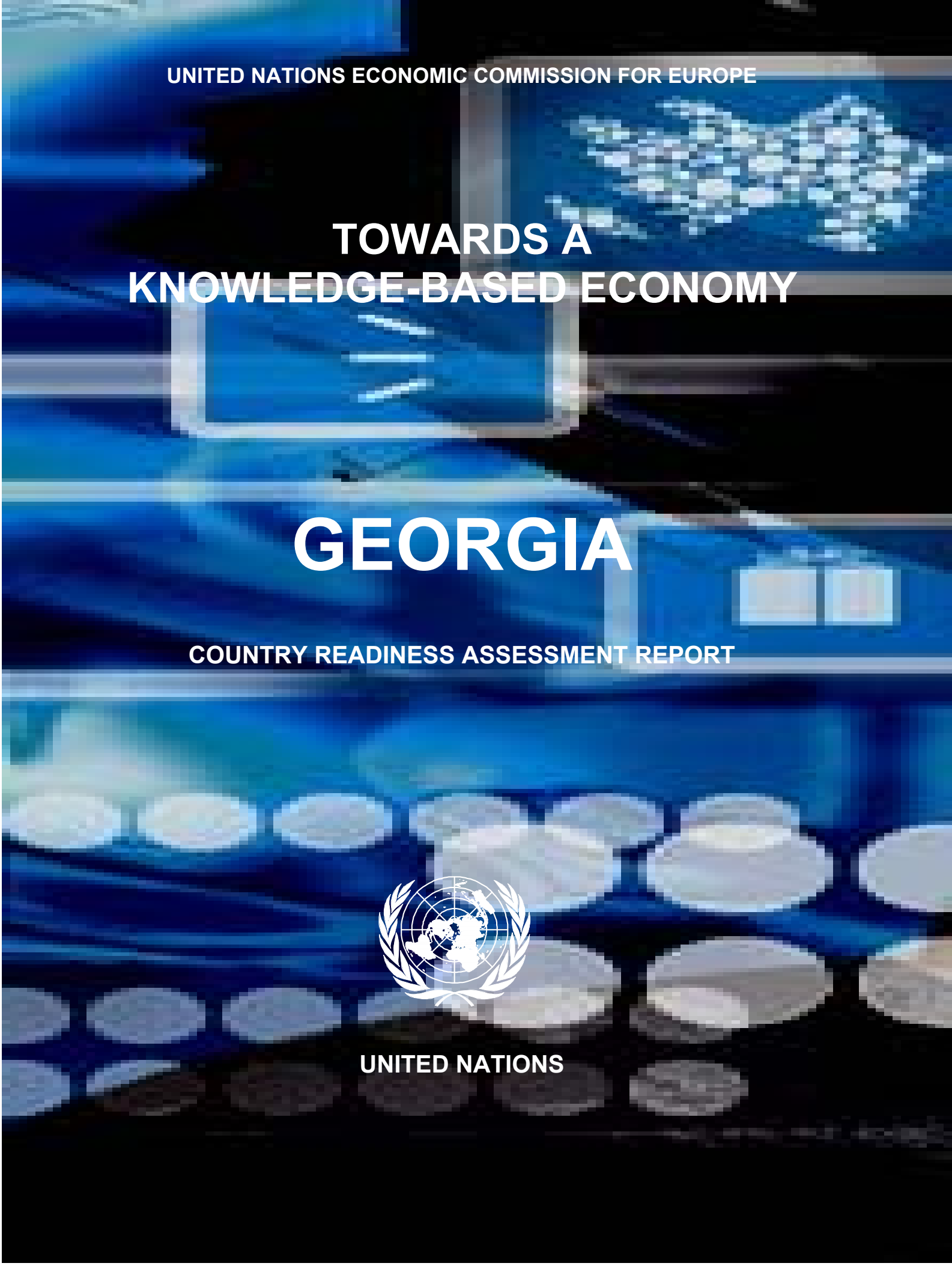

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

TOWARDS A KNOWLEDGE-BASED ECONOMY

GEORGIA

COUNTRY READINESS ASSESSMENT REPORT

UNITED NATIONS

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

TOWARDS A KNOWLEDGE-BASED ECONOMY

GEORGIA

COUNTRY READINESS ASSESSMENT REPORT

UNITED NATIONS

New York and Geneva, 2002

ECE/TRADE/311/

Copyright © United Nations, 2002

All rights reserved
Printed at United Nations, Geneva (Switzerland)

UNITED NATIONS PUBLICATIONS
Sales No.
ISBN

FOREWORD

The last decades of the 20th century have represented a turning point in the global development process. It is knowledge that has become the engine of the social, economic and cultural development in the today's world. Knowledge-intensive economic activities are now a factor of production of strategic importance in the leading countries. They have also become the main indicator of the level of development and the readiness of every country for a further economic and cultural growth in the 21st century. Taking into consideration all these factors, the United Nations Economic Commission for Europe has launched an initiative of monitoring and analyzing the development of the knowledge-based economy in all the European countries in transition and emerging market economies.

The major goal of this initiative is to stimulate the exchange of national experiences, to identify best practices and to promote region-wide and global-wide cooperation of the UNECE member States, which would accelerate the development of a knowledge-based economy in the countries in transition and emerging market economies. It envisages the preparation of country assessment reports on the biennium basis by national experts, nominated by the Governments, the creation of a High-Level Task Force on the Knowledge-Based Economy, which will consider the reports and provide policy advice and recommendations to the participating countries, and the development of progress measurements and indicators, policy guidelines and tools to assist countries in overcoming obstacles to the development of a knowledge-based economy.

We hope that the country assessment reports, showing a detailed level of the countries' potential and providing information on various approaches and solutions, will help policy-makers to take strategic decisions with regards to the challenges facing them in the development of institutions, information and innovation systems, human resources development and other areas crucial for the development of a knowledge-based economy.

Brigita Schmőgnerová
Executive Secretary
United Nations Economic Commission for Europe

PREFACE

The industrial revolution of the 19th century and the scientific revolution of the 20th century have prepared the conditions for the rise of the knowledge-based economy. Economic activities associated with the production and utilization of information and knowledge have become an engine of economic growth in the developed market economies, increasingly transforming all the other dimensions of development and the entire societal ***modus vivendi*** and ***modus operanti*** of the humanity.

What do we mean by "the knowledge-based economy"?

It is not just the digital economy, which incorporates the production and use of computers and telecommunication equipment. It is not quite the networked economy, which incorporates the telecommunication and networking growth during the last decades and its impact on human progress.

The knowledge-based economy is a much complex and broader phenomenon. There are different dimensions and aspects of the knowledge-based economy:

1. The knowledge-based economy has a very powerful technological driving force – a rapid growth of information and telecommunication technologies (ICT). Every three – four year there appears a new generation of ICT. Today, the ICT companies are among the largest corporations. The ICT sector is among the fastest growing economic sectors.

2. Telecommunication and networking, stimulated by a rapid growth of ICTs, have penetrated all the spheres of human activity, forcing them to work into an absolutely new mode and creating new spheres. The information society has become a reality.

3. Knowledge, based on information and supported by cultural and spiritual values, has become an independent force and the most decisive factor of social, economic, technological and cultural transformation.

4. The knowledge-based economy has allowed a quick integration of the enormous intellectual resources of economies in transition into the European intellectual pool, stimulating the development of the former countries. Every country can benefit from developing a knowledge-based economy to become a more equal participant in the global development process.

5. The emerging knowledge-based economy has been affecting other areas of societal activity in every country, including institutional and innovation system, human resources development and etc. and visa versa. The knowledge-based economy has become an engine of progress in every country. If a country is developed, it has a developed knowledge-based economy, if a country is lagging behind, a knowledge-based economy constitutes just a small fraction of its economy.

The report below was prepared by a national expert, nominated by the Government, and represents an overview of the present situation and an assessment of the emerging trends in all the major areas, constituting the foundation of the knowledge-based economy, such as policy and policy instruments, institutional regime, ICT infrastructure, information system, national innovation capacities and capabilities.

Contents

Introduction

The Country Readiness Assessment Report covers the situation in Georgia in the following fields: National strategy and institutional regime of the country, situation existing in the informational system, characteristics of human resources and national initiatives.

The report briefly discusses these issues in the context of the knowledge-based economy, concentrating in particular on the reasons that are causing the current situation and the apparent trends. The annexes provide more detailed information about the situation existing in various fields such as: telecommunication, education, research and development and other sectors, while emphasizing the level of integration of Georgia into the international network. The annexes are based on statistical information for each field.

1. National Strategy and Action Plan

Georgia is a developing country facing various problems in different areas. For the last decade, it is trying to establish strong democratic principles in the country that will strengthen its development process in accordance with the "western course". This national strategy can be illustrated through the following projects, showing the involvement of Georgia in international activities. The project of the Bako-Supsa pipeline is already functioning quite successfully. Also works on the Bako-Tbilisi-Jeihan pipeline project have already been completed, and the pipeline will start functioning in the nearest future. These are very important projects also in terms of telecommunications, which are linked to these routes.

One of the most important programes for the nearest future is the Poverty Reduction Program, which will be financed by several international organizations. It is being elaborated. The programme includes changes in the country's health, education, economy, justice and other systems. The programme is not approved yet and is the subject of intense discussions, as it is to be funded with the help of a credit of a duration of 15 years.

Special programmes for the purpose of enhancing the tax system of the country are in the process of implementation. They are designed to increase revenues of the state budget. Special commissions managed by competent local representatives are involved in the process.

A special project (establishment of a Center of Enterprise Restructuring and Management Assistance) is financed by the World Bank and implemented in order to restructure and support local enterprises. But the country itself has no internal financial sources to support local business, culture, science and other vitally important spheres. The low average salary level is seen to foster corruption. One of the important issues, on which active work has started, is the corruption elimination programme. Political, economic and social factors have to be tackled simultaneously.

2. The Institutional Regime

Georgia tends to introduce forms and structures of its institutional regime that are similar to the models existing in the world's developed countries. This is quite a difficult and slow process, because Georgia is a developing country of relatively low social background. During the last 10 years, the country has emerged from the residues of the communist system. In particular, mergers of different ministries and an optimization of the use of human resources took place.

The Republic of Georgia's supreme governing power is vested in the President and the constitution. The national government comprises the President, the Parliament as the legislative body, and Ministries, the executive bodies.

The President, the Parliament and local governmental bodies are elected through multiparty, democratic elections. The Parliament elaborates the laws necessary for the proper political and economical development of the country and approves by voting the members of the government upon their nomination by the President.
The President appoints ministers for the following ministries:

Agriculture and Products
Culture
Defense
Economics, Industry and Trade
Education
Environmental Protection and Natural Resources
Francei
Foreign Affairs
Fuel and Power Engineering
Labor Health and Social Protection
Internal Affairs
Justice
Refugees and Placement
Emergency Affairs
State Property Management
State Security
Tax Revenue
Transport and Communication
Urbanization and Construction

Each ministry determines state policy in its field. In accordance with adopted policies, ministries provide for the development of their respective spheres of activity through the implementation of respective reforms.
The "Sakrebulo" (Council) exists as the elected representative body in the municipal government. The City "Mares" and "Gamgebeli"-s are appointed by the President of Georgia.

In accordance with the general situation, the government's efforts are towards transformation, in particular through the strengthening of Ministries and other governmental structures in terms of their economic and social profile.

This report being concerned with the knowledge-based economy, it is important to focus on the educational system existing in the country, as this sphere is determining the future political and economic situation of Georgia.
From the Soviet times, the educational system of Georgia enherited two stages: the 11-year secondary schools, and higher education institutions specialized in the different subjects. Currently, the reform of the educational system is in its first phase of implementation. Based on the reforms, narrowly specialized institutes were transformed into universities, and bachelors' and masters' degrees were confirmed. The current reform includes a stage-by-stage certification of teachers aiming at the improvement of their qualification. In parallel, the school curricula are being reformed, so that they will support increasing the level of education in the country and it's movement towards world standards. The World Bank actively supports these reforms with financial sources.

Local Universities, higher education institutions and branches of foreign universities participate in the education of qualified human resources for the management of the country's political, economic and financial system. The above-mentioned reforms have already resulted in some progress of the economy of Georgia. Progress is demonstrated by the fact that previously closed enterprises have re-started operating. So, the view is confirmed that human resources development is a crucial factor in the development processes existing in the country.

3. Present Situation and Trends in the Country's Informational System

The informational system of any country depends, among other things, on the development level of its telecommunications sector. After the separation of the country from the Soviet Union, the telecommunications sector of Georgia started a liberalization process. For the last 10 years, various independent TV stations, radios and newspapers were established and developed in Georgia in order to spread free information. It is to be mentioned that free media are requested especially from the side of the local population. Any attempt of limiting free media representatives during this period was thwarted as a result of their support by local citizens. It might be considered as a success that today we have 45 TV stations, 17 radios and 124 newspapers operating locally, and most of them are independent.

The creation and development of public opinion plays the most important role in the establishment of the country's political and economic course. As a consequence, any kind of important decision made by governmental bodies that is not accepted by the population becomes the subject of discussion through free media, and may subsequently be changed and adapted to the public opinion.

There exists an intensive competition between media representatives, as most of them are in private companies. Successful media representatives (TV, radio, newspapers) gain more attention from the side of advertisers, thus creating additional funds for their development. The competition is reflected in the quality of transmission, freshness, importance of the reported information, and innovations.

Some media have been closed for failure in competition, but also new ones have been established. In general, employment in the media industry is increasing, proving its dynamics. Intensive competition supports the improvement of quality and the introduction of innovations in the local media industry.

The informational system of the country is supported by telephones, faxes, mobile phones, and the Internet. Telephone penetration can be expressed in the number of 13.4 mainlines per 100 citizens. The degree of telephone penetration in towns is higher than in other regions. Private telecommunication companies provide telephone services, making it easier for the citizens to obtain telephone mainlines. But on the other hand, as the private companies offer quality services, they cost much for the common citizen with low social possibilities.

Most of the existing telephone stations are operating since the Soviet times, and they need reconstruction and renovation in order to reach a high quality service. The quality of phone calls is more dependent on the telephone station through which the call is made.

Mobile phone penetration amounts to 7.8 mobile phones per 100 persons. Penetration has an increasing trend. There exist 3 cellular connection provider companies in Georgia that are strongly competing with each other. The price of mobile phone service per minute is quite expensive in comparison with the average salary in the country. Nevertheless, an increasing part of the citizens actively use mobile services in everyday life for personal, business and other purposes. There exist several wholesale and retail companies importing mobile phones. There are no mobile telephone producer companies in the country.

Computers actively serve in the systematic introduction of information technologies. All government-related organizations and private companies (especially large businesses) are equipped with computers. But most of the computers used are of older generations (486, 487, etc).

The average number of computers existing in a school is 0.3. This indicator might be considered as a crucial moment for the development of human resources in the country. The situation is better in institutions of higher education, but, anyway, the computerization of educational institutions is a necessary process and ought to be implemented. A special programme towards this objective will start next year.

The Internet becomes more and more popular and useful in the development of the informational system in the country. There are newly established Internet cafes and clubs that are mostly visited by the young. There are 8 ISP providers in Georgia. Prevailing types of ISP networks are dial-up and dedicated lines. Internet is widely used in business and other offices. Only 1% of the citizens have access to the Internet from their homes.

For the last 5 years, information system development process became more intensive, which is attributed to more active contacts with foreign countries. This process in itself supports the integration of Georgia into the international community. But the system is in the first stages of development only and needs financial and intellectual support for its continuation.

4. Characteristics of the country's human resources

Georgia, a country of a population of 4.5 million, did not experience a surplus of human resources in Soviet times. Georgia occupied the first place among the Soviet Union countries in terms of the share of population with a high education degree. But this intellectual capital was fully adapted to the economic conditions of the Soviet regime and, thus, lost much of its use for the post-Soviet era. The transfer process to the market economy, and the acceleration of the privatization processes created new problems for the local society. The Georgian population understood that independence of the country and a strong economy could not be achieved without professionalism. And the professionalism needed for development in the market economy system could not be acquired in such a closed area as the Soviet Union had been.

In the early 90s, when Georgia was making first steps to become a sovereign country, it became necessary to change all the state structures and among them, the educational system. This process caused the departure of local students to Europe, the United States of America and other countries, in order to study at the different colleges and universities. In parallel, qualified human resources were leaving Georgia in search of employment.

Establishment of a new public system itself caused an acceleration of reform processes that revealed the human resources problem in the country. Optimization of the human resources was an unavoidable process in order to support the overall development process in Georgia. Accordingly, the Government started a human resources optimization process with the assistance of international organizations. The process began with assessments of needs in different spheres such as justice, education, health, government structures and other systems. These assessments revealed a surplus in the number of human resources, and unemployment was spread throughout the country.

Small and medium-size businesses gradually developed, creating some new jobs. However, this did not resolve the unemployment problem, but some progress is visible.

5. National innovation capacities and capabilities and their effectiveness

Based on the deep economic and social crisis that is now existing for 10 years in Georgia, the Government elaborated several methods and ways for the further development of the country.

A suitable geopolitical location of Georgia and existing human resources created an opportunity for the country to be involved in the implementation process of global projects. In particular, it was discovered that Georgia is an extraordinarily suitable "transportation corridor" for the transport of oil and other raw materials from Azerbaijan and Middle Asia countries to Europe and the whole world. In relation to transport issues, it became also necessary to discuss the "silk road" restoration issue. The issue caused great interest on the side of international companies and governments of several developed countries.

As a result of these endeavours, some large projects were implemented: the Bako-Supsa pipeline is already functioning quite successfully. Also, the work on Bako-Tbilisi-Jeihan pipeline project is completed, and the pipeline will start functioning in the nearest future.

Besides, other prospective projects are in the projecting phase, in particular the construction of a gas pipeline. In the case of the implementation of all projects concerned, the Government of Georgia believes to solve the energy crisis that still exists in the country.

The successful implementation of the projects will help not only the employment of the surplus number of human resources, but it will also support the establishment of peace and stability in the Caucasus region and especially in Georgia.

6. National major initiatives

One of the major national initiatives of Georgia is the effort to create a really democratic, independent sovereign country, which will become a member of the world community. It is impossible to implement this process independently, and, so, the country actively cooperates with a number of foreign countries and international organizations.

Georgians are trying to create attractive investment conditions for foreign investors. Without them, it is impossible to develop a local economy. Development of the economy requires a stable energy system, the lack of which we are experiencing. We are almost fully dependent on the Russian energy market. Consequently, the economic growth is not satisfactory, and the Georgian Government looks for opportunities of establishing a strong local energy system. This plan needs large investments from external sources for realization. If the civilized world becomes convinced that Georgia pursues the right course for development, we will receive more support from their side.

National initiatives concerning the development of human resources (which is the basic issue in the context of the knowledge-based economy) in the country have resulted in several programmes for the education sector. They consider changes in the structure of educational establishments, the optimization of educational programmes, and computerization processes. The programmes will be financed from external sources.

7. Conclusion

The purpose of this report is to assess the existing situation in Georgia in the context of the knowledge-based economy. Human resources development becomes the most important issue to pay attention to in order to ensure the right development course of the country. The telecommunications sector supports the acceleration of the development processes. The processes that have occurred so far regarding the local media might be considered more than satisfactory, as the number of existing media enterprises (TVs, radios, newspapers) is quite high, and the existing intensive competition between them is one of the tools ensuring their development. Free media are strongly supported by the population, who consider them as a positive achievement. The manifestation of public opinion is of great importance in the development processes.

Telephone penetration in terms of both mainlines and mobile phones can be considered satisfactory, as the trend is increasing. All the government offices, most of the businesses and other organizations are computerized (with older generation computers), but there is lack of computers in the educational sector. The numbers existing in this sphere are quite low and need to be increased, as the education system plays a most important role in the knowledge-based economy. Also, a general improvement of the educational system at both schools and institutions of higher education needs to be realized.

The investments in the science and technology sector are low, as there are more important everyday problems in the country. But this circumstance may create more serious problems in the future in Georgia, as we not not be endowed with sufficient human resources in the science field.

Political, economic and social factors create an interdependent whole in the country that has to be dealt with, simultaneously. But as the starting point for improvement of the overall situation in Georgia might be considered the development of human resources, any progress in this field will support a more pronounced integration of Georgia into the international processes.

8. Annex

Knowledge-Based Economy Indicators

1. Network Access

1.1. Information infrastructure

- Number of telephone mainlines per 100 people is 13.4
- Mobile wireless penetration is 37.5% of total telephone penetration (including mobile phones plus total number of mainlines)
- Total number of mobile telephone subscribers is 355, 000
- Total number of mobile telephone subscribers per 1,000 people is 78
- Wireless penetration is 7.8% of the population of Georgia
- Growth trend is considered to be 5%-10% (of the number of existing subscribers) for the end of the year 2003
- Total number of cable TV subscribers is 278, 000 people
- Total number of cable TV subscribers is 72, 396 households

1.2 Internet Availability

- Total number of ISP providers is 8 in Georgia
- Prevailing types of ISPs' networks are: TCP/IP dial up, dedicated lines
- Unsuccessful local calls are 2%
- ISP providers are competing among themselves as they are private companies
- There are the following opportunities for public internet access: libraries, internet-cafes, internet clubs
- All the ISP providers have possibility to install dedicated line for their customers and so, there is competition among them

1.2. Internet Affordability

- There are the following average prices of internet access: unlimited access - US$0.5 per hour, dial up - US$0.4 – US$0.5 per hour
- Access to internet is affordable for minority of the population as the average salary per month is US$36.6
- There are the following rates for leasing lines: asynchronic 33.6 Kb/S - US$149/month, synchronic 128 Kb/S - US$650/month
- The rates are affordable for the minority part of individuals and small businesses

1.4 Network speed and Quality

- Successful calls comprise 98 %
- The quality of voice connection depends on telephone station, it might be high, medium or low

- There are reported 26.3 faults for each 100 telephone mainlines per year
- It takes 48 hours in average to clear faults
- E-mail, high-speed modem connection are supported by local telecommunications infrastructure. Maximum speed of modem connection is 128 Kb/S
- There are no backbone facilities
- Packet loss by the network comprises 30%-40%

1.5 Hardware and Software

- There are 32 local IT hardware/software sales points
- The price of IT hardware/software is affordable for minority of citizens and approximately 60% of businesses
- Some kind of software (accounting and financial programs, etc.) is available in local language
- 99.8% of the software is imported and the rest part is produced locally. There is no locally adapted software in Georgia.
- IT software/hardware retail wholesale markets are strongly competitive

1.6 Service and Support

- The waiting period from announcement date to telephone line installment is several days (nowadays total number of those on the waiting list is 138, 806)
- The waiting period for reported telephone line problem to be fixed is 48 hours in average
- Total number of employed software developers, network administrators and other technical personnel is 640 people. Employees working specially on web designs comprise 94 people. There is no statistical data for unemployed people in this field.

2. Networked Learning

2.1. Schools' access to ICTs

- Computers are accessible in secondary schools and universities.

Number of schools	3,464 (included 140 profess. secondary schools)
Number of computers in schools	1,059
Number of schools with computer labs	231
Number of computers per school	Average 0.3
Number of students	749, 100
Students per computer	Average 707
% of schools with computer labs	6.6%

- Access to the computers in the higher education institutions have technical staff, faculty, students
- The hardware used in schools is mainly Pentium 1 and 2. In higher education institutions hardware used might be as Pentium 1, as well as brand new computer models.
- There are no LANs, no WANs or national school networks in Georgia
- All the schools with computer labs have internet connectivity, mainly – dial up

2.2 Enhancing education with ICTs

- 2% of teachers and 35% of students in secondary schools and 4% of lecturers (including secretary staff) and 60% of students at higher education institution are using computers.
- Computers are used for the learning, preparing different kinds of letters, private purposes in secondary schools and in higher education institutions; the level of teachers' knowledge in computers in schools might be considered as medium, in higher education institutions – higher. Majority of students (approximately 80%) in schools have low level of computer literacy; and minority of students (approximately 10%) in higher education institutions have excellent computer skills.

2.3 Developing the ICT workforce

- There are training opportunities in programming, maintenance and support
- The trainings are offered basically by private institutions
- They are affordable for minority of the population (5% maximum)
- No online training is available
- Employers offer trainings for their staff

3. Networked Society

3.1. People and Organization online

- - 72% of the total population is aware of internet
  - 8% of the population has used Internet recently
  - 5% of the population uses Internet regularly
- 80% of users are with age 13 to 35 and 70% of total users are male. 95% of users with age above 22 have high education degree and 80% have job.
- Total number of locally registered domain names are 1,500
- There is intensive advertising for online companies

3.2 Locally relevant content

- There are approximately 2,500 locally produced websites. Almost all the websites are

- The contents of websites might be considered as static as they are updated in average 1-2 times per year
- The websites are created in the community
- There are used bulletin board systems
- Employers for their staff arrange the web-related trainings. Herewith, there is opportunity of training for outsiders that costs fixed money

3.3 ICTs in everyday life

- Using of phones, faxes, pagers, computers in everyday life might be rated as follows:
  Phones – are used for personal purposes and in businesses in everyday life
  Faxes – use all the businesses
  Pagers – almost not in use
  Computers – use all the businesses; and 1% of the population have them at home

- Phones, mobile phones, digital assistants are used as for the private purposes as well as in business

- Cyber cafes, tele-centers with e-mail capability are used widely.

3.4. ICTs in the workplace

- Employees have unlimited access to phones, Majority of them have personal e-mail accounts and Internet access from their personal workstations. Administration part of employees have e-mail and web addresses on business cards
- All the government offices have computers and all the businesses have at least one computer at their offices. 90% of administrative part of businesses use computers. There is no statistical data concerning the number of computers used
- Majority of them are in network
- The business is mainly conducted in person, but e-mail is used as one of the tools at the initial stage of cooperation with foreign partners
- There are efficiency gains resulting from the use of ICT systems as the businesses avoid transportation costs

4. Networked Economy

4.1 ICT employment opportunities

- Businesses and other employers already have technical staff, but there are opportunities for technically skilled workers within the country as new working places are established
- Companies outside of the country are not investing in IT related projects
- The portion of knowledge workers in each business is 80% in average. Labor force 7% of total population, GDP is 6, 431, 000, 000 USD, that can be expressed as 1, 437.5 GEL per 1 person

- Almost all the businesses are considering IT in their strategies, especially larger ones

4.2. B2C electronic commerce

- 15% of local businesses have websites and its content is static (updated 1-2 times per year)
- B2C transactions are mainly oral, paper-based, phone or fax-based
- It might be stated that there is no online retail concerning local businesses

4.3. B2C electronic commerce

- Some kind of market information can be found at the State Department of Statistics, but mainly information is gained based on market researches conducted by marketing staff of the business. Information about export market can be found at GEPA (Georgian Export Promotion Agency), Chamber of Commerce and via Internet.
- B2B transactions are mainly conducted orally, on paper, phone or fax base, but if partner company is located outside of Georgia, transaction might be conducted at certain level online-based
- Transactions are not conducted online without any paper documents
- As some transactions are conducted at certain level online-based, there is some gain in efficiency

4.4. E-Government

- Government related information online include the following: briefly about government bodies, general situation in each sector, constitution of Georgia and adopted laws, monthly bulletin of the parliament of Georgia, daily reports of the parliamentary press service, important statements made by parliament of Georgia
- Interaction between Government and Citizens are oral, paper-based, phone or fax-based
- Interaction between Government and suppliers and contractors is mainly oral, paper-based, phone or fax-based
- There is possibility to download applications from the websites
- There is not possibility to apply for permits, licenses or taxes online

5. Network Policy

5.1. Telecommunications regulation

- Telecommunications sector liberalization is already at the implementation stage
- There is strong competition between telecommunications service providers
- The broadband Internet access exists, but is used by 0,1% of users

- Regulation is set by Telecommunications National Regulatory Commission

5.2 ICT trade policy

- There exist special technical standards and domestic regulations system
- Service sector is mainly regulated by the relevant law
- There are no disproportional taxes on electronically delivered services
- Foreign direct investment in IT sector does not exist, though it is not restricted or discouraged

6. Media

6.1 Radio, TV and newspapers

- There are 17 radios, 45 TV stations, 124 newspapers in Georgia
- The size of audience/circulation is as follows:

- Radios:

Radio Channels	***Number of listeners***
Fortuna	549, 125
Fortuna+	448, 850
105	264, 701
Sakartvelos Khma	162, 973
State radio (radio 2)	126, 849
audiensia	127, 264
Pirveli Radio	108, 372
State Radio First Channel	194, 737
Univers	61, 452
Evrika	58, 130
Mtsvane Talga	61, 452
Rezonansi	50, 864
Georgian Church Radio "Iveria"	49, 826
France International	8, 927
Other	123, 940
Total	***2, 397, 462***

- TV stations

Local TV channels	***Audience***
Rustavi – 2	738, 698
State 1st channel	927, 587
Metskhre Arxi	190, 028
1st Stereo	158, 270

Kavkasia	161, 270
Iberia	150, 098
State TV 2nd channel	378, 193
Evrika	102, 307
Adjara	193, 028
Sakartvelos Khma	44, 171
Other local TV channels	552, 704
Total	***3,596, 354***

- Most sellable Newspapers

Name of Publication	***Circulation***
Kviris Palitra	65, 780
Axali Versia	21, 840
Asaval-Dasavali	20, 310
Alia	17, 800
Axali Taoba	15, 130
Kviris Kronika	9, 140
Georgian Times	6, 100
Sakartvelos Respublika	5, 770
Rezonansi	3, 630
Press Kurieri	2, 130
Arapolitikuri Gazeti	2, 030
Mteli Kvira	2, 030
Axali Epoka	1, 520
Axali Era	1, 200
Tbilisi	1, 100

6.2 Employment in the media

- There are 4940 employees in TV sector, 760 in radios, 1,424 in newspapers
- The number is slightly increasing as a result of new media establishments

7. Intellectual Capital

7.1. Patents

- Number of issued patents per annum is 150 in average
- Number of issues is more or less stable for the last 4 years, but it is projected to have slight increase for the nearest future

7.2. Copyrights

- There is not in practice to register copyrights in Georgia. For example books are sold in the local market without any copyright.

7.3. Licenses

- Number of issued licenses on inventions is 15, and licenses on trademarks is 12 per annum in average
- Projection considers to have slight increase especially in licenses on trademarks

7.4. Trademarks

- Number of issued domestic trademarks per annum is 100 in average
- Number of issues is more or less stable for the last 7 years. Projection considers to have 10% increase for the next year

7.5 Scientific Associations

Name	***Contact person***
Young Scientists Association	David Kekelidze
Scientific Society "Dimitri Uznadze"	Shota Nadirashvili, Tamaz Buachidze
Scientific Researching Association	Olga Metreveli
Cultural-Scientifical-Informational Association	Marina Egutia
Georgian Neuroscience Association	Simon Khechinashvili

8. Education

8.1. High Education

- There are 26 public and 145 private high education institutions in Georgia
- There are totally average 147, 400 students per annum (115, 500 students at the public high education institutions and 31, 900 students at private high education institutions)
- The most popular specializations are: Economics (International Economic Relations, Banking,), Law (Business Law, International Law, Civil Law), Journalism, foreign languages (English, German, French, etc.).
  More general distribution of students among prevailing fields is as follows:

Humanitarian specialties – 51, 357
General economic specialties – 20, 130
Engineering - economic specialties - 10, 979
Law – 18, 752

- Number of population with higher education degrees is 977, 221 (the number comprises the population of the age above 25 years old. The number is received based on statistical research made in 1991 plus average annual growth rate).

8.2 Distant Learning

- There are distant learning faculties at almost all the high education institutions. Also, there is possibility of distant learning through ACCA and CFA coordinating centres
- 49 834 students are trained at public high education institutions and 18 160 students are trained at private high education institutions in Georgia. Number of students involved in distant learning through ACCA and CFA coordinating centres is approximately 170

9. Labor Force

9.1. Employment in science and technical fields

- There are 7,456 employees in the science field. The number has decreasing trend as employees are dismissed from scientific institutions due to few scientific work needed to accomplish.
- Average salary amounts US$28

9.2. Employment in electronics industry

- There are 2, 156 employees in this field
- Average salary amounts US$24. Number of employees has declining trend in this field, as the industry is less developed in the country due to lack of investment. Also the specialty is less popular in Georgia for the last ten years.

10. Research and Development

10.1 Research institutions

- There are 62 research institutions in Georgia

10.2. Investments in research and development

- There is no reliable data concerning total amount of investment made in research and development sector. Government share amounted US$4, 519 for the year 2001