



Baltic Rural Broadband Project

Baseline Paper

Ignalina and Zarasai

2006

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Chapter 1: Facts about the region

1.1: Demographic Information

Question 1.1.1: Structure of Population

In 2004 the population of Ignalina district was 22,025, and the population of Zarasai district 22,209. Population density of Ignalina district municipality was 14.7 inhabitants per square kilometre, of Zarasai district 16.6 inhabitants per square kilometre. Population density rates in both municipalities are more than 3.5 times smaller than the total state average – 52.8 inhabitants per square kilometres.

Most of district households are situated in rural areas. In Ignalina district 68 per cent of the households are situated in rural areas and in Zarasai district 83 per cent. Ignalina and Zarasai districts only have two villages with more than 500 people.

Question 1.1.2: Geography

Ignalina nuclear power plant (NPP) region covers a total area of 2839 square kilometres, an area of 4.3 per cent of Lithuania. The region is located in the East of Lithuania and has borders with Latvia and Belarus. Ignalina nuclear power plant region comprises two fifths of Utena County and consists of three districts out of five: Ignalina district, Zarasai district and Visaginas town district. The region is the most picturesque in Lithuania, with 505 lakes of different sizes. Forestation complements the lakes, covering 36 per cent of the territory.

1.2: Economy

Question 1.2.1: Industry/Workforce

According to the Department of Statistics at the end of 2003 Ignalina district municipality had 266 active business entities. In 2003 Zarasai district municipality had 301 active business entities. Statistical data shows that in 2000-2003 the number of active business entities decreased.

Most of the business entities were in the sphere of public administration (Ignalina district – 36 %, Zarasai district – 41 %). Trade companies in Ignalina district comprised 25.7 per cent, in Zarasai district – 22 per cent of all the active companies.

Table. The number of active business entities in municipalities, 2004

	Ignalina district municipality		Zarasai district municipality	
	Units	%	Units	%
Agriculture, forestry, fishery	17	6.4%	23	7.6%
Industry	28	10.6%	37	12.3%
Supply of electricity, gas and water	3	1.1%	1	0.3%
Construction	6	2.3%	8	2.7%
Trade	68	25.7%	66	21.9%
Hotels and restaurants	7	2.6%	14	4.7%
Transport and storage	14	5.3%	12	4.0%
Mail and remote connections	2	0.8%	0	0.0%
Financial broking	1	0.4%	1	0.3%
Real estate, rent and other business activities	12	4.5%	7	2.3%
Other types of business	11	4.2%	9	3.0%
Public administration	96	36.2%	123	40.9%
Total	265	100.0%	301	100.0%

Question 1.2.2: Economic power/Financial strength

According to the Department of Statistics at the end of 2003 Ignalina district municipality had 266 active business entities. In 2003 Zarasai district municipality had 301 active business entities. Statistical data shows that in 2000-2003 the number of active business entities decreased.

Most of the business entities were in the sphere of public administration (Ignalina district – 36 %, Zarasai district – 41 %). Trade companies in Ignalina district comprised 25.7 per cent, in Zarasai district – 22 per cent of all the active companies.

Lithuanian economy is adapting to the competitive environment arising from EU membership and growing internationalisation. The growth of industry was particularly dynamic in 2002 when sales grew by 7.5 per cent with more than a half of this production exported. Growth in GDP is buoyant with growth of 9 per cent in 2003 giving a GDP per capita of LTL 4673 at the end of 2003.

In 2005, development of Lithuania's economy was consistently rapid:

- the estimated actual growth of the gross domestic product (GDP) in 2005 was 7.3 per cent year-on-year (7 % in 2004)
- exports of goods went up by 27.1 per cent in 2005 (21 % in 2004), and imports – by 25 per cent (15.8 % in 2004)
- the estimated direct foreign investments (FDI) as of 1 October 2005 accounted for LTL 18.2 billion and increased by 18.6 per cent during the year (compared with 1 October 2004)
- products produced and sold by mining, quarrying and manufacturing industry (MQMI) in 2005, compared with the previous year, increased by 8.4 per cent (11.5 % in 2004)
- year-on-year growth of turnover of retail trade enterprises in 2005 was 15.1 per cent (9.3 % in 2004).

Question 1.2.3: Employment/Unemployment

According to the Lithuanian Labour Exchange in 2003 the rate of unemployment in Ignalina district municipality was 16.3 per cent, whereas the rate of unemployment in Zarasai district municipality was markedly smaller – 6.9 per cent.

The number of unemployed and the rate of unemployment in the districts:

	Year	Unemployed, thousands Lt	Rate of unemployment, per cent
Ignalina district municipality	2000	3.7	13.2
	2001	2.1	19.4
	2002	2	18.7
	2003	1.7	16,3
Zarasai district municipality	2000	0.9	8.5
	2001	1	9.2
	2002	0.9	8.2
	2003	0.6	6.9

Business, Industry, Rural Development	Lithuania	Utena County	Ignalina district	Visaginas	Zarasai district	INPP Region
Number of inhabitant per 1 sq. km	52.5	24.9	14.9	495.3	16.3	25.6
Unemployment rate (%), 2004	10.3	10.4	16.3	12.6	6.9	12

In 2005 Lithuania saw a distinct declining trend in recorded unemployment rate (ratio of registered unemployed to working age population) – by end-January 2005 unemployment rate was 6.1 per cent and by end-December – 4.1 per cent (8 % in January 2004).

Question 1.2.4: Important Enterprises

Industry

Ignalina NPP Region was created as a consequence of decision to shut down Ignalina Nuclear Power Plant where is produced 80 per cent of the electric energy that is consumed in Lithuania. Ignalina NPP Plant was built in 1984. In March 1990 Lithuania became independent. In May 2004 it became a member of the EU. One of the main conditions of entering the EU was the decommissioning of Ignalina NPP. The first its unit has been shut down since the beginning of the year 2005 and the second one will be decommissioned in 2009. Decommissioning of the nuclear power plant is financed from the Government of Lithuania, PHARE funds, European Bank for Reconstruction and Development, various international organisations. In 2007-2013 it is planned EUR 815 Million amount for decommissioning. The EU will cover a part of this amount.

The Ignalina Nuclear Power Plant, (INPP) is currently the largest employer in the region with about 3500 workers including many highly qualified engineers. Most employees live in the

town of Visaginas but the INPP also draws workers from the other two towns in the region. The Power Plant is being decommissioned and is programmed to shut down in 2009. On the 1st of January 2005 the first block was shut down. The employees of the Power Plant are generally highly qualified or trained and would be valuable employees for any manufacturing industry.

Small-scale industrial enterprises prevail, with 10 per cent of the region's industrial enterprises in wood processing, saw milling, and joinery works. There are also six textile companies and several producers of plastic components.

Small and medium-sized business

Small and medium-sized enterprises (SMEs) are one of the key factors of economic growth in Lithuania, impacting both on the general development of the Lithuanian economy and on the economic development of individual regions. This dynamic sector of the economy is one of the most important factors contributing to the creation of new jobs, ensuring social stability and improving the level of personal wealth. At the end of the year 2005 the total number of employer companies in the region was 980 (Visaginas – 428, Ignalina – 258, Zarasai – 294). 700 of them were small and medium-sized enterprises (up to 250 employees).

Question 1.2.5: Costs of living

Households' income of both districts is smaller than the total Lithuanian average. The average households' disposable income for one member of the household in 2003 in Lithuania was LTL 457.6 /month, whereas in Utena county this rate was LTL 412. /month (EUR 112).

Cost of Living	Lithuania	Utena County	Ignalina district	Visaginas	Zarasai district	INPP Region
Average wage ("bruto") per month (EUR), 2004	333	332	271	486	267	362

In 2005 in Lithuania:

- prices for consumer goods and services increased by 3 per cent in 2004 (comparing December year-on-year), and average annual inflation in 2005 stood at 2.7 per cent (1.2 % in 2004)
- average gross monthly wage of the country's working population in the quarter 1, quarter 2 and quarter 3 year 2005, compared with respective quarters of year 2004, went up by 10.8 percent, 9 percent and 9.4 percent.

1.3 Infrastructure

Question 1.3.1: Educational institution

The network of comprehensive schools complies with the need. The same can be said about the network of pre-school training.

Vocational training is evenly distributed throughout the region and has a wide range of courses and programmes. University education is not available in the region.

Education insitutions	Lithuania	Utena County	Ignalina district	Visaginas	Zarasai district	INPP Region
Number of places for schoolchild per 100 pupil, 2004	94	102	104	97	96	98.7
Number of schoolchildren, 2004	563,107	28,563	3042	4863	3419	11,324
Number of vocational schools 2004-2005	73	6	0	2	1	3
Number of students in vocational schools, 2004-2005	46,344	2806	0	1010	484	1494

Question 1.3.2: Traffic & Transport

The region is strategically well positioned, only a one-hour drive from the capital, Vilnius.

Traffic and Transport	Lithuania	Utena County	Ignalina district	Visaginas	Zarasai district	INPP Region
Number of personal vehicles per 1000 inhabitants, 2004	354	346	304	266	276	279.7
Length of local roads (km), 2004	57,986	6812	1233	84	1352	2669
Average number of travels by bus per 1 inhabitant, 2004	58.0	16.8	18.3	-	23.6	12

Question 1.3.3: Situation of living

Lithuania is a country in transition and this is also reflected in the housing market and in housing costs. There is mismatch between affordability among the population and the price levels of real estate. The housing situation in Lithuania in many ways is similar to that of other countries in Central and Eastern Europe. Lithuania has quite a large housing stock when compared to these other countries with the same economic level. *Construction costs* have grown in double digits annually over the last two years due to more expensive energy

resources and higher labor costs. Nevertheless, both residential and commercial land is still appreciating. The demand for residential property in Vilnius, Klaipėda and Kaunas remains high. *Second homes* are becoming ever more popular. Salaries in Lithuania have been growing at around 10 percent per annum over the last three years. The mortgage lending portfolio continues to grow very fast and the bank SEB projects are to grow 75 per cent this year.

Flats: Over 95 per cent of Lithuanians own rather than rent flats. The rental market is much smaller than in most Western European countries. In Vilnius prices of flats in the centre tend to be EUR 2000 - 4500 per square metre.

Houses: There has been rapidly growing interest among Lithuanian middle - and upper - class families in houses.

Land Plots: Promising residential and commercial plots are considered to be in the Vilnius city and suburb areas in all directions. Also, lakeside and riverside land plots for residential development are in great demand within a 40 kilometres to 50 kilometres radius from the centre of Vilnius.

There is a limited number of "prepared" or "fully serviced and landscaped" land plots for residential developments in Lithuania. New small and secured VIP settlements in pine forests or near lakes, rivers and streams are in demand. In Ignalina and Zarasai districts land price has grown up significantly. In 2006, average market price for the housing land plot near the lake is about EUR 1000 per acre. It depends if the land plot is near lake, forest and other factors.

1.4 Cultural analysis

Question 1.4.1: Skills tradition

There is a lot of cultural and historical heritage in Ignalina NPP region. Protection of archaeology, ethnic villages, settlements and buildings was granted to this region by the Republic of Lithuania. Such protection is planned for Zarasai district. Ignalina NPP region (the first region in Lithuania to do so) has been officially named as a candidate in the network of "Culinary Heritage", a European network, which promotes traditional dishes and food of the region. Cultural traditions in the region are well established and there are different events all the year round that form an attractive image of the country and add to the tourist potential. The Winter Sport Centre could be held as an example to follow. It provides modern winter sport services and at the same time helps to expand tourism sector.

Question 1.4.2: Educational level

Ignalina NPP region exceeds the national and district averages in education. In 2002, 92.7 per cent of the population of Visaginas had at least primary education, 90.3 per cent in Ignalina district and 89.2 per cent in Zarasai district. The national average was 88.5 per cent and the district average was 89.9 per cent. The quality of education among the municipalities of the region is very different. Ignalina and Zarasai districts have higher numbers with primary and basic education, more than Visaginas town and national average. However, that examining the level of secondary, college-type and higher education, Visaginas town

exceeds the two districts and the national average. More than 80 per cent graduating the Visaginas comprehensive education schools enter universities in other regions of Lithuania or abroad.

1.5 Political climate

Question 1.5.1: Political mainstream

Ignalina NPP regional council consists of the delegated representatives from member municipalities: Ignalina d.mun. mayor (the Union of Lithuanian Farmers), Visaginas mun. mayor (the Party "Order and Justice" of liberals-democrats), Zarasai d.mun. mayor (the Party of Socialdemocrats) and municipal councils' representatives. The key-issue of the coalition is strengthening of even sustainable development through competitiveness development in the regions. In the Ignalina NPP regional development strategy there are commonly agreed and approved by the regional council statements regarding regional development priorities, which directly correspond the issue of broadband development and creates preconditions for its sustainable development in the future. Independently each municipality takes actions by submitting applications for EU structural funds. These actions are taken by municipal administrations. Authorizations of the administration are unrelated to the termination of the municipality council authorizations, which are political bodies.

Chapter 2: Baseline situation ICT and broadband

2.1: ICT access and use

Question 2.1.1: The ICT-sector/definition

The growth of the telecommunications sector in Lithuania is exceeding even the most optimistic expectations. According to Statistics Lithuania, the telecommunications market grew 12.9% in 2005. Almost all industries of the sector grew fast, the best performance was recorded by the Internet and mobile communication companies.

More than twofold increase in the number of subscribers for Internet services was primarily caused by a rapid growth of the number of private users. The growth of the number of broadband Internet users was slightly slower and stood at 81.4%. Overall revenue from Internet services jumped 36.1% in 2005 compared with 2004, and it was the fastest growth in the telecommunications sector recorded last year.

The population is getting increasingly comfortable with the idea of electronic government. In Lithuania, almost 50% of tax declarations were submitted in the electronic format in 2005. Nevertheless, at the moment Lithuania is among the outsiders in the EU by the number of people using electronic government services including the search of information on websites of public authorities. What sounds encouraging is the fact that Lithuania was among 50 countries (of a total number of 191) which had made the best progress in this area as indicated in the latest United Nations report.

In 2005, the growth in number of mobile service users in Lithuania was the fastest among all EU member states. People in Lithuania use one of the cheapest mobile services in the EU. *The most intense technological competition was seen on the broadband communication market.* The report of the European Commission indicates that the fastest growth of the number of active users of mobile services was in Lithuania, where the annual increase in the number of users was 37%. The second country among the leaders (by growth of the number of mobile service users) was Luxembourg (annual growth of 17%), while Estonia was the second among the new EU member states, where the number of users grew twice as slowly as in Lithuania (16%).

The number of fixed-line subscribers continues to decrease. In 2005, the number of fixed-line subscribers shrank 2.3%; fixed penetration has also reduced slightly and it seems that this trend will continue this year as well. Ultimately, as the majority of population will shift to the mobile market, the main share of demand will comprise business customers and the future of fixed services will depend on the number of companies and their willingness to use these services.

Information society development committee forecasts that the leap in the development of the IT sector in Lithuania should happen in the nearest future. This will be fuelled by the rapid economic expansion, the EU funds support in financing IT project as well as the tax incentives on purchase of hardware for the individuals.

So, the prospect of the ITT sector in Lithuania are positive in general with the most dynamic growth within the households segment.

Source: Lithuanian Economic Outlook, 2006, DnB Nord Bankas

ITC Sector in INPP Region

The three towns in the region have a well-developed IT infrastructure, with ISDN and Broadband Internet connections readily and inexpensively available to businesses, schools and homes. Visaginas is noted, not only for the computer network at the power plant, but also for a comparatively highly-computerized community. 20% (reikia patikslinti, manau turi

buti interneto galimybiu studijoje, kuri neseniai buvo parengta) of all households are cable Internet users enjoying high speed information (not less than 1Mbps).

In recent years, much attention has been paid to computerisation and the introduction of information technology in high schools.

There is an active IT sector in Lithuania, working to the highest international standards. There are several enterprises, in the region, creating and supplying IT services to the businesses community.

INPP Regional Development Agency, Ignalina district and Visaginas municipalities participate in Baltic rural broadband project. Main task is to create broadband access and internet use in rural areas to improve quality of regional development.

Question 2.1.2: ICT-use by population

The existing regional infrastructures do not provide the majority of village inhabitants with a possibility to use a rapid Internet connection.

Significant differences in IT usage among the inhabitants of cities and villages are dominant. In 2005, 36 per cent of households had computers at homes in the towns and cities, in rural areas only 14 per cent. In the five biggest cities of the country, 42 per cent of households had computers at home. According the data of the department of the statistics of the Republic of Lithuania, 14.4 per cent of the households were using Internet at home in quarter 1, 2005. 20 per cent of households in the cities had access to the Internet at home and only 4 per cent in villages.

It should be noted that most of the village population lives in small villages. Ignalina and Zarasai districts have only two villages with more than 500 people. All villages in the districts are geographically widely dispersed.

Question 2.1.3: ICT-use in schools

According the data of the Ministry of Education and Science of the Republic of Lithuania, in 2004, 1 computer has been used by 15 pupils at basics forms of the comprehensive education. At 9-12 forms (final secondary education stage) there was 1 pc per 6 pupils. In 2004, in EU relevantly there was 1 pc per 11 pupils at basic forms and 1 pc per 8 pupils in 9-12 forms. In 2004 there were 52 per cent of schools, which could use faster than 64 kbps access to Internet. Distant village schools have fewer possibilities for Internet access due to poor quality of the net lines.

Question 2.1.4: ICT-use by enterprises

Electronic business is developing in the country, even though the number of companies which fully shifted to doing business on the Internet is very low. Market researchers state that Lithuanian companies are quite eager to move their business to the Internet. So far, urban companies are more active in this respect. In rural areas, however, companies know less about the advantages of the Internet. Survey carried out by TNS Gallup shows that about 2.6% of companies in Lithuania have already transferred their whole business on-line. About 5.4% of companies are considering the possibilities to provide all services or accept orders via the Internet in the nearest future. Although the number of

companies that provide all their services on-line is quite low at the moment in Lithuania, the number of companies using their services, however, is much higher. The survey suggests that onetenth of companies which use the Internet regularly co-operate with the companies that provide only electronic services; two-thirds practise such co-operation occasionally.

Considering the fact that Lithuania is lagging far behind the old EU members in terms of the Internet use (this indicator stands at two-thirds of that in EU-25), the Internet penetration should grow faster in Lithuania than the EU average for the next few years.

Source: Lithuanian Economic Outlook, 2006, DnB Nord Bankas

In 2005, 91.0 per cent of industry and services companies, with 10 and more employees, were *using computers*; 98.7 per cent of medium sized enterprises; and 100 per cent of big companies (with more than 500 employees).

Internet services were used by 82.7 per cent of industry companies and 85.3 per cent of services suppliers. Among them there was 100 per cent of big companies, 97.7 per cent of medium sized and 81.1 per cent of small enterprises.

2.2: Broadband access and use

Question 2.2.1: Definition of broadband

A term “broadband network“ is usually used for description of continuous and faster speed than telephone modem internet link. Broadband network gives a possibility to present modern content, services and applications. At the time being in describing this definition a reference to data transfer channel width is used. Channel capacity is constantly increased by applications which require higher speed data transfer that is why the description of broadband network which is basically based on data capacity, is constantly changing. Descriptions of broadband network are very different. As to ITU recommendation **I113** broadband network means a possibility to transfer data faster than using one level ISDN line. FCC broadband network have a possibility to transfer data faster than 200 kbit/s and OECD requires sending capacity not less than 256 kbit/s.

Question 2.2.2: Overview of broadband access providers

AB „Lietuvos telekomas“ (after reorganization in 2006 is named “TEO LT”, AB) had the best infrastructure in the territories of Zarasai and Ignalina district municipalities. However, the territories had only 8 stations (in larger towns mainly) through which to install DSL services and only 6 stations of “TEO LT”, AB) have optics. “TEO LT”, AB, being the leader in data transfer market has the best developed network not only in the whole Lithuania but in Zarasai and Ignalina municipality districts, too.

One of the disadvantages of AB „TEO LT“ applied solutions is that it does not provide service mobility, i.e., the service is rendered directly to a certain point and in case one wishes to connect additional subscriber it is necessary to implement additional subscriber hardware.

Other broadband providers in the region:

- TEO LT, AB.
- Radio and Television Centre of Lithuania, AB; the service “Erdves” (Eng. “Spaces”).

- GSM networks (Omnitel; Bite GSM).
- RAIN (Rural Area Internet Network) project

Question 2.2.3: Overview of broadband users

63 per cent of all the residents of Ignalina and Zarasai districts live in rural areas. Most of them live in small villages where there is no possibility to use the broadband Internet connection. In Lithuania 100 inhabitants get just 1.2 connections of broadband network. In rural areas, comprising less than 500 inhabitants, only 2 per cent of all the dwellers have a possibility to use broadband network.

In Lithuania only cities have necessary infrastructure for supplying broadband network. In the cities broadband network services can be rendered to 99.8 per cent of the population. In the rural areas the situation is worse where the broadband network services can be rendered only to 16 per cent of the population. In villages and small towns which have less than 500 inhabitants, broadband network infrastructure is only in 0.3 per cent of all villages/towns or potentially only 2 per cent of the population can use broadband network.

Due to small population density in villages of both districts, suppliers of telecommunication services are not interested in effective developing of the network quality. Only population of specific district towns, education and other institutions have a possibility to use connection to the internet using ADSL technology.

Basing upon current data of district broadband network infrastructure and territorial distribution of population, 61 per cent of households of Ignalina and 62 per cent of Zarasai districts municipalities in the meantime have no possibilities to use the broadband data transfer networks. In such case, the potential market for the broadband data transfer network in Ignalina region makes at least 5600 households, and in Zarasai district – 6000 households.

Question 2.2.4: Available Technologies

The main service for broadband network supply is based on DSL hardware solution. This limits distances between DSL concentrator and final service recipient because effective distance for rendering service is only four kilometres (calculating distance of connection wires it means that actual distance is even shorter). In this case big territory of the district which is far from commutation stations would not be able to use DSL service even with complete modernization of the stations. Meanwhile to build more stations is not effective in respect of maintenance and exploitation due to little number of subscribers. This will result that part of the individual farmers and village residents will have no possibility to connect to the broadband network in cheaper and simpler solutions.

“Lietuvos telekomas“ has net optic network cables to Zarasai district and implemented technologies which can provide DSL network services (in Zarasai town, Dusetos and Salakas). Only three administrative units have this kind of technologies. So, at the time being only more 8831 people from 23,000 Zarasai district population can theoretically use DSL service and that makes only about 38 per cent Zarasai district inhabitants. Other distant administrative units can not use broadband network service as AB „Lietuvos telekomas“ has not implemented necessary final equipment and there are no optic cables to the existing telephone stations.

In mid-2004 in Ignalina district municipality there were 21 "TEO LT", AB network stations. Only in three of them it is possible to implement DSL net services (in Ignalina, Vidiskes village and Dukstos). It means that only 9000 of the population has a theoretical possibility to connect to "TEO LT", AB provides DSL service which makes 39 per cent of all district population.

"TEO LT", AB has net optic network cables to Zarasai district and implemented technologies which can provide DSL network services (in Zarasai town, Dusetos and Salakas). Only three administrative units have this kind of technologies. So, at the time being only more 8831 people from 23000 Zarasai district population can theoretically use DSL service and that makes only about 38 per cent Zarasai district inhabitants. Other distant administrative units can not use broadband network service as "TEO LT" AB has not implemented necessary final equipment and there are no optic cables to the existing telephone stations.

Users and technologies used for broadband access in Lithuania, 2005:

Broadband access technology	%
xDSL	44.78
LAN	20.22
Cable TV	21.20
Wireless	7.66
Optic fibre	5.53
Skirtoji line	0.61

Question 2.2.5: Applications

During the analysis of the information exchange flows between individual institutions and organizations of the districts it was noticed that the major information exchange flows are the following:

- Between the administrations and administrative divisions of the districts (on municipality scale);
- Between individual administrative divisions of the district (on municipality scale);
- Between health care institutions of the district (on municipality scale).

Minor information flows are noticed between the cultural institutions and country museums.

High information exchange flows exist not only between individual institutions but also with Lithuanian institutions and with institutions and organizations of other districts. Especially intense information flow with other Lithuanian institutions is noticed in municipality administrations, health care and education institutions.

Information (ordinary and confidential) exchange between the objective groups is performed via telephone, registered mail, mail, delivered in hand, „window principle“. Broadband connection provides with 8 types of services. Below are some examples for each type of services:

1. Use at home:

Possibilities to use the broadband connection for teleconferences, security purposes (installation facilities of video cameras), exchange of high information flows (video information, photos, etc.)

2. Workplaces:

Possibility to work in any place – not necessary to go to the workplace. Possibility to use the work applications from home or client's office. Possibility to collaborate with associates in video conference modes, etc

3. Health care:

This type of services could be used by patients as well as by doctors. Video conferences on real mode would allow the patients to communicate with doctors by video conferences, it would be also possible to take care of the elderly with expedience, etc.

4. Purchasing:

Possibility to look for, review and order purchases as well as possibility to pay for them via the Internet. With the help of the broadband connection some of the purchases (music, films, etc.) would be delivered/ supplied via the Internet

5. Public administration:

Possibility for the residents to have the use of electronic services. Future possibility to exercise political debates and discussions of public groups via video conferences

6. Learning:

The broadband connection allows the remote teaching

7. Culture:

Possibilities to get acquainted with the ongoing/ past cultural events

8. Transport:

The broadband connection allows the users to receive more information via the Internet. Therefore, transport costs and traffic jams are reduced.

Having implemented the pilot project households as well as business will be provided with the possibility to make the use of those services.

Question 2.2.6: General conditions/Legislation

Legislation:

- RAIN (Rural Area Internet Network) – project at implementation stage. Project is aimed to connect all rural municipalities within districts via optics lines.
- RAIN II – project at preparation stage. Project is planned to connect all settlements with more than 200 inhabitants, government or public institutions.
- Decision of the Government of the Republic of Lithuania No.480 Concerning common requirements for the web-sites of state and municipal institutions.

Institutions:

1. The Ministry of the Interiors of the Republic of Lithuania.
2. The Committee of Information Society Development of the Republic of Lithuania.
3. "Broadband Internet", Public Body.

Chapter 3: Broadband strategies

Question 3.1 Objectives

The existing development of data transmission infrastructure, limited competition environment and financially weak user market do not provide preconditions for a further spontaneous development of broadband network infrastructure.

The plan is to create a broadband data network for the „last mile“ subscribers' connection and rent it for the network operators who would offer services for the ultimate consumers: natural persons, business and private companies. After the implementation of the project data transmission network will cover 85 per cent of Zarasai and Ignalina district territory with approx. 95 per cent of the region dwellers. The infrastructure created during the project might be used in installing the Internet connection in rural areas where IT infrastructure is not created yet. With the help of the infrastructure created during the project private service suppliers will provide the dwellers with broadband Internet services.

To develop the broadband data transmission network infrastructure in the municipality territories including the “last mile” decisions. To allow the residents of Ignalina and Zarasai districts, business entities and public administration institutions have the use of the developed infrastructure; to link Ignalina and Zarasai district public administration, education and medical institutions into the integral computer network.

3.2 Measures

Long term covers the period of more than 10 years and follows relevant long term strategic documents.

The broadband development directly corresponds to the following documents: Lisbon Strategy; European Commission, 2002, June, Plan of Actions “E.Europe 2005”; Lithuania's SPD, activity areas, project rendering invitation intentions (SPD 3 priority „Development of trade sector“; SPD measure 3.3 „Development of information technologies services and infrastructure“); Regional development strategy “Priority.2 Development Of Human Resources” “Objective 2.2 To Promote The Formation Of Knowledge Society” “Target 2.2.1 Systematically introduce and develop information technologies” and “Target 2.2.2 To improve access of citizens and visitors to the Internet”.

Main goal of the Ignalina NPP Regional Development Agency is to implement measures, which mitigate NPP decommissioning negative socio-economic impact. Regional strategy is being implemented. Broadband is a possibility and priority. Strategy of its development is aimed **to identify and assume essential possibilities for regional development by using broadband**. It should **specify necessary investments, target fields and infrastructure**, having in mind the specifics of the region and advantages of transnational co-operation network of the Baltic Sea Region.