

- Defining public interest and real and partial expropriation (servitude rights) of the land
- Defining public interest and administrative transfer of state owned land
- Purchasing land from the owner.

Process of declaring public interest set in the new Law on Expropriation is stricter and more time consuming, than by previous legal acts. Having in mind that numbers of sites needed for construction of permanent installations and deviations of previously defined pipeline route, are quite small, it is better to go to:

- Direct purchase from the owner or
- To lobby Ministry of agriculture or Ministry in charge for forests, to make internal procedures to transfer land to JP SRBIJAGAS if it is agricultural land or forest in matter.

Interviewed professionals from JP SRBIJAGAS and Municipality Administrations stated that expropriation procedure following after defining public interest could last up to 2 years.

There are several issues regarding expropriation that could be of interest.

In the case of full expropriation, Law gives right to the owner to ask for the expropriation of whole real estate if he doesn't have economic interest to use the rest of it or if his existence is endangered. This solution is incorporated in the Law with primary reason to protect poor families and peasants. Municipal Administration has a duty to inform an owner that could submit that request and has to note this in the record. This request could be submitted up to 2 years after construction is over! Serbian courts and Ministry that has a 2nd instance jurisdiction, annul expropriation decision if this duty is not stated in official expropriation record. The practice of Higher Serbian courts expands implementation of this article and uses it even for a servitude right. In this cases base for

compensation price is amount of all real estate, not only area influenced by the pipeline. JP Srbijagas and other gas companies in Serbia don't follow this practice, allowing Serbian courts to intervene when they find appropriate.

The law has a special treatment of agricultural land in the case of pipeline construction. In the case of expropriation of agricultural land, primarily, way of compensation is providing property right on similar agricultural land, same culture and quality or by similar value in the same place or nearby. Only if Beneficiary is not in a position to offer similar agricultural land, compensation could be set in an amount of money. In cases other than pipeline, owner has a right to ask for other agricultural land; in case of pipeline it is obligated. We couldn't find evidence that Serbian Courts expand implementation of this article to servitude rights.

When house, flat or business premises are subject of expropriation, owner has a right to submit request to Beneficiary to provide him similar object in the same place or in the vicinity, with same structure and surface and corresponding to previous living or working conditions.

Regarding right of citizen to be informed about expropriation, it is mentioned that Municipal administration is responsible for informing the owner if proposal for expropriation is submitted. Having in mind that expropriation decisions have been made long ago, it will not be of our interest. To have complete picture, we will just mention that supporting documentation present evidence that owners have been informed and participated in process of granting Expropriation decision.

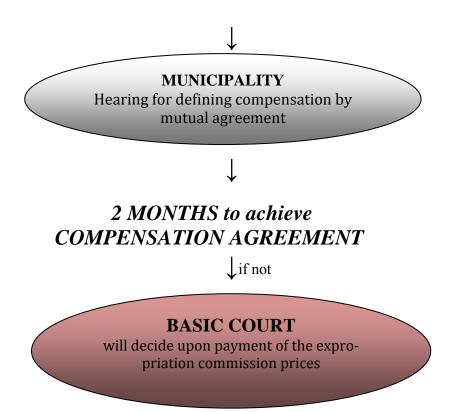
#### **EXPROPRIATION – COMPENSATION ISSUES**

Compensation issues are most sensitive in the whole procedure, both as a legal question and as a social impact it has in the community. JP SRBIJAGAS has an interest and responsibility to solve this question by respecting both legal obligation and ethical duties. It is last part of expropriation process, but most demanding.

Here you can see graphically presented procedure dealing with compensation issue:

#### **IP SRBIJAGAS**

Offer that define form and amount of compensation for the expropriated real estate in writing has to be submitted to the MUNICIPAL ADMINISTRATION.



Beneficiary has a right to enter the property after Compensation Decision or Agreement is valid and final, but in the case when gas pipeline has to be constructed it could be granted to enter the property even before, if Beneficiary define elements needed in order to define the expropriation price.

Amount of compensation price shall be defined having in mind circumstances in the moment of passing Decision of compensation or when 1<sup>st</sup> instance Court decision is enact.

Compensation Agreement could be used as enforcement decision and has to contain several important elements:

- Type and amount of compensation
- Time framework for implementation
- Eventual responsibility of original owner

On a hearing at the Municipality Administration or on a Court hearing, parties could agree upon providing other object or land, amount of compensation, eventual difference in the amount of the value and how to pay the difference, transfer of objects to other location, construction of access roads and paths etc.

One of solutions with social implication is permit to allow higher fee than the market price when financial and family circumstances of the owner require. Most likely this relates to vulnerable households with more members, monthly income below the poverty line, sick and depend-

ent members and so on. It is however not clear whether this provision applies to fees for servitude and rights of tenure.

Changes of the law on expropriation from 2009 define that the evaluation of real estate value which is to be expropriated is defined by the Tax administration. In the past, the evaluation was carried out by Court experts' testifying every single real estate. In the practice this change caused serious problems. Tax administrations don't have capacity to rightly estimate market price.

Market values of land and real estate are defined in accordance to the type and quality of the land, that is, its position and other qualities. For the area in which the construction of pipeline is planned, the market value of real estate for complete and partial expropriation has not been obtained yet. It is quite difficult to calculate market price in the area without any or almost any market at all. Compensation price paid for the land expropriated for the construction of high way will for sure increase market price of the land on the pipeline route.

We are familiar with some cases where court had to estimate compensation price, and based on market price of the whole plot (not only 30 m zone) estimated by the tax Administration proposed percentage (in this case 30%) that presented compensation price for establishment of servitude right.

Types of rights and compensation	
On the land that is in state or public	Compensation in the amount that cor-
ownership, rights of servitudes for	responds to the decrease of
transmission of gas may be granted	land/building/crops values caused by
	the servitude.
For the temporary occupation of the	Compensation in the amount given for
state or publicly owned land	the lease of most similar land.
Amount of fiscal compensation for	Defined based on the market price in
the expropriated real estates –Art 41	the moment of signing Price Agree-
	ment.
Compensation for the Agricultural	Defined in the fiscal amount based on
and Building Land	the market price.
	The Tax Administration provides esti-
	mation of this price.
Expropriation compensation for the	Defined by the market price of that real
building, flat or business premises	estate.
Compensation for the expropriated	User of that building land is entitled to
building land in state or public own-	the compensation depending on the
ership	time when his right of use has been
	granted.
Servitude rights.	Amount that compensate decreased
	market value of the land/building,
	caused by servitude.
Temporary occupation and Lease	Amount of market lease price for simi-
rights.	lar land, including possible damage
	and include the time needed for re-
	cultivation or re-functioning.

Both sides could request motion for enlisting right of way based on final Decision of expropriation. Although both sides could request it, by having in mind that it is free of charge for Beneficiary, it should be JP SRBIJAGAS responsibility.

Beneficiary of the expropriation must bear the costs of expropriation procedure. Beneficiary of the expropriation must bear the costs of the procedure related with achieving Agreement upon payment of the expropriation compensation. In expropriation procedure and compensation procedure all motions and decisions are free of paying taxes.

Another relevant law for the status of the local population is the **Law on pipe-line transport of gas and liquid hydrocarbons and the distribution of gas hydrocarbons** (Official Gazette, 104/2009). Provisions that are relevant for the position of the local population and land ownership are related to the mode of use of agricultural land in the protection area. Article 20 states that 'in the Protected Area of the Pipeline one must not carry out works and other activities other than agricultural work no deeper than 0,5 meters, unless there is written permission for the legal entity responsible for transport and for distribution along the pipelines". Approval for works in the protection zone of the pipeline, referred to in paragraph 1, must be issued by an energy authority carrying out transportation

The newly adopted **Law on Energy** (Official Gazette RS, 57/2011) states that Beneficiary has a right of way on a property of other owners for the purpose of undertaking works for maintenance, control of objects, installations and equipment and other works and use of those. Beneficiary is responsible to compensate eventual damage and the amount of compensation shall be set mutually, if not Court will intervene.

Same Law defines limitation for the owners of the land that is subject of right of servitude. Anyone that has right on the real estates that are under, above or beside energy object are forbidden to commence works that could threat or endanger an energy object without previous approval of Beneficiary. Approval could be given on a request by owner and contain technical conditions needed to be implemented.

Law on Planning and Construction (Official Gazette RS, 72/2009), chapter on public release (16.5), Article 50 states that the 'presentation of the planning document for public inspection is made after the expert analysis. Presentation of the planning document to the public shall be published in daily and local newspapers and advertised for 30 days. Government Agency for Spatial Planning and the local government authority in charge of spatial and urban planning are responsible to present the planning document for public approval. The Planning Commission shall prepare a report that contains data gathered during public consultation and must include all comments and any decisions taken.

In Serbia public consultation is marginalized both as a legal requirement, and even more so during the planning, development and implementation of spatial and urban planning documents. The Law on Planning and Construction requires that a Draft plan be submitted for so called Public insight. The Public insight takes place ex-post, when almost all basic propositions and planning solutions have been defined. The role of the public insight is to allow the civil society to make suggestion and comment on the proposed plan, which a special Commission later adopts or refuses. The law does not oblige the developer of the Plan to cooperate with the local community and civil society who live in the vicinity, not even in projects which demand expropriation of land or pose other forms of restrictions on property, as is the case of the Pipeline.

## 6.2.5 Temporary or permanent acquisition of land, property, economic assets

Legislation provides three ways in which one can secure land for the construction of the Pipeline: (1) Permanent expropriation of buildings and land, which entails seizing of the land and change in ownership; (2) Temporary occupation of the land during the preparation and construction of the building, without change in ownership; and (3) the right of servitude, which allows the Beneficiary permanent access to the facility which is situated on a piece of land that remains in previous ownership.

- Permanent expropriation is seizing of land from a current owner with compensation as regulated by law. Residential and other facilities are also subject to expropriation. The owner of the property has the right to request expropriation on the remaining land, if that part is outside the borders of the expropriated land. During identification and notification period the expropriation authority is obliged to inform every land owner of his/her rights. Permanent expropriation will be required for the construction of the permanent pipeline facilities, such as MR stations and bloc valve stations.
- 2 **Temporary occupation of the land** is the right of the user to use the land during the construction of the Pipeline. According to regulations, during the construction of the Pipeline the corridor used is 6 + 12m in width from the axis of the Pipeline. Temporary occupation of the land provides for adequate compensation for the landowner.
- The right of servitude allows the Beneficiary to access the Pipeline and the land owned by another subject, with adequate compensation which is paid to the land owner by one-off payment (according to data gathered from JP Srbijagas, (the amount of compensation is 30% of market value of land over which the route passes). According to current legislation the owner does not have the right to ask for permanent expropriation of the land where the right of easement has been established.

A comment about a potential effect that the right of servitude can have on the commercial and utility value of the land:

4 The right of servitude imposes certain limits with regards to the use of the land; especially that right to use his/her land without disturbance. This is in

particular regarding the fact that 'in the safety zone one is not allowed to undertake any works except agricultural works up to 0.5m depth, without a permit from the energy authority in charge of transporting and distribution along the Pipeline. As such the landowner is required to ask the Beneficiary for permission to build on his own land. The Beneficiary is required to compensate the landowner for the devaluation of the property. Regarding human rights and the right of the owner to use his/her property safely and without limitations, one can argue that the owner should be given an opportunity to choose the form of land acquisition (permanent expropriation of land or right of servitude).

- It is possible, for example, that the owner of a property where the right of servitude has been established might ask for consent from the Beneficiary to lay a new passing road over the Pipeline route in order to access another part of his land. However, it is also possible that the landowner will not get permission from the Beneficiary to pass through to other piece of his/her plot of land.
- A certain number of interviewed citizens, as well as a number of professionals, regard that offering permanent expropriation is more just and rational for the property owner than applying the right of servitude.
- One should not disregard psychological effects that can be caused by the proximity of the Pipeline to housing objects, which can, also, affect the value of the property. We have not found any available analysis of such psychological effects. We can assume that for depopulated villages and those with low population where land is used mainly for agriculture, the effect would be minimal. However in populated areas the above mentioned psychological effect could be more severe. As such it is crucial to raise such questions during meetings with local civilians (most effective in focus groups). During the discussion in Pirot, an interviewee was asked about her feeling on security if the Main Pipeline will pass ten meters from her house. She replied with a question: 'Would you be happy if your children were to play close to a gas pipeline?'.
- Another problem was noted regarding an owner whose land has been given the right of servitude. Namely in the case if agricultural land will be changed to land where construction is permitted. At that point the owner of the later will have to seek a permit to build in PA 30m radius from the axis of the Pipeline. In practice this will prohibit construction on land, which previously had a building permit.
- 9 It is uncertain if and in which situation would the owner have the right to choose between permanent expropriation and the right of servitude. It is possible to clarify this question during public consultation in the local borough.

#### 6.3 Resettlement Plan

Involuntary resettlement refers both to physical displacement (loss of home) and to economic displacement (loss of assets that are sources of income) as a result of project-related land acquisition or restriction of access to natural re-

sources. Land acquisition includes both outright purchase of property and purchase of access rights, such as rights-of-way. Resettlement is considered involuntary when affected persons do not have the right to refuse land acquisition that result in displacement.

Along the M-10 Pipeline housing and business properties are not to be relocated, as explained in Para. 4.9.3.3. Namely, there will be no permanent expropriations where in addition to monetary compensation one required to change his place of residence. For the purpose of the Pipeline the right of servitude regulates the land acquisition.

#### **Project Design**

According to the Feasibility Study and ESIA – Serbian Gas Transmission Pipeline (to Bulgaria), requirements to avoid or minimize physical and /or economic displacement have been fulfilled. At the time of planning the Pipeline route, due care was taken to avoid crossing land where buildings have already been built, and as such to create a Protected Area (PA 200m, and PA 30m) with minimal construction of housing, business and other building.

Table 1 (in Annex 1) and Table 8 (above) show preliminary assessment of the number of objects situated on PA 200m and PA 30m. This data show that there are around 40 built objects in the PA 30m, whose type cannot be differentiated. Jelasnica is a settlement with a larger concentration of built objects (10-15 built objects in PA 30m).

According to the data from the Feasibility Study and ESIA – Serbian Gas Transmission Pipeline (to Bulgaria) permanent expropriation will be applied only for the building of four measuring regulation stations (MR) and for two transfer stations (GMS). Consequently only agricultural land is entailed in the expropriation process, whereas built objects are not. All other land along the Pipeline will be regulated though the right of servitude. That means that there will be no housing properties along the Pipeline which will be fully or partially displaced, and as such have the right to additional allowance and assistance at the time of resettlement (i.e. purchase of new land, construction of new housing, securing of the building permits and other). Furthermore one should not expect influx of people who will try to materialize their right to get compensation or additional allowances.

#### 6.4 Public Consultation

According to propositions in the Environmental and Social Policy Performance Requirements by European bank for Reconstruction and Development the Project Beneficiary will consult with affected persons and communities and facilitate their early and informed participation in decision-making processes related to resettlement, in accordance with PR 10: (1) Affected persons shall be given the opportunity to participate in the negotiation of the compensation packages, eligibility requirements, resettlements assistance, suitability of proposed resettlements sites and proposed timing, and (2) Special provisions shall apply to

consultations which involve individuals belonging to vulnerable groups (that should be identified through the process of environmental and social appraisal – PR 1).

## According to, EBRD Performance Requirements for Environmental and Social Policy Public consultation entails the following:

- Constant cooperation with the public;
- Accessibility and disclosure of all relevant information;
- Cooperation between the Beneficiary and all regulatory bodies of the local government with affected persons and communities and facilitation of their early and informed participation in decision-making processes related to land acquisition and expropriation of built structures;
- Affected persons shall be given the opportunity to participate in negotiation of the compensation packages, eligibility requirements, resettlement assistance, suitability of proposed resettlement sites and the proposed timing;
- Consultation will continue during implementation, monitoring, and evaluation of compensation payment and resettlement so as to achieve outcomes that are consistent with the objectives of EBRD.

# In order to ensure continued cooperation with the civil society the following measures are proposed:

- 10 Organization of open hearings in local communities and settlements whose properties will be affected by the Pipeline. These civil gatherings should be planned while drawing up the draft document for the construction of the Pipeline. The developer of the planning document and/or the Beneficiary is under the obligation to inform the civil society (with graphic presentation) about the planned route of the Pipeline, and to consider all suggestion and comments. Minutes from the meeting should be published and available in the local community. Before starting expropriation and other forms, such as establishment of the right of servitude, the Beneficiary is responsible to reveal all information, which is relevant for the affected property owners. This information should be public and transparent. A notice with the date and place of the public consultation should be published at least 30 days prior to the consultation, and should also include a printed draft of the Pipeline route, numbers for all cadastre parcels, street names and other details. It is compulsory to take minutes of all comments and remarks that should then be considered.
- Informing via the media (local newspapers and TV) is the most common method for disseminating information about current and future plans, the place and date of gatherings and other. Evidence has showed that those methods are not sufficient enough in local communities with specific features such as dispersed buildings, low educated population, high share of elderly households, and other. A large proportion of households do not read local newspapers nor watches TV.. As such these types of households

- should be independently informed, namely posted in writing to their home address and visits, to ensure that all relevant information reaches them directly.
- 12 Particularly important aspect of cooperation with local communities is providing advice, legal and other assistance to property owners and other interested citizens. EBRD Environmental and Social policy state that Resettlement Action Plan should incorporate measures to ensure that displaced people are provided, where possible, with legal assistance to enable them to complete administrative requirements prior to land acquisition and, if needed, to seek redress from the Courts. Civil society in Serbia, particularly in rural settlement is poorly informed about their rights and relevant legal frameworks. Organizing this type of assistance for citizen along the Pipeline route is of crucial importance. Citizens in these settlements are poorly educated, with a large number of elderly, disabled and poor households who cannot afford to pay a lawyer or another professional to ensure they receive adequate and relevant information. They do not have access to any type of independent and professional legal assistance, while even the responsible officials at the local government do often not protect their interests. Rural settlements are situated far away from the local power structures. It is therefore crucial to oblige all parties involved in the construction of the Pipeline to provide relevant and timely information about the project, expropriation of land, application of the right of servitude and all other legal information. This should be compulsory with regards to all projects that entail changes in the use of land.

In order to have an efficient and effective communication with the civil society and adequately inform them of all relevant questions, it is proposed to create an Independent Unit (IU) under the jurisdiction of JP Srbijagas Project Manager/Project Supervisor that will regulate all activities during the preconstruction, and construction, phases, to ensure implementation of all commitments and protect the rights of citizens. IU should be formed of community representatives, representatives of independent bodies, local government representatives and representatives of the Beneficiary.

Considering the length of the route (around 108 km), and that the route passes through the territory of four municipalities, it is necessary to consider whether each municipality should form a Committee, or to form one that will entail activities along the whole route. The latter should include sub-Committees for each municipality.

Obligation to organize public consultation relates to all settlements along the Pipeline route, regardless whether there are buildings within the PA 200m, or if the route passes only through agricultural or forest land.

#### 6.4.1 Grievance mechanism

Grievance mechanism serves to receive and address complaints and concerns about compensation and relocation that are raised by displaced/affected persons and/or members of host communities, including a recourse mechanism designation.

nated to resolve disputes in an impartial manner. The body for addressing citizens' complaints and concerns would be the IU It would follow the preparation, development and implementation of all relevant commitments and would overlook the protection of citizens' rights during the construction of the Pipeline. A crucial function of the Committee would be to serve as a peaceful mediator in potential disputes between property owners and the Beneficiary. In this way one would avoid court proceedings that are costly for the citizens, lengthy and also demand professional legal services.

### 6.5 Resettlement impact

#### 6.5.1 Identification of impacts

In order to define the categories of Affected Persons and/or Affected Households during preliminary and construction works on and the actual operation of the Pipeline first step is to categorize the land in respect of ownership and manner of use. Along the Pipeline route the following categories of land use relative to ownership can be distinguished:

- 1. Resident private landlords this category as a rule most often features in zones where the Pipeline passes through a village borough or along settlements. The owners of farming land have residential and farm buildings on their plots and, as a rule, till the land.
- 2. Absentee private landlords. The absentee private landlord category refers to two groups: (1) Landowners who have moved out and live in some other town in Serbia or abroad. In most cases they have made available their agricultural land to relatives or neighbours living in the vicinity to be farmed by them. (2) The second group are conditionally absentees, namely they are owners whose holdings are at some distance from their places of residence, which may be a restrictive factor in using land for growing crops which require daily attendance (irrigation and similar).
- 3. Tenants (users) of privately owned agriculture lands. Tenancy of privately owned agricultural land is not practiced, i.e. there are no lease agreements. A form of tenancy could be granting land for tilling to neighbours and relatives against a symbolic consideration in kind.
- 4. Tenants of public land. Agricultural land which in the period of socialism was in public ownership (nationalization) has been mostly privatized over the past 20 years. As the Law on Restitution is expected to be adopted by the National Assembly of the Republic of Serbia in September 2011, implications of its legal provisions for changes in the ownership of land which was nationalized in the late 1950's are as yet unknown.
- 5. Formal and informal users of state-owned pastures and forests. Illegal felling of trees for firewood is the most frequent form of the informal use of state-owned forests.
- 6. Local institutions that own and/or use land. This refers to building land and plots on which facilities of public services are located.

7. Other (regional and state administration, public enterprises...).

The following categories can be recognized as Affected Persons and/or Affected Households during preliminary and construction works on and the actual operation of the Pipeline:

- 13 Citizens whose land, residential and business buildings are within the 30 m PA on both sides of the Pipeline axis. In this category, the owners are subject to the following restrictions:
  - 13.1 A permanent ban on the construction of residential and other facilities in the Protected Area, and/or construction with a permit from the Beneficiary.
  - 13.2 Prohibition of planting in a zone of 5 m on both sides of the Pipeline axis of plants with roots exceeding a depth of 1 m, i.e. for which the land needs to be worked deeper than 0.5 m.
  - 13.3 Provisional expropriation of land in a width of 18 m (6 + 12 m), for the needs of preliminary works and the construction of the Pipeline, until reinstatement of the land.
  - 13.4Owners entitled to compensation on account of lost crops, felled trees and other.
- 14 Citizens whose residential and business buildings are 200 m within the PA on both sides of the Pipeline, i.e. in the 30 to 200 m band on both sides. This category should not be affected by any adverse impact either during the preliminary works or construction or the actual operation of the Pipeline

For the time being it is impossible to establish the exact number of plots through which the Pipeline route passes in terms of forms of impact (5+5 m; 12+6 m; 30+30m, 200+200 m).

Neither is it possible to establish, on the basis of the available data: (1) the number of owners; (2) the number of households; (3) the quality and categories of agricultural land.

The construction of the Pipeline shall not cause the loss of land and facilities (housing, business, agricultural), nor shall it lead to a change of land use. It will not lead to a reduction of the agricultural land area (arable land, pastures, orchards), nor of its quality, on the condition that the requirement for the selective removal of the topsoil during preliminary works and construction and of proper re-topsoiling of the plot after the completion of works is met. Some forms of agricultural activities shall be restricted within a 5+5 m belt from the Pipeline axis.

In order to better understand the possible impacts and rationale for the establishment of an adequate control framework and the preclusion of any undesirable and adverse impacts of the construction of the Pipeline on local communities, the following needs to be pointed out:

- 8. In the course of field research it was established that in practice there exist different assessments of the value of the land, both of agricultural and building land. There is an evident mismatch between judicial practice and land evaluation, both in terms of the expropriation price and of assessments of compensation for the right of servitude made by tax administrations. Several judges interviewed were of the view that tax administrations made blanket assessments of plot values and that previously established and harmonized criteria for assessing the value of individual plots were not being applied in the assessment process.
- 9. Given the current poverty levels in Serbia, in particular in Eastern and South-Eastern Serbia, which, according to available data, are among the worst poverty-stricken areas, most owners accept just any offered sum as compensation, the money being perceived as a chance for survival. Experience with permanent expropriations for Corridor 10, on the Crvena Reka Prosek section, has shown that few owners had objections against the offered price for agricultural land, and that none asked to be given other land in exchange for the expropriated one. Suffice it to say that on that section of the highway, on Corridor 10, over half of the polled households were below the poverty line, and that pensions ranging between 50 and 150 Euros are the only permanent and stable source of household income.
- 10. A comparison of the institute of permanent expropriation with the right of servitude shows that the right of servitude *de facto* restricts the right of disposal of property to a greater extent than the institute of permanent expropriation. In circumstances when the price of agricultural land is low, the expropriation price for agricultural land is as a rule higher than the actual price (an exceptionally low one, as already underlined), so that the owner of expropriated land can buy new agricultural land with the proceeds of the permanent expropriation. The newly-purchased land shall not be mortgaged in contrast to the plot on which a right of servitude has been established.
- 11. Owners of agricultural land in the peripheral zones which shall be converted to building land shall be particularly affected because they shall have to apply to the Beneficiary for approval/permits for any construction within the 30 m PA.
- 12. Households in the Pipeline route area are vulnerable in multiple respects: (1) a high percentage of old-age households (single and/or two-member ones); (2) a high percentage of households without permanently employed members and without regular sources of income; (3) considerable distances from basic public services education, health care, social welfare; (4) low population education levels; (5) a high percentage of households below the poverty line (in Serbia 8,800 RSD for a single-member household, and/or for the first household member and about 5,000 RSD for every other household member). As already mentioned, population movement projections (Annex III) indicate the certain demise of a number of rural settlements along the Pipeline route.
- 13. Informing of citizens and the accessibility of information are at a very low level, in particular in rural settlements far away from urban centres. On the

one hand, as already mentioned, a large percentage of the citizens have not completed elementary school or only have a compulsory elementary education background. Among the older population segments the share of this group is frequently as high as 60-70%, especially in rural areas. On the other hand, information provided to citizens on important issues affecting their interests is not adapted to the target group. As is evident from the example of informing citizens of the plan charting the MG-11 gas pipeline route in the village of Trupale (Annex VI), the existing practice of informing citizens is not even appropriate for urban communities having a better educational structure and more efficient mutual communication modalities.

- 14. An additional difficulty in the information sector is the poor organization of the citizens, the low social capital, and the poor network and quality of civil society organizations. Social capital reflects the capacity of citizens to associate in pursuit of common, and, *ipso facto*, individual welfare. Among the indicators of the level of social capital in a community are organizations of the civil society. Independent and autonomous civil society organizations have developed in Serbia only over the past two decades, principally in larger urban settlements. Searching the Internet just one village along the Pipeline route with some forms of civic association was found. That is the village of Krupac, which has adopted an Action Plan of this local community/ settlement.
- 15. In circumstances of a low level of social capital, of particular importance are community-based programs and support to the setting up of organizations of the civil society.
- 16. The inefficient functioning of institutions and the poor coordination between the citizens, local administrations and their services, is yet another argument in favour of setting up an independent body that citizens can turn to and which will wield sufficient influence and authority to ensure that the set conditions and terms are satisfied. People from Dimitrovgrad point to the example of the firm which is the contractor executing works on the highway on Corridor 10. According to the allegations of these sources, this firm is violating numerous legal regulations in the course of construction, and the citizens have no means of preventing it. The local self-government is neither autonomous nor independent. Apart from that, its inspection services are not empowered to control these activities directly but lodge complaints with the republican services. The locals have the opinion that the powers of the local inspection services should be expanded and their more active role ensured, rather than for them to keep lodging complaints to which nobody reacts.

#### 6.5.2 Mitigation and Management of Resettlement Impact

In order to meet all legal interests of the different groups of stakeholders, all stakeholders should be provided full, objective and reliable information on:

All stages of construction of the Pipeline and the implications of the works in the Pipeline preparation, construction and operation stages for the living conditions of the local population, the use of agricultural land and other resources and the status of other property along the Pipeline route, and in particular within the 30+30 m Protected Area from the Pipeline axis;

The legal rights and obligations of the Beneficiary and the firms it engages in the preliminary stage and the execution of works;

The legal rights and obligations of landowners and other stakeholders from the local community, and in particular the requirements and recommendations set by the European Bank for Reconstruction and Development and other international financial institutions, which refer to the rights and position of the local population in projects like these;

The legal framework for compensation for expropriated property, and/or land on which the right of servitude is established;

The negotiating mechanisms and those for the protection of the rights of the factors involved (Beneficiary, Landowners, Local authorities...) with a view to reaching a mutually acceptable agreement and avoiding lawsuits.

During works on the preparation and construction of the Pipeline and in the stage of its operation, the following is required to be done:

1.

Together with the local self-government and before the commencement of the works, the Beneficiary shall inform in detail all citizens having property within the 200 m PA, of the technical, environmental and other standards that have to be met during the preliminary works and construction, as well as of the obligation of the Investor to fully restore the land to its original condition.

2.

In order to ensure the objective, impartial, timely and full informing of the citizens about the planned works on the construction of the Pipeline, a brochure (info sheet) must be prepared, with detailed explanations of all relevant information: the legal framework, the rights and duties of owners, the rights and duties of the Beneficiary, the stages of the works and other aspects and impacts of the construction of the Pipeline on citizens' living conditions and quality of life. The pamphlet should be sent directly to all AH.

A separate chapter in the brochure should deal with the technical standards which must be observed during the preliminary works and construction, such as: the permissible noise and dust levels, the working hours, the regimen of local roads use, the boundaries of the work corridor (12m + 6m), the regulations for the construction of temporary access roads and structures and their obligatory removal, i.e. restoration of these areas to their original state following the completion of construction,.

3.

A survey and assessment of temporary loss of income due to reduced accessibility to land during preliminary works and construction, as well as an estimate

of losses in respect of plants and crops should be undertaken in cooperation with and in the presence of the owners. This requires independent evaluation of the value of the plot before and after construction.

4

The Law on Expropriation requires the determination of a price for expropriation and for the establishment of the right of servitude. In order to arrive at a fair compensation, clear-cut criteria for the evaluation of the market value of real estate must be established. Annex V proposes criteria established on the basis of judicial practice and the adverse effects of arbitrary evaluations of the value of real estate.

Attention should be drawn to the fact that there are differences in interpretation as to whether the compensation for the establishment of the right of servitude refers only to the actual part of the plot through which the 30+30 m PA passes, or to the area of the entire plot through which the 30+30 m PA passes. There are differences in interpretation in this respect.

5.

An independent body needs to be formed to be the focal point for all activities concerning relations between the Beneficiary, the local authorities and the citizens through whose property the Pipeline route passes. A detailed description of the activities, composition and terms of reference of that body is given in the chapter Public Consultation. It should be added at this point that the independent body cannot function on the voluntary principle, i.e. that it is necessary to appoint an operational secretary of the Committee who will cooperate with the citizens and coordinate all the activities of the Committee. It should be a paid position and requires that the person in question should be a permanent resident of the municipality in which the works are being executed, i.e. monitor the progress of the preparations for and the construction of the Pipeline.

6.

It is particularly important to find an efficient way for assessing damage inflicted in the course of preliminary works for and the construction and operation of the Pipeline. Apart from the importance of recording the inflicted damage and owners' complaints lodged on that account, the Investor should be specifically required to pay damages many times exceeding the inflicted damage. This is emphasized because, on the one hand, fines in Serbia for violations on construction sites and for environmental offences are so small that not infrequently one is better off paying damages, as that is cheaper than investing in damage prevention. On the other hand, the inefficient judicial system and the lengthy court proceedings are a disincentive to citizens to seek legal redress for any damage sustained.

8.

It is of particular importance to precisely describe and interpret legal obligations in respect of the requirement to protect and maintain agricultural land quality in the stretch where construction and earth-moving works shall be executed during the construction of the Pipeline (12 + 6 m), i.e. of all agricultural

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land areas where works shall be executed and which shall not be converted to other uses, i.e. shall remain agricultural land.

The protection and preservation of the humus layer of arable areas and forest soil as an un renewable resource has been laid down under several laws in the Republic of Serbia<sup>20</sup>.

From the legal provisions the obligation of re-cultivation and topsoil protection exists irrespective of the ownership status of the land. Even if the land were to become the property of the Beneficiary, the obligation to abide by the foregoing and other regulations would stand. Strict compliance with these obligations is of particular weight in respect of the use of land which shall continue to be the private property of others, with the Beneficiary acquiring the right of servitude on the land in question according to the law.

For many households along the Pipeline route, agricultural land is a major source of income for their own needs and to a lesser extent for sale to neighbours or at the local market. That fact is yet another important argument in favour of preserving the fertility of agricultural land.

9.

Municipalities in Serbia have legal assistance services with lawyers on the staff offering free legal advice. Given the complexity of the activities in the construction of the Pipeline and the specific nature of the legal regulations governing this subject matter, additional training needs to be organized for the staff of free legal assistance services, which the citizens can apply to for advice. Such additional training can be implemented as part of community-based programs for promoting the quality of life in local communities.

10.

The foregoing analyses deal with the problem which arises when agricultural land is converted to be used as building land, or already *de facto* has the status of building land making it certain that in the near future it will indeed be declared building land. In view of the marked differences in the market prices of agricultural vs. building land, on the one hand, and the restrictions imposed by the right of servitude on future construction on a plot which has become a building lot, it should be possible for owners of plots which are in the building zone or shall become building lots to demand permanent expropriation at the actual market price. During field research and talks in municipal land registry services, courts and other institutions, there were an overwhelmingly understanding that it was justified to offer the possibility of permanent expropriation as an alternative to the establishment of the right of servitude if so requested by the owner of the plot.

<sup>&</sup>lt;sup>20</sup> The Law on the Protection of Nature ("Official Gazette of the RS", Nos. 36/2009, 88/2010, 91/2010) stipulate the preservation of the humus topsoil as obligatory. The Law on Agricultural Land, (Official Gazette 41/2009); Chapter 4.2 Recultivation of Agricultural Land Used for the Exploitation of Mineral Resources and Other Materials. The Law on Environmental Protection (Official Gazette, 43/2001)

### 7 Social Action and Monitoring plan

A Social Action and Monitoring Plan (SAMP) will be prepared for the project. The broad purpose of the SAMP is:

- to provide a mechanism for ensuring that measures to mitigate potentially adverse socio-economic impacts are implemented;
- to ensure that good construction practices are adopted throughout the construction of the pipeline;
- to provide a framework for mitigating impacts that may be unforeseen or unidentified until construction is underway;
- to provide assurance to third parties that their requirements with respect to social performance will be met
- to provide a framework for compliance auditing and inspection to enable Srbijagas to be assured that its aims with respect to social performance are being met.

The SAMP will be a document that continuously evolves throughout the life of the project. It will be developed as further consultation and route investigations take place, and detailed design and working method statements are prepared.

In the following table, an outline of the SAMP is provided. Impacts and mitigation measures are broken down in project phases, while the responsibility for the implementation measures is allocated appropriately, either to the project owner or the eventual construction contractor. Monitoring provisions are also given.

		Soc	ial Action and Monitoring Plan – Pre-	construction pha	ise	
No.	EBRD PR	Impact	Proposed actions (measures)	Responsibility	Resources EUR*	Monitoring
			Social			
1	10	Construction activities in- fluence on the community everyday life and dynamic	Prepare plan on engagement and information disclosure with local authorities and LNC	Beneficiary		Reporting to Lenders / Authorities; Auditing of the contractor by the Beneficiary
2	1	Local institutions' lack control over local occurrences because of construction works	Development of Community Relation Management Plan including conflict resolution aspects.	Contractor		Reporting to Lenders/ authorities, Auditing of the Contractor by the Beneficiary
3	1	Possible disputes with citizens and dissatisfaction with influx of outside workers.	The application of a "code of conduct" will be contractually binding and will be described in the tender documents	Beneficiary/ Contractor		Auditing of the Contractor by the Beneficiary
4	2	Workers' safety.	Development of Health & Safety Management Plan for the workforce in compliance with the Serbian and EBRD H&S requirements and the provisions of labour legislation, risk assessment, etc.	Contractor		Reporting to Lenders/ authorities, Auditing of the Contractor by the Beneficiary
5	4	Concerns that workers accommodation facilities will foster anti-social behaviour and impact host communities.	Prepare Workers' Code of Conduct	Contractor		Reporting to Lenders/ authorities, Auditing of the Contractor by the Beneficiary
6	2	Influx of job seekers on size and composition of com-	Establishment of information unit on the site	Contractor		Auditing of the contractor by the Beneficiary

		munity.			
7		Women are not included enough in the decision making process.	Organize focus groups and public hearings to maximise their involvement. Include their comments during Public Consultation.	Beneficiary	Reporting to Lenders / Authorities
8		Roma are not appropriately represented in the local community.	Organize focus groups and public hearings to maximise their involvement. Include their comments during Public Consultation.	Beneficiary	Reporting to Lenders / Authorities
9		Elderly that have limited mobility might not be able to participate in public hearings.	Organise visits to the households with elderly during Public consultation.	Beneficiary	Reporting to Lenders / Authorities
			Health		
10	4	Increase in traffic accidents, especially in the summer holiday period.	Development of Traffic Plan including safety issues and risk assessment for servicing the construction works, in coordination with the local authorities.	Contractor	Reporting to Lenders / Authorities. Auditing of the Contractor by the Beneficiary.
11	4	Emergency issues.	Block valves stations along the pipeline and in sensitive sectors.	Contractor	Detailed design
12	4	Influence of noise, dust and traffic fumes on the population.	The construction yards for pipes and materials must be at sufficient distance from the settlements and agreed with the municipalities.  Controls on noise, dust and traffic will be addressed in the tender documents.	Contractor	Auditing of the Contractor by the Beneficiary

13	4	Potential change in the perception of community safety and security due to large influx of non-resident workers and gender imbalance.	Community health and safety initiatives to minimise health impacts to the community and build safety awareness.	Contractor	Reporting to Lenders/ authorities, Auditing of the Contractor by the Beneficiary
			Employment & Econom	nic	
14	5	Temporary loss of grazing land and some damage to agricultural infrastructure during clearance.	Compensation of crop lost will be carried out in compliance with the local and international procedures and requirements.  Careful selection of access roads to be carried out in consultation with local authorities, landowners and land users.	Beneficiary	Reporting to Lenders / Authorities; Auditing of the contractor by the Beneficiary
15	1	High expectations of the local population for the employment opportunities due to high poverty and unemployment rate.	Set compulsory percentage of the local people that will be employed on the project.	Beneficiary	Auditing of the contractor by the Beneficiary
16	1	Increased job demand on the Project due to high level of unemployment in the pipeline route.	Maximize employment opportunities for local residents and underrepresented groups. Advertise positions through both local and mainstream recruitment channels.	Contractor	Auditing of the contractor by the Beneficiary
17	1	Employment of the workforce.	Workers will be employed as per Serbian requirements on labour con- ditions and international require-	Contractor	Auditing of the contractor by the Beneficiary

18	1	Increased opportunities for local and regional businesses to supply goods and services to the Project.	ments of the ILO. Deliver Health and Safety training.  Organisation of information events for the local companies which may be interested in procurement of local goods and services. Publishing information locally regarding future tender procedures and timelines.	Contractor	Auditing of the contractor by the Beneficiary
	•		Infrastructure & Traffi	c	
19	4	Potential impact on road safety resulting from increased traffic associated with transport of workers and materials and Equipment.	Preparation of Traffic management plan. Emergency response planning to address impacts to traffic, transport and emergency services.	Contractor	Reporting to Lenders/ authorities, Auditing of the Contractor by the Beneficiary

	Social Action and Monitoring Plan – Construction phase							
No.	EBRD PR	Impact	Proposed actions (measures)	Responsibility	Resources	Monitoring		
			Social		EUR*			
			Social	T				
20	4	Limited access to the public services, schools, business premises, health centres and agricultural land.	Temporary access roads will be prepared in close cooperation with the authorities' requirements and the Traffic Management Plan. Existing access roads will be used whenever possible.	Contractor		Reporting to Lenders/ authorities, Auditing of the Contractor by the Beneficiary		

21	10	Disbelief and doubt about	Consultation with the public;	Beneficiary	Reporting to Lenders/ author-
		the Project activities and its	Prepare Information disclosure and		ities,
		negative aspects.	population engagement plan;		
			Prepare executive summaries in Ser-		
			bian, Roma and Bulgarian language		
			to dispatch in the community.		
22	1	Elderly, children and per-	Ensure adequate infrastructure and	Contractor	Reporting to Lenders/ author-
		sons with disabilities might	ramps for disabled on the crossing of		ities, Auditing of the Con-
		have problems with mobili-	the construction sites		tractor by the Beneficiary
		ty.			
23	10	Community concerns about	Perform Public Consultation. Ensure	Beneficiary	Developed Information dis-
		the management of envi-	information disclosure and stake-		closure and stakeholder en-
		ronmental, social or eco-	holder engagement in the community		gagement plan
		nomic issues.	planning process		
24	4	Potential for socially unac-	Prepare community management	Contractor	Reporting to Lenders/ author-
		ceptable behaviour due to	plan and code of conduct of workers		ities, Auditing of the Con-
		the increase in population			tractor by the Beneficiary.
		and changed demographics.			
	_		Health		·
25	4	Increase of injuries and ac-	First aid stationary on the site, heli-	Contractor	Reporting to authorities. Au-
		cidents.	copter/ ambulance car ready on call		diting of the Contractor by
					the Beneficiary.
26	4	Increased demand on medi-	Prepare Health and Safety plan.	Contractor	Reporting to authorities. Au-
		cal and health services.			diting of the Contractor by
					the Beneficiary.
30	4	Increase incidents of com-	Prepare Health and Safety Plan.	Contractor	Reporting to Lenders/ author-
		municable disease.			ities, Auditing of the Con-

					tractor by the Beneficiary.
31	2	Workers' health.	Perform regular training of the construction staff for labour health & safety.	Contractor	Auditing of the contractor by the Beneficiary.
32	2	Workers' safety.	Develop and implement safety training for all employees and contractors to understand responsibility towards safe methods of work.	Contractor	Training records. Auditing of the contractor by the Beneficiary
33	4	Integration with local community, including risk of spreading STDs and HIV.	Instalment of condom machines on the site and in the vicinity of site	Contractor	Auditing of the contractor by the Beneficiary
34	4	Influence of noise on population mental wellbeing.	On-time notification of the population affected from blasting operations	Contractor	Reporting to Lenders / Authorities; Auditing of the contractor by the Beneficiary
35	4	Influence of dust on population health.	Spraying from water tanks to minimize its influence.	Contractor	Reporting to Lenders / Authorities; Auditing of the contractor by the Beneficiary
			Economic		
36	5	Temporary loss of grazing land and some damage to agricultural infrastructure during clearance.	Compensation of crop lost will be carried out in compliance with the local and international procedures and requirements.  Minimize by careful selection of access roads in consultation with local authorities, landowners and land users.  Work carried out in winter will have less economic impact if land is re-	Beneficiary	Reporting to Lenders / Authorities; Auditing of the contractor by the Beneficiary

			turned to the owners by mid-March.		
37	5	Increase in housing and/or rental prices caused by increased demand and limited supply.	Minimize effects through maximizing employment of residential workforce.	Contractor	Auditing of the Contractor by the Beneficiary
38	5	Increased cost of living due to inflationary pressure from higher average weekly incomes.	Minimize effects through provision of local employment.	Beneficiary	Auditing of the Contractor by the Beneficiary
39	5	Decreasing of fertility of arable land during preconstruction and construction works	Obligation of reinstatement and topsoil protection during construction work.	Contractor	Reporting to Lenders / Authorities; Auditing of the contractor by the Beneficiary
			Infrastructure & Traffi	c	
40	4	Transportation of hazardous or abnormal loads.	Control of the speed limits of the trucks when they pass through the settlements in accordance with the Traffic Management Plan.	Contractor	Auditing of the contractor by the Beneficiary
			Consult with local authorities to develop specific routes.		
41	4	Construction activities, construction vehicles and the movement patterns of vehicles and equipment might temporarily prohibit access to properties.	Minimize impact by careful selection of the traffic routes, especially for heavy machinery. Provision of adequate crossing points for population and local vehicles.	Contractor	Auditing of the contractor by the Beneficiary
42	4	Movement of heavy traffic	Reduce traffic flow by selecting spe-	Contractor	Auditing of the contractor by

43	4	impacts roads near the pipeline road.  Transport material and equipment.	cific access roads. Avoid routes passing in front of schools, old people's homes or medical centres. Restricting traffic to certain hours. Use the working corridor. Restriction of transportation of materials to day-	Contractor	Auditing of the contractor by the Beneficiary
		~ 1····F	light hours.		1
44	4	More frequent crossing of Serbian-Bulgarian border in the summer period and at the end of year.	Minimize disturbance during the summer tourist season (between July and September, and in December).	Contractor	Auditing of the contractor by the Beneficiary
			Cultural heritage		
45	8	Possible findings of new archaeological sites.	Appointment of archaeologist during the construction.	Beneficiary	Reporting to Lenders / Authorities
			Cumulative impacts		
46	1	Due to Corridor 10 construction.	Avoid or minimize through appropriate planning of pipeline construction. Establish appropriate communication between the two projects.	Beneficiary/ Contractor	Reporting to Lenders / Authorities; Auditing of the contractor by the Beneficiary

	Social Action and Monitoring Plan – Operation phase							
No.	EBRD PR	Impact	Proposed actions (measures)	Responsibility	Resources EUR*	Monitoring		
			Social					
47	1	Impact on income and af- fordability of the connection to the pipeline network for disadvantaged and poor people.	Make possible credit loans and social benefits from the country for disadvantaged people.	Beneficiary		Reporting to Lenders / Authorities.		

		Socia	al Action and Monitoring Plan – Decom	missioning phase		
No.	EBRD PR	Impact	Proposed actions (measures)	Responsibility	Resources EUR*	Monitoring
			Social			
48	1	Socio-economic impact.	Full social assessment of the planned decommissioning activities must be planned and implemented according to the actual regulations at the time of decommissioning.	Operator		Reporting to Lenders / Authorities; Auditing of the Operator by the Beneficiary
49	1	Impact on job loss of people employed on the operation and maintenance.	Social program.	Beneficiary		Reporting to Lenders / Authorities

			Resettlement Action and Monitor	ring Plan		
			Pre - Construction phase			
No.	EBRD PR	Impact	Proposed actions (measures)	Responsibility	Resources EUR*	Monitoring
1	5	Low level of awareness and knowledge of the proce- dures related to compensa- tion and expropriation on behalf of local people.	Organize public hearings to inform on the project and the related procedures.	Beneficiary		Report on implementation of Action Plan, Minutes and photos.
2	5	Economic impacts to property owners through expropriation of land or establishment of RoW.	Ensure that fair compensation is provided, on the basis of market prices, as per national legislation and EBRD standards.	Beneficiary		Minutes of meetings with owners, full account of compensation provided, algorithm for calculating compensation.
3	5	Possible violation of property rights.	Minimize through providing additional legal assistance to citizens. Providing capacity building for municipal legal assistance unit.	Beneficiary (IU)		Reports from legal assistance unit.
			Construction phase			
4	5	Restriction of land use due to necessary construction approval from Beneficiary within PA 30m.	Defining technical conditions and standards needed to build paths necessary for economic activities on agricultural land.	Beneficiary (IU)		Technical standards and number of approved motions.

<sup>\*</sup>Note- Resources have to be established during the Implementation phase

### 7.1 Roles, Responsibilities and Reporting

# 7.1.1 The Role of JP Srbijagas with Respect to Social Action and Monitoring Plan

As project beneficiary, JP Srbijagas will have ultimate responsibility for the implementation of the SAMP. This includes:

- continuous management of social issues as detailed design proceeds;
- monitoring of the Contractor's performances;
- development of mechanisms for dealing with problems;
- acting as a point of contact for consultation and feedback with landowners, the public and interested parties; and
- general social monitoring and reporting.

Srbijagas will ensure that the activities of its Contractor are conducted in accordance with the standards outlined above; this will be a contractual requirement. In order to monitor this and to ensure compliance with the SAMP, Srbijagas' and the Contractor's management teams will conduct regular site inspections and audits, the results of which will be documented.

# 7.1.2 The Role of the Contractor with Regard to Social Action and Monitoring Plan

The Contractor will be required to develop and comply with the provisions of the Social Action and Monitoring Plan and to take responsibility for its continual development throughout the detailed design and construction stages of the project. The Contractor will be responsible for ensuring compliance with:

- all relevant legislation;
- the social controls and mitigation measures contained in the Social Action Plan: and
- any social or other codes of conduct required by JP Srbijagas.

The Contractor will be required to undertake regular environmental and social inspections and reporting to enable JP Srbijagas to monitor and evaluate the Contractors performance.

The Contractor will need to demonstrate to JP Srbijagas' satisfaction how he will ensure that the requirements of the SAMP are being complied with during construction. The Contractor will also be expected to demonstrate commitment to the Social Action Plan at all levels in the Contractors management structure.

The Contractor's performance in complying with the SAMP is to be monitored and audited by the JP Srbijagas Project Manager/Project Supervisor and an employed auditor. This person may be part of any engineering supervisory team

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but should be able to demonstrate competency in social environmental management and be independent of any contractors involved in the construction.

Compliance and non-compliance (established during audits) with the provisions of the SAMP will be recorded by the Project Manager / Project Supervisor and records will be held at the Contractor's site office. These records will be made available for inspection by representatives of the Contractor, JP Srbijagas and the relevant Serbian authorities. The JP Srbijagas' Project Manager / Project Supervisor will be empowered to stop the works if he is of the opinion that the provisions of the SAMP are not being met.

#### 7.1.3 Communication with third parties

The Contractor will be responsible for formal external communications. The Contractor may therefore be required to attend meetings as appropriate. Communication channels will be established in the Social Management Plan to ensure that good relations are maintained with parties potentially affected by the project. JP Srbijagas and its Contractor will liaise with local communities, landowners and other interested parties.

JP Srbijagas will set out the procedure to be adopted when dealing with the media. The Contractor will ensure that all media contact is passed to JP Srbijagas' authorized spokesperson.

The project Query Management Procedure (Grievance Mechanism) will continue to be implemented in the SAMP to respond to complaints and enquiries and to provide regular updates on project progress.

### 8 Literature

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