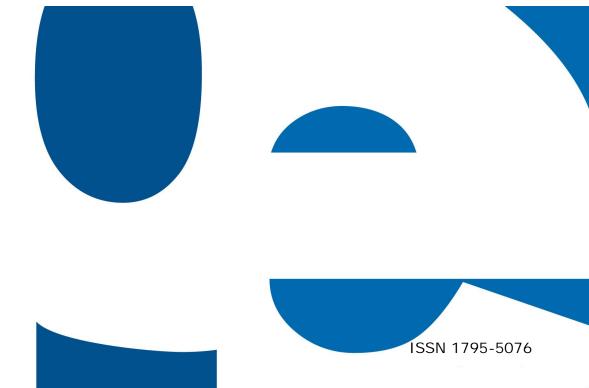


Eric Brunat

Issues of professional development of labour resources in the Kaliningrad region

Electronic Publications of Pan-European Institute 15/2007



Issues of professional development of labour resources in the Kaliningrad region

ICCEES Regional European Congress, Berlin, August 2–4, 2007 Humboldt University Berlin

Eric Brunat¹

15/2007

Electronic Publications of Pan-European Institute

http://www.tse.fi/pei/pub

Opinions and views expressed in this report do not necessarily reflect those of the Pan-European Institute or its staff members.

¹Eric Brunat, University of Savoie, Faculty of Law and Economics, IREGE laboratory, France; EuropeAid Team Leader of the EU Project "Support and Development of Business and Administrative Education in the Kaliningrad Region" (KalEdu), Russian Federation. eric.brunat@univ-savoie.fr

Special thanks to Corinna Reinicke and Vitaly P. Zhdanov for valuable comments and suggestions. The author remains responsible of all views and possible errors.

TABLE OF CONTENTS

1 IN	NTRODUCTION	3
	ALININGRAD PROFESSIONAL LABOUR RESOURCES: SOME PECULIARITIES OUTERMOST WESTERN RUSSIAN REGION	
	HE ESTABLISHED SYSTEM OF PROFESSIONAL TRAINING AND RETRAINING (ALISTS IN RUSSIA	
3.1 3.2	Professional training and higher education in Russia	
RETRA	IRECTIONS OF IMPROVEMENT OF PROFESSIONAL TRAINING AND AINING OF LABOUR RESOURCES AT THE REGIONAL LEVEL: MMENDATIONS FOR KALININGRAD	21
COMP	EQUIREMENTS OF A COMPETITIVE KNOWLEDGE IN THE MODERN WORLD: LEXITIES AND RELEVANCE FOR THE RUSSIAN ECONOMY OF RENT? SOME ENTS FOR FURTHER RESEARCH	
	ONCLUSIONS: A PATH FORWARD IN KALININGRAD?	
ANNEX	XE	31
REFER	RENCES	32

Abstract:

A clear direction for improvement of professional training and retraining of labour resources at the regional level is required to sustain the economic growth in the Kaliningrad Region. This process of the transformation of the economy and, as a result, the creation of new challenges connected to the necessity for the improvement of the quality human resources become particularly apparent communities/territories, and the Russian Kaliningrad region is amongst them. The most efficient way to re-align the existing misbalance in the region is to re-establish an institutional basis for the continuous education, training and retraining of adults on a life-long learning basis. Fast dissemination of actual knowledge and modern technologies into the sphere of the initial professional education (college and university level) will become an additional effect of the implementation of the continuous education system for adults in the region. However, there are essential preconditions for the successful solving of the problems of the professional training and retraining of the labour resources. Factors hindering re-alignment are the disconnection of the academic community, the still weak technical basis of the higher educational institutions and an insufficient use of active teaching methods. It is also of a crucial importance to forge a better link between the academic sphere with business and the public sector, and to adapt and modernize the supply of higher education, postgraduate education with the quality of expertise for creating and enlarging the demand of knowledge. This could contribute towards attracting investment, to sustain the economic growth for enhancing an attractive human development.

1 Introduction

Kaliningrad region is in the situation of being adjacent to the rapidly developing EU member states. Despite significant growth over the recent years, under-investment in old, over-manned industries, and combined with an SME and services sector, which is too weak and fragile, these are the major defining characteristics of an economy that could fall behind its neighbours. At the same time the regional and municipal administrative structures are also in need of further guidance with reform measures and need assistance in developing a productive relationship with the private sector. This is needed at both the strategic planning and economic development framework level in order to buttress the vital socio-economic regeneration that the region requires. On the one hand, it is in response to this major structural dislocation between public and private sectors, and the consequent inability of one sector to support the other, that the European Union is more and more co-operating with the Regional Government in developing the concept of a 'public private-partnership'. The expected impact on productivity, best commercial practices, and increased competitiveness should give a huge impetus to economic development in Kaliningrad. The expected economic growth will act as a pole of attraction for further forms of investment in the framework stipulated by the new Law on Special Economic Zone, based on the new tax benefits in force since April 2006. On the other hand, the strategic location of the enclave, provides a great potential opportunity for economic and social interaction and growth. However, the still continuing inadequacies of the higher education/training sector is acting as a brake upon the sustainability of any socio-economic revival in the region especially in the area of post graduate studies. In that respect, there is an objective necessity for enhancing quality and level of professional training of labour resources in Kaliningrad, establishing a system of professional training and retraining of specialists.

2 Kaliningrad professional labour resources: some peculiarities of the outermost western Russian region

The territorial separateness of the region from the mainland of Russia objectively brings about considerable economic loss for enterprises and the population of the exclave that are conditioned by the break up of the single economic space, border and customs barriers (Biltchak & alii 1999; Samson 2000; Fedorov & alii 2003; Brunat, Greffe, Mau, Samson & alii 2004; Fedorov & alii 2005). That is why the transformation of the economy and the processes of restructuring of enterprises in the Kaliningrad region followed a tougher scenario compared to the other Russian regions, and the manifestations of the economic recession had more visible results.

For more than a decade a lot of goods going to Russia from the Kaliningrad region of the Russian Federation (RF) and back has had to go through customs clearance. Therefore, compared to the normal conditions in Russia, the Kaliningrad businessmen have to pay additional customs fees, certificates of the goods originating from the Special Economic Zone –SEZ (RF Federal Law 1996 & 2006; Fedorov & alii 2003; see annexe), insurances and ecological fees. However because of crossing the territories of foreign states the length of stays increases significantly for the Kaliningraders, as well as the length and the cost of goods transportation and the cost of energy resources. These undoubtedly negative factors have resulted in an immediate drop in production volumes, and in the destruction of the prior production potential. It is obvious therefore, that these processes featured are of a more acute character compared to those of the mainland Russia. Thus, the volume of industrial production in 1996 was only 27% of the level of 1990 (to compare: for the Russian Federation on average this important indicator came to 46%).

To a certain extent the Kaliningrad region has for a long time been a selected pilot area for the Russian reforms (RF Federal Law 1996 & 2006): positive or negative results of reforms manifest themselves within one or two months on a small, separated from the other entities of the RF, area of the region.

By the beginning of the market reforms the economic potential of the Kaliningrad region had been characterized as being average for the USSR level of development and featured a clear specialisation within the all-Union division of labour. After the disintegration of the USSR the specialisation ceased to correspond to the new market

conditions. That is why the restructuring of the regional economy, and its adaptation to the new regime went on extremely painfully. In spite of the benefits that were in force in the Kaliningrad region in recent years (i.e. the regulations of the Special Economic Zone) the industrial production in the region continued to drop and came in 1998 to only 29% of the level of the year 1990 (in the RF the index was 47%). Only from the beginning of 1999 did a surge of economic development begin in the region that was characterized by an intensive production growth.

After a prolonged economic recession against the background of the growing demand for domestic goods (with the rouble devaluation the import of consumer goods to Russia was reduced significantly) the investment in the basic capital of the region's economy grew rapidly. The basis for the middle-term economic growth that began to take shape in the region that was based on modernization of old and emergence of new enterprises, oriented towards the production of goods for the growing Russian market.

It is worth noting that restructuring of the sectors of the region's economy went on at different pace. Thus, the transfer to the market orientation of the region's industrial branches was mainly completed within seven years, by the year 1998. As a result the industrial enterprises of the Kaliningrad region began to specialize under the conditions of the all-Russian division of labour in the production of end consumer goods (both manufactured products and foods), mainly exploiting the niche strategy (import substitution).

It is obvious that in the Kaliningrad region the economic growth features a clear regenerative character: the regional economy compressed to a maximum extent by the end of the 1990s began coming to a new level of balance that was determined by the following: by new product markets, by recently acquired specialisations, and by production, labour and natural potential available in the region.

The most important result of the regional development within the period from the early 1990s till the present has been the fact that a quite mobile *new economy* has been developed and continues to develop in the region (Fedorov & alii 2005). Its structure at the moment corresponds to a great extent to real market conditions compared to the economies of the other Russian regions. This economy can not be considered post-

industrial, but modern tendencies can be clearly identified in it: i.e., the increase of the role of the service sector, and orientation to the market indices.

However, there are also negative trends. In the Kaliningrad region as well as in Russia in general the unfavorable social and demographic situation is being formed. Thus the assessment of the demographic potential of the territory shows that the situation with the labour resources in the region is going to get worse. This can be seen from the following data forecasted by the Federal Service of State Statistics:

Table 1 Prognosis of number of working age population in the Kaliningrad region for the perspective up to 2025

Year	All Kaliningrad region population (number of people):			% to the total number of the Kaliningrad region population:			
	Younger	Working	Pensioners	Younger	Working	Pensioners	
	than	age		than	age		
	working age			working age			
2005	144776	612497	184170	15,4	65,0	19,6	
2010	141551	591812	196828	15,2	63,6	21,2	
2015	155770	563234	215726	16,7	60,2	23,1	
2020	167926	547504	232744	17,7	57,7	24,6	
2025	168156	550301	242978	17,5	57,2	25,3	
	1					ı	

Total

2005-			
2025	+23380	-62196	+58808

Source: Regional Committee of Statistics, 2006

Accordingly considerable changes will take place in the age structure of the working age population. Those generations born in the 90s and at the beginning of the new century will start joining this group and numerous generations born after the World War II will leave it. It will lead not only to the absolute decrease of the labour force but also to its quality decrease (senescence). The population of working age people age (men 16-59, women 16-54 years old) will annually decrease during the whole prediction period. Only by 2023 will stabilization be achieved and during the following two years little growth of working age population will be possible. In comparison with 2005, in 2025 the Kaliningrad region population of working age was reduced by 62,2 thousand people less, or 10,2% less, including the decrease of the working age urban population

- 59,9 thousand people less (-12,6%) and of the working age rural population - 2,3 thousand people less (-1,7%).

Such a substantial reduction of the population of working age will already reduce the size of the labour force in the labour market, in the short-term perspective. And here the main problem is not so much in the absolute decrease of the working age population since the use of labour-substitution technologies can be a compensatory mechanism, for the senescence of the labour force itself. In the comparison with 2005 the younger age group of the working age population (16-29 years old) will become 82,7 thousand people less and its share in the structure of the working age population will decrease from 37% to 26,1%. The increase of the share of the older age groups in the number of working age population can influence the ability of the labour force to adapt to the high tech innovations (Regional Committee of Statistics 2007).

The current growth of labour resources is at the expense of the older age population rather than the younger working age one. A considerable share of the regional population is not involved into the public production activities. About 30-35 thousand people are looking for job during the year. At the same time companies feel a need for increases the labour force – according to the official statistics this need is evaluated as 8-10 thousand people. On average unemployed people are younger than the ones employed in the economy. Some qualifications, obtained by young people, are not called for in the regional labour market. As a result a situation has arisen where young people of 16-29 years with higher and secondary special education are unemployed. And for all that from year to year the qualified personnel deficiency is increasing.

However, a better inflow of investment into the economy of the Kaliningrad region has been a characteristic of the past few years. Investors, despite a certain instability caused by the legal regulations of the SEZ, have in the majority of cases received evidence that it is has been rather effective (Liutho 2005 & 2007). Nonetheless, the high level of transaction costs still hampers massive investment flows (national or foreign) but the internal demand is currently increasing significantly, and the potential for capital and intellectual investment remains high in the medium term (Brunat 2006 a & b)².

² According to V. Biltchak 2007, in Brunat and alii 2007, p.62, the accumulated foreign direct investment per capita in US dollar is growing in Kaliningrad to reach USD 91,9 in 2005 (even USD 126,8 in 2006) to be compared however to USD 1608 in Lithuania or USD 5800 in Estonia in 2005 for example.

Within the last six years the volume of investment has increased 4.5 times. The tempo of investment processes taking place in the region are more intensive than on average for the country (in 2004 the region's share in investment in the basic capital of Russia's economy came to 0.5%, while in the industrial production it was only 0.35%). The forecasted number of investment projects in the Kaliningrad region according to the Regional Government within the ten-year period (till 2016) will be approximately 150, while approximately 60 of these can be regarded as large (transport and logistics, energy, tourism infrastructure, food and agricultural processing..).

After a deep and prolonged recession, which took place before the recent surge in the rehabilitation of the level of production and structural changes in the Kaliningrad economy, both existing regional enterprises and potential investors have faced an acute deficiency of qualified managers and labour force. The situation at the labour market therefore is under strain. The problem of providing qualified personnel for some trades, especially mechanical engineering, pulp and paper industry and housing, is critical. This structural imbalance of the labour market has determined a number of issues connected with professional education, training and retraining, labour migration of the working force and illegal migration which has stimulated an inflow of less or non-qualified human capital in the labour market.

Within a ten-year period of recession the paramount prestige of production activity was lost in the region, whilst the spontaneous retraining of many categories of workers and engineers was taking place. Qualified specialists (those in precision engineering, shipbuilding, fishing industry etc.) had in the early 1990s to switch from these occupations to commerce; and had to look for jobs in the service industry.

Rapid privatization of the service sphere and retail trade in the Kaliningrad region in the early 1990s gave impetus to the extension of this sector of the economy where the annual growth rate within several years was on average 16-18%.

The restructuring of the majority of enterprises of the regional transport complex had been mainly completed by approximately 2000, which was a little later than in the industrial sector. The region began to specialize in servicing the foreign economic links of the Russian Federation. Thus, the volumes of cargo processing in the Kaliningrad ports have increased 2.6 times from 2000 to 2004 to reach 13.9 ml tons, having so exceeded the highest indices of the Soviet period. Transport modernisation is actually

supported by the Federal Government: considerable funds have been allocated for the construction of a new deep water port in the town of Baltyisk, thus transport infrastructure is being modernized.

At present an intensive reorientation of the service sector of the region is taking place in accordance with the model of the contact area Russia – EU is taking place. International passenger transfers are rapidly growing, the infrastructure for servicing international business links is being developed, directions and volumes of technology transfers are increasing, tourism and recreation complex is being modernized, and the hospitality industry is developing and is a priority.

These quite well-established directions in the specialisation of market conditions at present represents a continuous growth of the regional industrial production and service sphere. However, in the other industries for example, the agrarian sector and in housing and communal services, the processes of restructuring have only just started, and they are still superficial touching mainly the level of changing owners (Liuhto 2005 & 2007; Smorodinskaya 2006).

Certain specialisation of the Kaliningrad region in terms of professional training of labour resources is also determined by the border location and the closeness of the area to the developed European countries with more post-industrial economies. The region's prospects regarding its participation in the international division of labour is first of all manifested in the effective specialisation of its economy and rational organization of production in those industries and segments where the country and its individual territory are most competitive. The Kaliningrad economy has already fitted into certain transnational chains of value formation; foreign economic links and international cooperation remain however at a rather low level but continue to develop in the recent period. Possibilities for both small businesses and personal development of numerous Kaliningraders are connected with the strong international orientation of the region's economy.

The service sector is more connected to and dependent on the human capital factor in the region. In the Kaliningrad region the number of people with a professional education in the service sphere is a more higher than in Russia as a whole. And it means that much more higher quality and needed services can and should be produced (and possibly exported in the future) in the region.

It should be noted, that in Russia and in the Kaliningrad region in particular the population on the whole possesses quite high (according to international standards) level of education.

Table 2 Elementary vocational education institutions (EVEI) development in the Kaliningrad region³

	2001	2002	2003	2004	2005
Number of educational institutions (by the end of					
the year)	23	23	23	23	23
Number of students (by the end of the year),					
thousands of people	11,1	11,1	11,5	11,3	10,6
Students accepted EVEI, thousands of people	5,3	5,5	5,3	5,0	4,5
Qualified workers turned out, thousands of					
people	5,0	4,9	4,7	4,7	5,1

Table 3 Secondary vocational education development in the Kaliningrad region (at the beginning of the academic year)

State secondary vocational educational institutions (SVEI)

	2001/02	2002/03	2003/04	2004/05	2005/06
Number of SVEI	13	13	12	11	11
Students in them,					
thousands of people	12,6	12,5	12,8	13,0	12,8
including:					
women	6,7	6,7	6,7	7,0	6,5
Among the whole number of					
students:					
Full-time	9,8	9,5	9,8	10,1	9,9
Number of students per 10000					
people	132	131	135	138	136
Number of people, accepted to the					
SVEI	4223	4440	4427	4309	4145
Specialists graduated ¹					
	2962	3445	3065	3257	3310

³ The data of the Regional Administration Department of Education.

	2001/02	2002/03	2003/04	2004/05	2005/06
Specialists graduated from SVEI per 10000 people ¹	31	36	32	34	35

Table 4 Showings of the higher professional education development in the Kaliningrad region (at the beginning of the academic year)

Higher Education Institutions (HEI), the whole spectrum

	2001/02	2002/03	2003/04	2004/05	2005/06				
Total									
Number of HEI	8	10	10	10	10				
Students in them									
(including branches) - total,									
thousands people	24,5	29,1	29,4	30,2	40,1				
Among them students learnt:									
Full-time	15,6	16,7	15,8	16,8	15,2				
Students per 10000 people	256	305	310	319	425				
A. State-owned HEI									
Number of HEI	3	4	4	4	4				
Students in them									
(including branches) - total,									
thousands people	21,2	24,6	24,6	25,4	28,6				
Students per 10000 people	222	258	259	269	303				
B.	Non-governi	mental HEI							
Number of HEI	5	6	6	6	6				
Students in them									
(including branches) - total,									
thousands people	3,3	4,5	4,8	4,8	11,5				
Students per 10000 people	35	47	51	48	122				

Source: Regional Committee of Statistics 2006

However, it has been noticed in the past years that the well-educated population of the Kaliningrad region is characterized by one of the most acute deficiencies, namely lack of business competences. In this case the matter concerns not only the lack of trained

¹ Accordingly 2001, 2002, 2003, 2004 and 2005.

personnel, but the lack of critically important skills for a rapid increase of capacities of strategically important areas of the regional economy. However, it should be noted that the Kaliningraders due to the mobile mentality developed in the past years are better adaptable and, as practice has shown, are able within limited time to master some electronic, modern mass economic specialisation (energy, communication technologies, automative industry..). Above all, this was manifested, for example, by the regional revolution in the sphere of retail trade that was completed within 3-4 years. No doubt, it was difficult to predict in the early 1990s which specific segments of the regional economy, for example the processing industry, would become competitive. In connection with this issue, the structure of professional training in the region turned out to be inconsistent with the new specialisation of the economy. As a result at present in the Kaliningrad region there is a great deficiency of highly qualified managers, builders, specialists in ship repairs, while at the same time there is a surplus of accountants, lawyers and poorly qualified managers (Regional Committee of statistics 2007).

The spread of skills critically important for the modern economy and, in particular, for the future effective specialisation of the Kaliningrad region is still going on quite slowly due to stagnation (lagging behind in modernization) of the system of professional training established in the country and in the region. This lagging behind will have to be compensated for by all possible means including, as current practice shows, import of qualified specialists from abroad. In this connection at the present stage it is advisable to consider the possibilities of importing educational services, especially in the sphere of business education, since the present regional system of education will not be able to fill all the gaps soon. It is necessary to increase the number of personnel's study trips abroad, to use all the possibilities to develop the potential of Russian education in those areas where the deficiency of knowledge is most acute at present. In the interests of rapid development of the region is seems advisable to remove numerous barriers in the spheres of formation and dissemination of innovations and up-to-date knowledge that hamper the development of the economy of the Kaliningrad region.

3 The established system of professional training and retraining of specialists in Russia

The main feature of modern systems of professional training established in Russia and in the world is their multi-level character. Practically from childhood till old age a person can successively gain knowledge at the following stages:

- Professional training (primary, secondary, higher);
- Additional professional training (secondary, higher);
- Post-graduate professional training (advanced training and retraining, post-graduate course, institution of doctoral candidacy).

Depending on the will and possibilities, a person can officially receive more than one qualifications confirmed by certificates (issued by state or private institutions) of completion of a course, including higher stages of training. The form of acquiring professional training can also be chosen by a person depending on his/her will: at an educational institution (full-time, part-time (evening courses), extramural courses); in the form of independent studies or externship.

This multi-level character allows the citizens of different states to this or that extent to realize the principle of continuous education ("life-long learning"). In theory continuous education should give every person an institutional possibility to form for his/her purposes an individual educational trajectory and to receive that professional training which is necessary for him/her to further their professional, career or personal growth. The development of the system of continuous education will allow the ensuring of greater adaptability of professional training to external needs, including those of the labour market. Earlier the education system was composed of the sum of knowledge decided and set in advance, skills and habits; at present the concept of competence has been coined that means an ability for professional behavior that does not result directly from the sum of skills but develops as a result of the match between the theory, received in an educational institution, and the production and technologies that are constantly changing.

An example of a competence is an ability to generate discourse, to speak the mother tongue correctly without thinking about grammar, cases, gender, numbers, etc.

3.1 Professional training and higher education in Russia

In modern Russia the key level of the system of professional training is *higher* education.

In the past years in connection with technology innovation, the demand for specialists has increased drastically. The pattern of demand for graduates of higher educational institutions is changing so drastically and so rapidly, that curricula and standards do not sometimes catch up with them. Employers, accordingly, have developed a somewhat nihilistic approach to certificates of higher education and while hiring specialists they trust the results of a ten-minute interview more than the graduation specialisation of the applicant that was worth of five years of studies⁴.

Based on the estimates of the Ministry for Education approximately one third of those graduated in Arts are at present completely employed in the internet – in the virtual professional field despite the fact that the Russian internet is only ten years old. They are not those people who use the internet in their work (there are practically one hundred per cent of those) but professionals who are occupied in this area (electronic mass media, web-designers, on-line sales, etc.). Thus vacuous complaints about people not working within their specialisation lose their sense. For example, a specialist who graduated from the Faculty of Physics and Mathematics and working in a commercial bank or in an ecological organization, does he work within his qualification? He certainly does, though he is not a mathematician in the strict meaning of this word.

At present national educational standards of the third age generation, with new lists of qualifications and specialisations of studies are being developed.

In 2010 Russia should practically and completely enter the common European education space whose frameworks were set by the Bologna declaration. The Bologna project has been developed by the European Union since the late 1980s and this is quite a considerable time distance within which certain stages have been passed. However, the current situation in the European education is fundamentally different compared to that of the year 2003 when Russia signed the Bologna declaration. At present the development of the *tuning* phase is going on within the Bologna project.

⁴ Public view expressed by the Director of the Regional Recruiting Center (direct interviews, spring 2007).

This is the stage of Bologna process within which the so-called "European Qualification Framework" is being formulated, in accordance with which the "National Qualification Frameworks" will be set. These concepts are based on the most important results of the ten-year common European process aimed at the elaboration of new principles of higher education. Until the 1980s the education at universities was mainly built on the basis of the formula "from task to result", and within the Bologna process the complete inversion took place – the task set for the curricula is based on the required result (the demand for certain specialists on a specific labour market).

At present Russian university teachers and administrators are much more aware of the Bologna system compared to the situation three years ago. Practically all the lecturers of the Russian institutions of higher education are aware of the main components of the Bologna process: the multi-level character of the education system, academic mobility of both lecturers and students, credit and modular structure of studies, and unified European Diploma Supplement, etc.

It is important that in Russia the higher education community, and the society as the whole are gradually coming to an understanding that there is no alternative to the "Bolognisation" of the Russian higher education system. It is significant to enter the process on a well-balanced and evolutionary basis. It is also necessary to identify invariants, those aspects common for different systems that would allow matching them. If the match is not achieved, the university graduates will lose their mobility and will be lost on the labour market which is getting more and more international and global every day. Without well-established common European procedures for recognizing certificates of education equivalent it is impossible to "read" and to assess within the credits system the specialisation and qualifications of a specialist who graduated from a higher education institution in another country.

A double-circuit system of higher professional education has been historically established in Russia. It comprises of two relatively independent educational technological layouts:

 "the Soviet" model, training on a continuous basis specialists within 500 specialities of higher professional education (the duration of training is 5 years as a rule); "the Bologna" model, providing for the implementation of the curricula within two successive stages of higher professional training with awarding the graduate the degree (qualification) of a "bachelor" (the length of training is 4 years) and "master" (the length of studies is 6 years) within 120 areas of training of higher professional education.

According to the Federal Ministry of Education and Science, approximately 50% of all Russian higher education institutions have been licensed for training bachelor students so far.

The practical implementation of these schemas is carried out along different trajectories in Russia:

- Independent trajectories of training within sub-systems of bachelors and masters (do not have any common parts);
- Combined trajectories of training at initial stages (from the first year of studies to the second or third) with a subsequent division of flows of specialists and bachelors at higher stages of studies that is favored by the national standards of higher professional education introduced in 2000.

The drawback of the current system of Russian higher education is the imperfection and halfway character of numerous administrative and legal decisions. The issue of bachelors' getting jobs has not been settled yet. Employers sometimes view them as half-educated people. The Bachelors degree is based on a comprehensive higher education concept. It is not shortened or defective, but complete allowing the graduate to successfully operate on the labour market as an actor but not as a leader, organizer or initiator of projects. The Bachelors' degree is a basis for higher education. At present training of bachelors and masters is envisaged in all the educational areas of higher professional education with the exception of Medicine and Information Security. And the master's course is not a prototype of today's "graduate" courses; it is not simply a completion of higher education but is in fact the first academic degree. The master's course is specialized; it can focus on research, creative activity or engineering. It does not necessarily immediately follow the bachelor's course in the way like today's fourth year is followed by the fifth. There could be a break between them during which a person while working realizes his needs for additional competences and chooses which institution and what master's course he would like to take. This is how an individual trajectory of education is built.

With the aim of the further development of the level of higher professional education, the Ministry for Education and Science of the Russian Federation has recently taken a number of important steps:

- An order was issued by the Ministry for Education and Science of March 22, 2006 No. 62 "On the curriculum for higher professional education of specialized training of masters" ensuring academic freedoms for HEIs in the elaboration of curricula of specialized training of masters as a kind of curricula aimed at the development of highly qualified specialists trained to perform different kinds of innovative activities;
- A decision was made by the accreditation board of the Russian Education Inspectorate on the facilitated procedure of accreditation of curricula for training bachelors licensed on the basis of similar accredited curricula for training specialists;
- The development of higher level professional education has been determined corresponding to the ideology of Bologna process by the Ministry as the most important index of the innovative potential of a HEI in the course of assessment of curricula implemented within the priority national project "Education";
- An objective was set for the new federal universities established in the South and Siberian federal districts to develop curricula for training bachelors and masters competitive with the best world ones.

Still a dual nature, with free fee-paying education for some students accessing to higher education after successfully passing exams and paying students⁵, the system of education in Russia is on the whole moving towards the fee-paying basis. This issue should be solved by the state so that the education system remains accessible for everybody, and it should be solved not within transfer to Bologna system but within the national social policy.

Postgraduate education. Two levels of professional education are identified which can be achieved within the framework of the post-graduate education of an individual: additional education within his/her speciality considered as personnel professional

⁵ According to UNESCO, quoting Valentina Ivanova, Deputy Chair from the Ministry of Education (Moscow Times of July 30, 2007), annually USD 520 million in bribes is paid in Russian Federation in higher education.

development, and acquiring a new occupation (retraining) that plays a special role during the restructuring of the economy. Depending on the specificity of the speciality and the level of retraining both kinds of training can be conducted as *in-company* (or *in-service*) and on a full-time basis. Professional training or fine tuning of the personnel is mainly conducted in company and/or with company(s) involvement. A comprehensive review of recent works concerning different aspects of in-company training is given in Bassanini, Booth & alii 2005.

Very little is known so far about the scale of retraining in Russian and Kaliningrad companies, about forms of retraining, what companies prefer – whether they employ a qualified specialist or train him/her in company. There is no official statistics regarding this issue. It is believed that among the countries of East Europe and CIS, Russia has very low indices concerning the volumes of training of employees, though assessments vary depending on types of employees (UNDP 2004 & 2005).

3.2 Theoretical framework and some empirical international studies

In connection with the interest to the issue of human capital quite a few works have been dedicated to the studies of different aspects of in-company training in the past years. In his research Becker (Becker 1964) pointed out an important distinction between the general human capital, i.e. knowledge and skills, that can be exploited in any company, and specific human capital, i.e. knowledge and skills, understood as assets specific, necessary only for working in a particular company (Williamson 1985 & 2000). Becker claimed that in connection with the issue of opportunism on the part of both the employee and the company the investment to the human capital should be fully paid for by the employee, while the costs of specialized training should be distributed between the employee and the company.

Several recent empirical studies (Booth & Bryan, 2002; Bassanini & alii 2005) have shown that training paid for by the company is widely spread, and most part of such training provides the so-called general skills, for example, specialized training programmes in Germany – apprenticeship programmes (see Acemoglu & Pischke 1998; Loewenstein & Spletzer 1998). It should also be noted that the company's financing the costs of training does not mean that it finally bears all the costs. These costs can to this or that extent be shifted onto the employee by means of reducing (or freezing) his/her salary during his/her training or later. In accordance with the standard

theory of human capital the curve of payment of a trained employee should be sharper: lower salary at the beginning of his/her work and faster growth later. However, the existing empirical research fails to confirm the fact that in-company training lowers the starting salary (Barron, Berger and alii, 1999).

Why do companies pay for the training assuming in advance that the trained employee can leave the company depriving it of the return on investment? Several theories were put forward in an attempt to explain this fact. Most of these theories are connected with different drawbacks of the labour market. In Loewenstein and Spletzer, 1998 the authors proposed a model of gaining rent that emerges as a result of peculiarities of performing work contracts. Within this model employers pay for the training since they benefit from it. The authors found an empirical confirmation to this result: the USA data show that training paid for by the previous employer gives higher benefit for the employee than the training paid for by the current employer. Based on the results of the research, one can conclude that retraining increases the inter-company mobility of the employee, but the uncertainty of the value of the acquired skills increases the variation of the potential salary that can result in the insufficient investment in this kind of training in Russia. Lazareva (Lazareva, 2006) used the results of the Rostovskii Metalurgishevskii Electro Zavot -RMEZ survey for the later years (2001—2003) having analyzed the influence of the structure of the Russian labour market on the incentives of employees and companies to investing in training.

The necessity of the state interference in the sphere of employees' in-company training is not self-evident and requires substantiating its effectiveness. A lot more attention should be paid to the policy of ensuring equal access to getting training (Bassanini, Booth & alii 2005). As a rule it is quite difficult to substantiate any regulation in this sphere by increasing effectiveness since the existing research does not provide enough empirical evidence of the fact that the current level of training in many countries is lower that the socially optimal. The difficulty of assessment is connected with the lack of data on public and private costs on training and on the return of the conducted training. The state policy connected with the equality of access to training is as a rule aimed at groups of employees who have fewer chances of getting training due to reasons not depending on them (sex, parents' level of education, etc).

In spite of insufficient substantiation of the necessity of the state interference, many countries apply different measures that create incentives or directly subsidize companies and employees' investment in training. Some of these measures are aimed

at allowing companies to gain return on their investment in employees training by means of reducing the number of trained employees leaving their jobs. These measures include different forms of work contracts (for example, a contract that envisages payment by the employee of the cost of his/her training in case of him/her leaving before a certain time after receiving training) that are quite common in the European countries.

Other measures of state policy include schemes of co-financing of training that supplement the companies and employees' expenses on training with budget subsidies or grants. For example, many countries introduced special taxes and grants as well as tax deduction for companies. Thus, in France quite a complex system of company taxes was adopted for financing programmes of professional training by state or sectoral organizations. At the same time England abandoned such taxes in order to stimulate individual initiative of employees and companies. Greenhalgh (Greenhalgh, 1999) estimated that the volume of in-company training is higher in France than in England. This can testify to a higher level of state interference on the training market. In Gorg and Strobl, 2005 the authors show that grants for in-company training introduced in Ireland stimulate private investment in training in companies. On the whole, however, there is a lack of research assessing the effectiveness of such measures of economic policy⁶.

The schemas of co-financing can also be aimed at individuals where tax deductions can be envisaged amounting at the cost of training, as well as vouchers, individual accounts for training etc. These measures are effective for eliminating limitations of liquidity and for solving the problem of equal access to training since they can be directed to certain groups of employees. However, there is an argument against this policy according to which it is not an effective means of redistribution of incomes in favor of low-qualified and low-income groups of population since the return on training for them is low. At the same time such policy does not undermine stimuli for work unlike the usual schemas of redistribution (benefits etc).

⁶ For further information see review by P. F. Anisimov "Professional training abroad" (http://www.ecsocman.edu.ru/db/msg/155324.html), in P. F. Anisimov, V. M. Denim and O.N. Oleynikova eds. 2001. This site also provides other publications about professional training and education in Russia and Europe. The project is a part of the European Training Foundation (www.etf.eu.int).

An important role of the state policy in the sphere of training lies in the distribution of information and elimination of the problem of information asymmetry connected with the fact that informal knowledge and skills received by an employee in a company is difficult to "sell" to other employers. In connection with this the concept of professional continuous training has been acquiring greater popularity in recent years. Continuous training presupposes getting knowledge, skills and competences by an individual during the whole period of his active working age. In order to stimulate continuous (life long) training, France for example and some other countries introduced a system of certification of competences. This system allows the employees to receive official certificates recognized by employers and educational institutions which certify knowledge and skills received in the course of work and in-company training. This system allows solving the problem of the asymmetry of information, to increase the area of application of new skills and knowledge and to ensure greater flexibility in individual training and career growth.

4 Directions of improvement of professional training and retraining of labour resources at the regional level: recommendations for Kaliningrad

At present different types of formal institutions of primary and secondary professional training (technical schools, colleges, vocational lyceums, and vocational colleges) implement a similar set of curricula. Thus, the dissolution of the structure of professional training is taking place. At the same time, due to the loss of close links with companies and organisations and ageing of the material and technical base of the institutions, they are sometimes unable to ensure training of personnel with the qualifications necessary for the modern economy and social sphere. Thus, the restructuring of the system of primary and secondary professional training is necessary.

It is also advisable to modernize the system of retraining and professional development of teachers – practitioners and training officers.

Under conditions of development of the knowledge economy in Russia, it will be necessary to elaborate mechanisms for overcoming the permanent lagging behind of the system of education from knowledge and technologies of current importance on which modern society is based.

It is necessary to provide conditions for the development of the federal and regional innovation system within which an integration of education, science and economy should be implemented.

In order to meet the growing needs of the economy of the Kaliningrad region for permanent professional development and retraining, it is necessary to modernize the infrastructure of continuous professional training and to increase the accessibility of various forms of training, covering the whole period of professional activity.

For the development of the modern system of continuous professional training in the region it is advisable to do the following:

- To increase the number of organizations providing educational services in the sphere of professional training and training of personnel;
- To create conditions for distribution of public and professional mechanisms of assessment and accreditation of curricula;
- To enhance the role of public institutions in the administration of education;
- To elaborate the regional system of assessment of quality of education received by a citizen and of the implemented curricula;
- To create conditions for ensuring educational mobility of the trainees.

Modern higher education requires the elaboration of fundamentally new approaches to the organization of education ensuring its universality, fundamental character and practical orientation.

A most important element of the complex modernization of the Kaliningrad sphere of higher education is the introduction of the following levels of higher education: bachelor's course (first level), master's course or specialist training on the basis of the bachelor's course. This system is to become a basis for the development of the structure of recognized qualifications and up-to-date curricula corresponding to the demands of the modern society. Since the regional system of higher and post-graduate education faces objectives connected not only with meeting current needs of the economy in qualified specialists, but also with the integration of the Russian Federation in the world education space, the introduction of the bachelor and master's levels will allow to significantly enlarge the export of educational services.

Along with the absolute significance of the further improvement of mechanisms for enhancing the efficiency of spending budget funds in the system of education, it is advisable to create mechanisms and stimuli for investment of private and corporate funds in it. The development of such mechanisms and stimuli will not only promote improvement of the general financial and economic situation within the system of education, but it will provide conditions for the growth of its sensitivity to the needs of the society and labour market, which will undoubtedly have a positive impact on the quality of education process.

At the same time creation of favorable legal and economic conditions for private investment in the education sphere should be accompanied by the elaboration and implementation of mechanisms of protection of state and municipal educational institutions from activities aimed at their ungrounded privatization.

In order to increase the investment attractiveness of the education sphere it is advisable to do the following:

- To create conditions for increasing economic independence of educational institutions by means of increasing the variety of organisational and legal forms of educational institutions;
- To create conditions for lowering risks connected with investment in education by means of development of public institutions of administration of education;
- To ensure introduction of new principles of financing of institutions of professional training and schools;
- To ensure greater transparency for founders of processes of financial and economic administration of educational institutions;
- To create conditions for enhancing quality of administration of educational institutions.

Under conditions of global competition the modern system of education should ensure the development of effective market of educational services in accordance with the demands of the economy in qualified specialists on the basis of constant monitoring of the labour market. Qualified specialists are valued most highly. The construction of the education process on the basis of a "bottom-up" approach going from the assumed result to setting an objective means that HEIs keep in touch with employers who make an order for education. This is not an order from individual companies but rather from associations of employers who consider social and team interests. Such an order

reflects most precisely the demand of the labour market unlike the standard that is developed by a university lecturer.

Attaining the following objectives accompanying the implementation of the priority directions of education development plays an important role in the development of the system of education:

- Further computerization of the system of education, creation of conditions for development of the information and technological basis of educational institutions, for enhancing information competences of educators, for development of modern teaching and learning techniques on the basis of information technologies;
- Reequipping higher education institutions via centers of open access;
- Creation of institutional mechanisms of improvement of the system of providing educational services in the Kaliningrad region for foreign students, first of all from the Baltic states and Poland and from the CIS;
- Creation of a modern system of monitoring and statistics of education in accordance with international standards.

Development of modern forms of students' self-governance as a special form of initiative, innovative, independent, and responsible activity of students aimed at solving important problems of youth's every-day activities, development of its social activity, and support of social initiatives. In the light of Russia's joining the Bologna agreement the development of student self-governance will promote the integration of higher and secondary professional training in the European education space, as well as international mobility of the Russian youth.

High-quality education is a basis for the future regional development. The inertia of the current and, by the way, quite dynamic development of the region – is the result of a deep restructuring of economy which took place in 1993-98 according under the most strict scenario of those available (liquidation or fundamental change of profile of many industrial enterprises, particularly former military-industrial complex, breaking of cooperative links with the other RF regions and new states). The territory survived and is developing a new industrial and a more service profile. However, this positive trend will be exhausted already in 2-3 years unless a new quality and an additional impulse to the regional development is given. In order to organize further long-term dynamic and non-conflict development, the region needs to establish a kind of a "team" of

highly-qualified analysts and managers with a profound knowledge of the specific features of both the Kaliningrad region, and its near and far neighbours. The level of the necessary training of such specialists is at least of the –MBA and MPA⁷ level, efficiently blending together the European and Russian experience. In this connection it is expedient to form an effective, permanently renewing educational environment in the Kaliningrad region, probably in the frames of establishing a specialized university consortium for post-graduate education.

For the purpose of aiding with the modernization of the postgraduate economic education in the Kaliningrad region – the key element of the professional education system in the region in 2005-2007 an European project "Strengthening and Developing Business and Administrative Education in Kaliningrad region" is being implemented (Brunat and alii 2007). This project is oriented to the establishment of the necessary creative and innovative educational environment on MBA/MPA programmes in one of the problem Russian regions.

In the frameworks of the project, financed by the EU, there was completed a series of technical workshops on participatory teaching methods, as well as 38 new learning courses covering different aspects of business and public administration. During the courses development phase the knowledge and skills of teachers and researchers was deployed from Moscow, Kaliningrad and European universities and institutes. 60 teachers and developers of the learning courses are training 320 Kaliningraders on the basis of the progressive European and Russian practices on topics with the object of establishing forms of public-private partnership (PPP) and corporate social responsibility. It is not just an attempt to hand over modern knowledge in public management and business to the Kaliningrad region. It is also providing one possible basis for managing the complexity and high costs and promoting a faster bottom-up regional development for the region as a whole (Brunat 2006b; Brunat & Klepach 2007).

In order to increase the effectiveness of the training of trainers and to provide a basis for their future joint work there were formed united groups consisting of entrepreneurs, state and municipal servants as well as NGO's representatives. For strengthening the synergetic effect at the concluding stage of the training for trainers courses the topics

⁷ Master of Business Administration mainly for business managers and Master of Public Administration mainly for civil servants.

of the final papers on several large PPP projects were also defined. The main themes of these final papers and works are as follows:

-development of Term of References (ToRs) on the concessions for the organisation of the interregional (inter-district) transport connections both for the motor and railway modes of transport;

-development of concessionary conditions for the development of the near-port territories;

-development of the conditions of concession for the development of some costal territories (marines, recreation zones);

-development of complex programmes on providing the support (development) to some depressed territories of the regions;

-development of programmes on small power engineering development and on mastering the alternative sources of energy;

- -development of the energy-saving programme;
- -development of the conditions for the attraction and organisation of guided labour resource migration to the region;
 - -mortgage house building;
 - -organisation of the professional training;
 - -public-private partnership in the fight against corruption and shadow economy;
- -realization of other scaled social and environmental programmes for Kaliningrad regional development.

5 Requirements of a competitive knowledge in the modern world: complexities and relevance for the Russian economy of rent? Some elements for further research

To avoid the risks of a hyper specialised economy, captured by the natural resources with a highly rent seeking profile and all possible negative aspects of a *Dutch Disease*, Russian and foreign economists are more and more concerned by the necessity to support innovation, services and to diversity the Russian economy towards a more knowledge based society (Mau 2003; UNDP 2004). The (political) challenge means clearly a more post-industrial and a less "oil and gas" profile. This debate focusing on innovation and modernity is recurrent in Russia and is raised as well in the Kaliningrad oblast.

From the quantitative and qualitative points of view, the end of the 20th – beginning of the 21st century was featured by economic growth that was mainly determined by the large-scale application of the results of the scientific and technical progress, and consequent intellectualization of the main factors of production. For the last two hundred years, neo-classical economics has recognised only two factors of production: labour and capital. This is now changing. Information and knowledge is replacing capital and energy as the primary wealth-creating assets, just as the latter two replaced land and labour 200 years ago. In addition, technological developments in the 20th century have transformed the majority of wealth-creating work from physically-based to "knowledge-based". Technology and knowledge are now key factors of production. With increased mobility of information and the global work force, knowledge and expertise can be transported instantaneously around the world, and any advantage gained by one company can be eliminated by competitive improvements overnight. The only comparative advantage a company will enjoy will be its process of innovation-combining market and technology know-how with the creative talents of knowledge workers to solve a constant stream of competitiveness problems-and its ability to derive value from information. We are now an information society in a knowledge economy where knowledge management is essential (OECD 1996).

The intensity and scale of technological changes that have taken place in the world exceed the bravest forecasts. A new type of technological and economic setup, the so-called knowledge economy⁸, has developed and is beginning to prevail in all developed countries and more and more in emerging economies. Information and knowledge play the role of a key production resource in it (Cowan & alii 2000; OECD 1996 & 2002; Chartrand 2006). The knowledge economy and diversification of the service sphere are

⁸ The knowledge economy is understood as production and services based on knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance, as well as rapid obsolescence. The key component of a knowledge economy is a greater reliance on intellectual capabilities than on physical inputs or natural resources. Usually, this expansion is driven by the emergence of new industries where the most recent technological advances have raised productivity. The debate raises also over whether new forms of work that embody technological change have generated more worker autonomy or greater managerial control. The distributional consequences of a knowledge-based economy is essential with respect very often to growing inequality in wages and high-quality jobs (Powell & Snellman 2004). The knowledge based economy is also a situation focusing on institutions of the economy and relationships where value lies increasingly in new ideas, projects, financing, software and services. An economy characterised by the recognition of knowledge as a source of competitiveness, including the increasing importance of science, research, technology and innovation in knowledge creation, where the use of computers and the Internet is generating, share and apply knowledge (Rooney & alii 2003 Brunat & alii 2004; UNDP 2004; World Bank 2006 & 2007).

becoming the basis for the economic systems in the 21st century. The basis for achieving the world leadership by the USA, Japan and West Europe countries in the 1990s was an exploitation of intellectual achievements and accelerated development of modern industries and technologies supplemented by deep diversification of the service industry. The development of both the service industry and knowledge economy is closely connected and to a great extent depends on such qualitative indices of the human capital factor as education, social mobility and general culture of the population that to a great extent was determined by the quality of professional training of people.

The development of the new intellectual-resource driven economic system following the purely industrial production based system, drastically increases the requirements for the quality and level of professional training of labour resources that are trained within industrial society. In the foreseeable future the mobility of human resources, the possibilities of rapid professional retraining and actualization of the staff's skills and knowledge, are becoming more important factors than the high rates of increase of the material production potential. It is also worth noting that macroeconomic indices (e.g., GDP) that have traditionally served for comparing developed countries are not adequate instruments for measuring economic progress; they cease to reflect qualitative aspects of the economic dynamics of the national states. The economic growth provided only due to extensive factors does not any longer guarantee balanced and sustainable development of the country in the future, nor can it enhance its competitiveness, or improve its position within the system of international labour division. The potential competitiveness of countries and individual regions of the world is determined by the level of exploitation of new technologies, the state of the macroeconomic environment, the quality of state and public institutions (Rooney & alii 2003) and good and modern government governance practices (UN Global Forum on Reinventing Government 2007). Thereafter, the criterion of success of economic development of individual countries is the index of growth of produced added value (value added by treatment) reflecting the quality and dynamics of the sectoral structure of the economy, of its evolution from simple forms of production (with minimal input of human capital and high natural rent) towards deeper forms of transformation of production factors. In this connection, the issues regarding the quality and level of professional training of labour resources are gaining a special urgency.

Sociological and economic research shows that in the course of development of the post-industrial society the institutional bodies (understood as long term organisational structures) are being gradually replaced by project ones, education and research priorities deeply linked with business activities, and this trend is sgetting more sustainable (Drucker 1993; Biltchak & alii 2000; Mau 2003; Brunat & alii 2004). As an example it can be noted that earlier the composition of academic subject nomenclatures or departmental specialisations of higher educational institutions were almost permanent. Students used to be trained in the same professions (with occasional updating of curricula) for many decades. It was quite difficult to open a new or to close an established department. The situation has changed drastically in the past decade. Since projects run within a limited period of time allowing flexibility and quick reaction, it is impossible to establish a fixed and unchangeable set of subjects and professions within the project approach. The demand for specialists is determined by the rapidly changing market environment. Under these conditions education is ceasing to be a clear-cut stage of human life after which a person can be considered a fullyfledged professional able to realize during his lifetime all the knowledge and skills received in his youth. For a successful career education is also about gaining a project character. A person during his life should improve himself adjusting to the rapidly changing circumstances. Thus, we have the concept of life-long-learning. The European Qualification Framework that is being developed within the Bologna process is aiming at envisaging what competences are necessary for a person at different stages of his life and career (Brunat 2006 b).

It is generally recognized that the use of advanced knowledge and innovative technologies improves the results of activities of economic entities much more than activization of any other production factor (Becker 1993; Drucker 1993). In this connection a complete system of retraining of labour resources is a necessary prerequisite for ensuring the sustainability of economic growth, especially during the periods of considerable technological changes, deep restructuring of the economy including a diversification of the production and exports..

6 Conclusions: a path forward in Kaliningrad?

The processes of the transformation of the economy and, as a result of this, the arising new challenges connected with the necessity of the human potential quality improvement become particularly apparent in isolated communities/territories, and the Kaliningrad region is among them. The most efficient way to liquidate the existing misbalance in the region and to diminish the high transaction coats, is to re-establish an institutional basis for the continuous education, training and retraining of adults during their whole life. It is necessary to do it by uniting the efforts of the regional community on the basis of public-private partnership principles (co-financing, system projecting and programme-target management, and cooperation at the national and international levels). Fast dissemination of actual knowledge and modern technologies into the sphere of the initial professional education (college and university level) will become an additional consequence of the implementation of the continuous education system for adults in the region (see McAllister 1997; Biltchak & alii 2000; Brunat 2006a).

There are essential preconditions for the successful solving of the problems of the professional training and retraining of the labour resources. The hindering factors are the disconnection of the academic community, weak technical basis of the higher educational institutions and insufficient use of active teaching methods. It is also of crucial importance to better link the academic sphere with business and the public sector, in order to adapt and modernize the supply of higher education, post-graduate education and the quality of expertise for creating and enlarging the demand of knowledge, innovation and service. This could contribute to attracting investment, and to sustaining the economic growth to be then translated to an attractive human development (Brunat 2004).

Annexe

Kaliningrad Special Economic Zone

Old SEZ based on customs benefits (1996)

- The enterprises, which have been registered in the Kaliningrad region before April 2006, may use these customs benefits
- Foreign goods imported in the region are exempted from customs duties and taxies
- Goods imported from Kaliningrad to other regions of Russia are exempted from custom duties if:
- The commodity classification code has changed at the level of any of the first four digits
- The share of the added value has reached at least 30 %

The old SEZ will function for 10 years, i.e. until the end of March 2016

- New SEZ based on tax benefits (2006)
- New firms conducting a capital investment at least 150 million RUR (USD 5.3 million) in the region's production over 3 years may use the tax benefits
- Tax benefits offered for an investor:
 Corporate income tax and property tax are:
 - 0 % for the first 6 years following investment
 - 50 % reduction from tax for the years 7 - 12 after the investment

The law will be in force for 25 years, i.e. until the end of March 2031 including guarantees to the investors provided by the law

Sources: F. Lapin 2006, K. Liuhto 2007

References

Acemoglu D., Pischke J.S., (1998), Why Do Firms Train? Theory and Evidence, The Quarterly Journal of Economics. Vol. 112. No. 1. pp. 79–119

Administration of Kaliningrad Region, (2004), The Kaliningrad region: strategy of cooperation, Olma Press, Moscow, 320 p.

Administration of Kaliningrad Region, (2003), Strategy of social and economic development of the Kaliningrad region as a region of the cooperation to 2010, Kaliningrad, 98 p.

Anisimov P.F., (2001), "Professional training abroad", in P. F. Anisimov, V. M. Denim and O.N. Oleynikova eds. (http://www.ecsocman.edu.ru/db/msq/155324.html)

Arora A., Gambardella A., (1994), The changing technology of technological change: general and abstract knowledge and the division of innovative labour, Research Policy, Vol. 23, pp. 523-532

Barron J., Berger M., Black D., (1999), Do Workers Pay for Job Training, The Journal of Human Resources, Spring 1999, Vol. 34, No. 2

Bassanini A., Booth A., Brunello G., De Paola M., Leuven E., (2005), Workplace Training in Europe, IZA Discussion Paper No. 1640

Baxendale J., (2001), EU-Russia relations: Is 2001 a turning point for Kaliningrad?, European Foreign Affairs Review, №6,p. 437-464

Becker G. (1964 and 1993rd ed.), Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education.. Chicago, University of Chicago Press

Biltchak V., (2007), National and foreign direct investment in Brunat E. and alii (eds), Integrated Cross-Modular Learning Programme in Business and Public Administration: towards oriented regional programme, vol. 1, pp. 45 - 69, I. Kant State University of Russia Publishing House, Kaliningrad.

Biltchak V., Brunat E., Klemeshev A. eds., (2000), The Role and Influence of the Higher Education System on Development of Business, Kaliningrad State University Press, Russia, 240 p.

Biltchak V., Samson I., Fedorov G., (1999), Kaliningrad pole of integration. Strategy of the development of the exclave Russian region: Monograph / Edited by G. Fedorov. Kaliningrad, 686 p.

Booth A.L., Bryan M.L., (2002), Who Pays for General Training? New Evidence for British Men and Women, IZA Discussion Paper No. 486, April

Brunat E. and alii eds, (2007), Integrated Cross-Modular Learning Programme in Business and Public Administration: towards oriented regional programme, 2 volumes, 490 p. and 332 p., I. Kant State University of Russia Publishing House, Kaliningrad.

Brunat E., (2006a), The importance of higher education to attract investment and contribute to sustain economic growth and competitiveness in Kaliningrad, Expert Article no. 48, Baltic Rim Economies, bimonthly review no. 3, Turku School of Economics, Finland, June

Brunat E., (2006b) The EU standards of higher education: a reference for the managers in Kaliningrad?, Komsomolskaia Pravda, June 6

Brunat E., (2004), Giving Growth a Human Face: Challenges for a Sustainable Development, in Achieving the Millennium Development Goals: Approaches and Strategies, book published by UNDP, Minsk, Belarus, December, pp 141 – 153

Brunat E. and alii, (2004), National Innovation System: the Basis of Russia's Knowledge Economy in 'Towards a Knowledge Based Society', Human Development Report, Russian Federation 2004, UNDP, November

Brunat E., Greffe X., Mau V., Novikov V., Samson I. eds., (2004), Common Economic Space and the perspectives of the EU-Russia relations, Izdatelstvo "Delo", Moscow, 240 p.

Brunat E., Klepach A., (2007), Productivity and Competitiveness Challenges for the Russian Economy: Room for a More Proactive Policy?, in Jean-François Huchet, Xavier Richet, Joël Ruet eds (2007) Globalization in China, India and Russia, Published by Academic Foundation in association with Centre de Sciences Humaines, New Delhi and University of Paris III Sorbonne Nouvelle, 364 p.

Chartrand H.H. (2006), Ideological evolution: the competitiveness of Nations in globa knowledge-based economy, PhD, University of Saskatchewan, Canada

Coase R., (1998), The New Institutional Economics, The American Economic Review, Volume 88, Issue 2, May 1998, pp. 72-74

Dosi G. and alii eds., (1988) Technical Change and Economic Theory. London and New York. Pinter

Drucker P., (1993), Post-Capitalist Society, Oxford: Butterworth Heinemann

Federal Target Programme «Development of the Kaliningrad region to 2010». http://gov.kaliningrad.ru/index.php?sgrp=stat&idn=federalprg.

Fedorov G. ed., (2003), The Kaliningrad region surrounded by the EU: the role of the region in the all-European integration, Conference "Europe and Russia: borders which unite". Kaliningrad, 241 p.

Fedorov G., Gareev T., Zhdanov V., (2005), New economy of the Kaliningrad region, Voprosii Economikii - №2., Moscow

Fedorov G., Klopetskiy A., (2000), The Kaliningrad region: region of cooperation. Monograph, Yantarnii Skaz, Kaliningrad, 736 p.

Fedorov G., Tsikel M., Zhdanov V., (2003), The efficiency and modernization of the SEZ mechanism in the Kaliningrad region, Kaliningrad State University, 88 p.

Görg H., Strobl E., (2005), Do Government Subsidies Stimulate Training Expenditure? Microeconometric Evidence from Plant Level Data, IZA Discussion Paper No. 1606

Greenhalgh C., (1999), Adult Vocational Training and Government Policy in France and Britain, Oxford Review of Economic Policy, Vol. 15. No. 1, Spring

Hayek F.A., (1937), Economics and Knowledge, Economica, New Series, Volume 4, Issue 13, February pp.33-54

Inkpen A., Ramaswamy K., (2006), Global strategy, Creating and Sustaining Advantage across Borders, Oxford University Press, 247 p.

Klemeshev A., Fedorov G., (2004), From the isolated exclave to the "corridor of development". Alternatives of the Russian exclave in the Baltic region, KSU, 253 p.

Klemeshev A., Kozlov S., Fedorov G., (2003), Special territory of Russia, Kaliningrad, Kaliningrad State University, 360 p.

Lapin F., (2006), Development of the Kaliningrad Region – New Perspectives, Expert Article no. 38, Baltic Rim Economies, bimonthly review no. 2, Turku School of Economics, Finland, June

Lazareva O., (2006) On the job training in Russia: major factors and outcome, Scientific Works of the Russian Economic Research Programme, № 06/05

Liutho K., (2007), Kaliningrad an attractive location of EU investors, electronic publications of Pan-European Institute 1/2007, Turku School of Economics, Finland

Liutho K., (2005), The economic impact of the EU enlargement and forthcoming change in the legislation of the special economic zone upon the Kaliningrad region, RECEP, Moscow

Loewenstein M.A., Spletzer J.R., (1998), Dividing the Costs and Returns to General Training, Journal of Labour Economics, 16(1), pp. 142–171, January

Lorenzen M. ed., (2007), Industry and Innovation, Department of Industrial Economics and Strategy, Copenhagen Business School, Journal of Industry, Denmark, February

Mau V., (2003), Post-communist Russia in the Post-industrial World: The Quest for Catching-up Policy, Post-Communist Economies, Volume 15, Number 3, September, pp. 313-330

McAllister I. ed., (1997), Working with the region, University Partnerships, Regional Cooperation, Sustainable Development, Henson College, Dalhousie Univ., Canada, 466 p.

North D.C., (1971), Institutional Change and Economic Development, The Journal of Economic History, Volume 31, Issue 1, The Tasks of Economic History, March, pp.118-125

Organization for Economic Cooperation and Development, (2002), Global Economic Forum on the Knowledge Economy, Paris, www.oecd.org

Organization for Economic Cooperation and Development, (1996), The Knowledge-Based Economy, Paris

Porter M. (1996), Competitive advantage, agglomeration economies, and regional policy, International Regional Science Review, Vol.19, №1-2, p. 85-94

Powell W.W., Snellman K., (2004), The Knowledge Economy, Annual Review of Sociology, Vol. 30, pp. 199-220, August

Regional Committee of Statistics, (2007), Social and economic situation of the Kaliningrad region in 2006, Kaliningrad, 184 p.

Regional Development Agency, (2005), The Kaliningrad region: new challenges, new chances. The mechanism of the development of the unique region, Kaliningrad, 504 p.

Regional Development Agency, (2002), The Kaliningrad region. Features of economy and entrepreneurship, Kaliningrad, 432 p.

RF Federal Law, (2006), "On changes to the Federal Law on Special Economic Zone in the Kaliningrad region and some RF FL", published in Rossiskaya Gazeta, January 10

RF Federal Law, (1996), "On the Special Economic Zone in the Kaliningrad region, January 22, published in the Kaliningrad Pravda, 1996, January 31.

Richardson H., Townroe P., (1986), Regional policies in developing countries, Handbook of regional and urban economics, in P.Nijkamp ed., Elsevier Science Publishers BV, Vol. 1,p. 647-678.

Rooney D., Hearn G., Mandeville T. & Joseph R., (2003), Public Policy in Knowledge-Based Economies: Foundations and Frameworks, Cheltenham, Edward Elgar

Rosenberg N., (1974), Science, Invention and Economic Growth, The Economic Journal, Volume 84, Issue 333, March, pp. 90-108

Samson I. ed. (2000), The Kaliningrad region 2010: Potential, concepts and perspectives, University Pierre Mendès France, Grenoble, 343 p.

Smorodinskaya N., (2006), Kaliningrad region: its prospects for economic modernization and the role of EU – Russia rapprochement, Indeunis, www.wiiw.ac.at and www.cordis.lu, 41 p.

State Committee of Statistics, (2007), Regions of Russia: Collected statistics, 2 volumes, Volume 1, 615 p., Moscow

State Committee of Statistics, (2007), Russian statistical year-book: 2006, Moscow State Committee of Statistics, (2006), Small business in Russia, Moscow

Storper M., (1992), The Limitations to Globalization: Technology Districts and International Trade, Economic Geography, Volume 68, Issue 1, January, pp. 60-93

Tidd J., Bessand J., Pavitt K., (2006), Management de l'Innovation, de Boeck ed., 616 p.

Timmermann X., (2002), The Kaliningrad region as a pilot region for the establishment of the cooperation between the EU and Russia, Committee «Russia in the united Europe», Moscow, 72 p.

United Nations, (2007), 7th Global Forum on Reinventing Government, Building Trust in Government, Vienna, June,

http://www.7thglobalforum.org/Forum_Information/background.htm

UNDP (2004 & 2005), Human Development Report, Russian Federation, Moscow

Vandenberg P., North D.C., Williamson O.E., (1997), On institutions: compliments and differences, SOAS Economic Digest (SED), № 1

Williamson O.E., (2000), The New Institutional Economics: Taking Stock, Looking Ahead , Journal of Economic Literature, Vol. 38, № 3–, p. 595-613

Williamson O.E., (1985), The economic institutions of capitalism, Free Press, New York

World Bank, (2007), K4D, Knowledge for Development Programme, www.worldbank.org

World Bank, (2006) KAM, Knowledge Assessment Technology Management www.worldbank.org

Zhdanov V., (2005), Investment and industrial policy in the region, Kaliningrad State University, 377 p.

Zhdanov V., Kuznecova O., Mau V. and alii, (2002), Problem of economic development of the Kaliningrad region as an exclave region of Russia, Institute for the Economy in Transition, Moscow, 250 p.

Electronic publications of the Pan-European Institute ISSN 1795-5076

Freely available at http://www.tse.fi/pei/pub

2007

14/2007

Dezhina, Irina – Zashev. Peeter

Linkages in innovation system in Russia – Current status and opportunities for Russian-Finnish collaboration

13/2007

Vahtra, Peeter

Expansion or Exodus? The new leaders among the Russian TNCs

12/2007

Kärnä. Veikko

The Russian mining industry in transition

11/2007

Männistö, Marika

Venäjän uudet erityistalousalueet – Odotukset ja mahdollisuudet

10/2007

Kuznetsov, Alexei V.

Prospects of various types of Russian transnational corporations (TNCs)

9/2007

Uiboupin, Janek

Cross-border cooperation and economic development in border regions of Western Ukraine

8/2007

Liuhto, Kari (ed.)

External economic relations of Belarus

7/2007

Kaartemo, Valtteri

The motives of Chinese foreign investments in the Baltic sea region

6/2007

Vahtra, Peeter - Pelto, Elina (eds)

The Future Competitiveness of the EU and Its Eastern Neighbours

5/2007

Lorentz, Harri

Finnish industrial companies' supply network cooperation and performance in Russia

4/2007

Liuhto, Kari

A future role of foreign firms in Russia's strategic industries

3/2007

Lisitsyn, Nikita

Technological cooperation between Finland and Russia: Example of technology parks in St. Petersburg

2/2007

Avdasheva, Svetlana

Is optimal industrial policy possible for Russia? Implications from value chain concept

1/2007

Liuhto, Kari

Kaliningrad, an attractive location for EU Investors

2006

11/2006

Lorentz, Harri

Food supply chains in Ukraine and Kazakhstan

10/2006

Hannula, Kaisa-Kerttu

Doing business in Ukraine - Experiences of two Finnish companies

9/2006

Uiboupin, Janek

Industrial clusters and regional development in Ukraine: the implications of foreign direct investments and trade

8/2006

Avdasheva, Svetlana

Russian furniture industry: Enterprises' upgrading from the value-chain Theory perspectives

7/2006

Food industry value chains in Leningrad oblast and Krasnodar krai (Finngrain – Vilja-alan yhteistyöryhmä)

6/2006

Zashev, Peter – Vahtra, Peeter

Kazakhstan as a Business Opportunity – Industrial Clusters and Regional Development

5/2006

Keskitalo, Päivi

Internationalisation of Finnish Environmental Technology to Poland

4/2006

Heiskanen, Katja

Internationalisation of Finnish Small and Medium-sized Companies towards the New EU Member States in the Baltic Sea Region

3/2006

Zashev, Peter

Belarus as a Business Opportunity?

2/2006

Johansson, Linda

International Business Operations of Companies with Russian Involvement in Southwestern Finland

1/2006

Vahtra, Peeter

Expansion or Exodus? - Trends and Developments in Foreign Investments of Russia's Largest Industrial Enterprises

2005

10/2005

Hannula, Kaisa-Kerttu

Host Country Determinants and Investment Motives of Finnish FDI in the Publishing Sectors of Bulgaria and Romania

9/2005

Vahtra, Peeter

Russian Investments in the CIS - Scope, Motivations and Leverage

8/2005

Liuhto, Kari - Zashev, Peter - Heiskanen, Katja (ed.)

The Approaching EU Accession of Bulgaria and Romania - New Opportunities for EU Enterprises

7/2005

Liuhto, Kari (ed.)

Kaliningrad 2020: Its Future Competitiveness and Role in the Baltic Sea Economic Region

6/2005

Levando, Dmitry

Investigation into the Structure of Reasoning in Economics

5/2005

Vahtra, Peeter - Pirilä, Hannu - Hietanen, Satu

ICT-sektori Baltiassa ja Puolassa

4/2005

Zashev, Peter

Between the Co-competitors: Belarus, Moldova and Ukraine Economic Integration in a Bi-polar Europe

3/2005

Pirilä, Hannu

Baltian ja Puolan taloudet vuonna 2004 - EU-jäsenyyden ja nopean talouskasvun vuosi

2/2005 **Liuhto, Kari - Vincze, Zsuzsanna (ed.)** Wider Europe

1/2005

Lisitsyn, Nikita E. - Sutyrin, Sergei F. - Trofimenko, Olga Y. - Vorobieva, Irina V. Outward Internationalisation of Russian Leading Telecom Companies



www.tse.fi/pei/pub