State Institute of Vocational Education and Training
Slovak National Observatory of Vocational Education and Training

Current Status of Vocational Education and Training in Slovakia

(Vocational Education and Training on the Verge of the Millennium)

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with the support of
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Table of contents

1. Socio-economic background

The in-depth analysis of the socio-economic development in the 1990s was provided within the 2000 SNO National Report. Hence, just the most important data and characteristics showing the trends important for VET are to be summarised within this chapter.

1.1 Economic developments

Table 1
1990-1999 Basic Macroeconomic Indicators (1990-1992 as Part of Czechoslovakia)

Indicator/Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP	-2.5	-14.6	-6.5	-3.7	4.9	6.7	6.2	6.2	4.1	1.9	2.2
Unemployment rate	1.5	11.8	10.4	14.4	14.6	13.1	12.8	12.5	15.6	19.2	17,9
Inflation Rate	-	61.2	10.1	23.2	13.5	9.9	5.8	6.1	6.7	10.6	12.0

Source: Statistical Office of SR, Tabled by author
Note: GDP, constant prices 1995, annual change (%) ESA methodology since 1995
Registered Unemployment Rate as of Dec 31st (%), Annual Average Inflation Rate – Consumer Prices (% change)

Three periods of development can be identified from Table 1. It is the period of the first steps of transformation from a controlled economy to a market economy 1990-1993 with the decrease in GDP and extensive growth in unemployment as a consequence of the collapse of eastern markets. The years between 1994 and 1998 were characterised by substantial growth in the GDP, a stable rate of inflation, and a relatively stable rate of unemployment. Compared to most other candidate countries, there were quite good macroeconomic indicators in the 1994-1998 period. However, these were not just signs of better utilisation of industrial capacities. Instead of protection of competitive economic environment, privatisation by means of politics, for the benefit of selected Slovak owners, accompanied by politically-biased loan policy of banks and expansive fiscal policy were promoted. In fact, a dead investment market and an ineffective banking sector failed to create conditions for the sustainable healthy growth of companies. High interest rates and low accessibility to credit in general held back the development of small and medium-sized enterprises (SME). Potential investors were also discouraged by the highest tax and levy charges of all the countries in central Europe. By the year 1999 the positive trend in selected macroeconomic data saw a reversal, indicated to some extent by the 1998 results. The economic turmoil caused by accumulated problems and politically-biased reaction, predominantly of political privatisers of 1994-1998 ruling coalition after the lost election in September ‘98, worsened the situation dramatically. The fourth quarter 1998 GDP fell below 1% compared to third quarter 1998 GDP of over 5% and the unemployment started to grow sharply and develop into a major social problem.
Dismissing redundant employees and closing unattractive and unsuccessful companies led to a severe growth in unemployment, leaving Slovakia with the highest rate of unemployment among OECD member nations.

Table 2
1990 – 1999 Labour Market Indicators - Unemployment

Indicator /Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
AA number of registered unemployed	14 296	169059	285511	323 216	366 168	349 821	324278	336661	379466	485 202	517925
AA registered unemployment rate (%)	0,6	6,6	11,4	12,7	14,4	13,8	12,6	12,9	13,7	17,3	18,3
LFS unempl. rate (%)	-	-	-	-	13,7	13,1	11,3	11,8	12,5	16,2	18,6
AA number of benefited unemployed	7 996	124 624	119 205	112 409	91 143	76 590	85 241	83 939	102 491	130 343	111567

Source: National Labour Office and Statistical Office of the SR (LFS)
Note: AA – Average annual

Increasing numbers of unemployed exhausted labour market policy resources reaching the bottom in 1999 with almost dead active labour market policies. There was a revival in 2000, partly boosted by newly introduced, and state budget-financed,"publicly useful works"that pointed to a turn toward better provision of active policy tools in the early '00s.

Table 3
1997 – 2000 Labour Market Policy Expenditures

LMP expenditures in mill SKK/ Year	1997	1998	1999	2000
Total expenditure	7 088	7 774	7 766	7 752
Passive Policy	3 989	5 485	7292	6 182
Active Policy	3 099	2 289	474	1 570
Active Policy share in LMP (%)	43,7	29,4	6,1	20,3

Source: Ministry of Labour, Social Affairs and the Family

The new government had to implement policies fighting macroeconomic imbalances (predominantly the twin deficits of current account and public finance), with the most important "rescue package" adopted in May 1999 followed by partial deregulation of prices of natural monopolies in January 2000.
In 1999, the public sector incurred a consolidated deficit of SKK 29.211 billion (EUR680m), representing 3.7% of the GDP in International Monetary Fund terms, compared to 4.6% in 1998. In 2000, the deficit was SKK 30.429 billion representing 3.4% of the GDP (6.1% in OECD standard ESA 95 methodology).
The price that had to be paid for the soft landing of the economy was a reduction in the growth of the GDP, a decline in consumption and a decline in the investment in goods and services for possible expansion in the future.

Table 4
Cooling Phase of the Economy:
Selected Macroeconomic Indicators (in Billions of SKK* with Annual Index of Change)

Indicator	1997		1998		1999		2000	
	SKK	Index	SKK	Index	SKK	Index	SKK	Index
GDP	615.9	6,2	641.1	4,1	653.3	1,9	667.7	2.2
Domestic demand	649.3	4,3	710.8	9,5	678.1	-4,8	669.3	-1.3
Final consumption of households	317.0	5,6	333.8	5,3	334.2	0,1	322.7	-3.4
Final consumption of government	133.7	4,0	139.1	4,0	129.5	-6,9	128.3	-0.9
Imports of goods and services	419.7	17,6	503.0	12,2	472.8	3,6	520.8	10.2
Gross fixed capital formation	213.1	12,0	236.8	11,1	192.2	-18,8	190.9	-0.7

Source: Statistical Office of SR, ESA 95 methodology
*Constant prices of 1995

While the government economic policies seemed to be successful in controlling macroeconomic indicators, a politically sensitive and significant negative result was that real wages decreased. Real wages in 2000 remained significantly below wages in 1989, confirming decreasing trend after five years of growth in the mid-'90s. Furthermore, gradual deterioration of wages in education is clearly visible.

Table 5
1989 –2000 Real Average Monthly Gross Wages of Employees (1989 Basis)

Indicator	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nominal Average Wage (in SKK, in CZK till ´92)	3142	3278	3770	4543	5379	6294	7195	8154	9226	10003	10728	11430
Real Wage Index in National Economy	100	94.4	69.6	75.7	72.8	75	78.2	83.8	89.2	91.8	88.2	84.2
Real Wage Index in Education	100	94	72.3	82	70.5	68.5	74.6	79.7	83.2	82.1	76.2	72,9

Source: Statistical Office of SR

When looking at the trend in wages as broken down by NACE sections (Table 5), a gradual decline in the education sector is again easily seen. When comparing the situation at the start of the transition process in 1991 and wage averages in 2000, the winners are employees with direct access to power (i.e., the administration and financial intermediation) and direct access to financial resources. Typically, this is represented by the unavoidable payments of inhabitants (electricity, gas, and water supply).

Table 6
Average Gross Wage per Section (average wage=100)

NACE Sectors	1991	1994	1998	1999	2000
Slovak Republic Average	100	100	100	100	100
Agriculture, hunting and forestry and fishing	100	82	78	78,11	78,92
Mining and quarrying	118	117	110	112	117
Manufacturing	100	98	100	100	103
Electricity, gas and water supply	119	139	133	134	140
Construction	102	103	100	92	92
Trade and repair	90	91	107	107	111
Hotels and restaurants	84	82	75	76	77
Transport, storage and telecommunication	102	105	106	108	109
Financial intermediation	140	187	193	186	194
Real estate and business activities	99	106	121	122	123
Public administration and defence	111	117	124	122	121
Education	94	82	82	78,30	78,65
Health care and welfare	105	86	91	85	82
Other services	98	89	85	88	72

Source: Statistical Office of SR, tabled by the Slovak National Observatory /ETF

Although interest rates dropped considerably (from over 20% in 1998 to about 10% at the end of 2001) as a consequence of government efforts in rehabilitating the financial sector, bank credit policy has not revived. In spite of sufficient liquidity banks expressed their distrust in the company sector, preferring investments in public securities and bonds rather than in shares and provision of credits to entrepreneurs.

The privatisation process is progressing quickly (see Table 7). The industrial sector is almost completely privatised, with some exceptions predominantly within the late military-linked machinery plants. 2001 is the year of the privatisation of the banking sector. Massive interventions at the cost of taxpayers and replacement of bad loans from the most important banks to the specialised agency contributed to the attractiveness of the banking sector for foreign investors. Currently, all major banks are privatised and backed by important foreign investors.

By contrast to the privatisation of banks, the privatisation of Slovak Telekom (already acquired by Deutsche Telekom) and of other monopolies planned for 2001 and 2002 are considered to be lucrative both for investors and the Slovak government. The state gas utility Slovenský plynárenský priemysel (SPP), petroleum utility Transpetrol, Slovak Insurance Company, energy producer Slovenské elektrárne (SE), regional public bus companies of Slovenská automobilová doprava, the water supplier Vodárne a kanalizácie and additional smaller banks Istrobanka, IRB and Postova banka are all expected to be privatised by 2002.

Table 7
Private Sector Share in the Economy – Selected Indices

Indicators	1993	1994	1995	1996	1997	1998	1999	2000
Private Sector Share in % of GDP	39.0	58.2	65.6	76.8	80.1	81.0	83.3	83.2
Private Sector Share in Industrial Production (%)	30.1	57.5	64.6	68.2	73.2	78.1	79.3	76.6
Private Sector Share in Construction Production (%)	53.2	74.2	81.8	83.2	82.2	83.7	91.5	99.4
Private Sector Share in Total Retail Sales (%)	80.9	88.5	91.7	94.6	95.9	96.8	95.5	98.0

Source: Statistical Office of the SR, preliminary data

Slovakia is still relatively unsuccessful in attracting foreign investors. It lags behind in the establishment of industrial parks compared to neighbouring candidate countries (the Czech Republic, Hungary, and Poland), having been considered less politically stable (not accepted to NATO and to the Luxembourg group of most promising candidates countries for accession to EU in the first round). Despite clear success of the new government (3 692.2 Million USD in 2000 compared to 2 256.4 in 1999 and even less in 1998) the current situation shows three types of extreme disparities in foreign direct investment:

- Insufficient greenfield investment compared to the acquisition of the existing companies via privatisation
- Disparity in distribution by regions
- Disparity in distribution by sectors

Here are the most important investments in already-established companies, indicating simultaneously the most attractive sectors in 2000: steel-mill VSZ Košice $485 million by U.S. Steel, petrol refinery Slovnaft $270m by Hungarian MOL, paper-mill SCP Ružomberok, $80m by Neusiedler (Austria). There are some interesting green field investments expected in 2002, currently retail chains represent a significant contribution to greenfield investments across the country. In addition to these investments, brown-field investment could contribute significantly to job creation by making use of the capacities in bankrupted or underachieving companies.

Over half of investments (even excluding the banks) were allocated to Bratislava region. Other regions seem to be equally unattractive, with just one significant exception: the investment in the steel-mill in Košice in 2000. The Bratislava region has a unique position not only in comparison with other Slovak regions but also in comparison with the EU average, featuring 98% GDP per capita in purchasing power of the EU average, while other regions in Slovakia feature 32 – 50%.. (1998 Statistical Office of the SR data)

Table 8
FDI* by Regions as of End of Year Compared to 2000 GDP Share**

Territory	1999		2000		2000
	Mill. USD	%	Mill. USD	%	GDP in %
Bratislava Region* **	1,341.9	59.5	2,068.5	56.0	23.6
Trnava Region	200.9	8.9	200.1	5.4	10.4
Trencín Region	153.1	6.8	142.8	3.9	9.7
Nitra Region	86.0	3.8	94.3	2.6	11.5
Žilina Region	77.5	3.4	175.1	4.7	10.7
Banská Bystrica Region	111.4	4.9	111.7	3.0	10.9
Prešov Region	98.7	4.4	97.8	2.6	9.1
Košice Region	186.8	8.3	802.0	21.7	14.1
Slovakia	2,256.4	100.0	3,692.2	100.0	100.0

Source: National Bank of Slovakia, Monetary Survey
* Foreign Direct Investment represented by equity capital + reinvested earnings
** 2001Statistical office of the SR data from 2000 preliminary quarterly accounts; share calculated by SNO
*** Including banks, $307m and $319.8m in 1999 and 2000 respectively

The investment into the sectors could be compared using Table 9. A significant increase in investment into the transport sector related to the aforementioned acquisition of Slovak Telekom by Deutsche Telekom.

Table 9
Structure of FDI* by Sectors as of End of Year

Sector	1999		2000		2000
	Mill. USD	%	Mill. USD	%	GDP in %
Agriculture, hunting and forestry	4.4	0.2	4.0	0.1	4.1
Extraction of raw materials	24.7	1.1	39.7	1.1	0.8
Industrial production	1,124.4	49.8	1, 964.3	53.2	21.8
Production and distribution of electricity and gas	10.1	0.4	9.2	0.2	3.7
Construction	42.3	1.9	43.4	1.2	4.8
Wholesale and retail trade	415.0	18.4	426.2	11.5	Together 15,1
Hotels and restaurants	29.2	1.3	27.5	0.7	
Transport, storage and telecommunication	67.5	3.0	618.8	16.8	10.2
Banking, finance and insurance	421.9	18.7	443.7	12.0	Other services and tax related results 39.5
Real estate, leasing and business activities	104.1	4.6	102.8	2.8	
Health and social care	0.4	0.0	1.4	0.0	
Other public, social and personal services	12.3	0.5	11.2	0.3	
Total	2,256.4	100	3,692.2	100	100

Source: National Bank of Slovakia, Monetary Survey
* Foreign Direct Investment represented by equity capital + reinvested earnings
** 2001Statistical office of the SR data from 2000 preliminary quarterly accounts;

The Government is determined to attract foreign investors by taking the following measures:

Act 193/2001 Coll. on support for industrial parks is valid since June 1, 2001. This law regulates conditions for providing the capitation grants for a community
- to equip the area technically and establish the infrastructure necessary to establish the industrial park in the amount of 70% of costs;
- to compensate the costs for procurement of lands in the amount of 79% of the land price, or up to 70% of the agreed rental for the first 10 years of the lease;
- to compensate up to 70% of fees for extraction from the Agricultural Soil Fund/Forestry Soil Fund.

Act No. 565/2001 Coll. on investment incentives, in effect since January 1, 2002, stipulates special conditions for providing individual state aid for development of regions in a form of:

- relief on corporate income tax in regions with registered unemployment rate at least 10%;
- contribution for re-training of employees hired for new jobs;
- contribution to creating a new job.

A right to the tax credit can be claimed by the taxpayer, at most, up to the amount during the taxation periods for which the tax relief is claimed. It must not exceed in the aggregate amount the value specially stated for respective type of investment. The title to the tax credit can be claimed for the ten directly succeeding taxation periods.

The District Labour Office will provide a contribution for re-training per one employee in amount of SKK 10,000 at most, and only if after completing re-training the employer continues to employ this employee for at least 12 months. Nevertheless, re-training incentive conditioned in such a way might make the newly employed unattractive for an employer after 12 months, which turns this kind of measure rather into more of a supportive scheme for graduates than an incentive for sustainable job creation.

The total amount of contribution provided for the newly-created job by an employer depends on the regional unemployment rate, based on the end of the calendar month before the new job was created.

Table 10
Investment Incentives for New Jobs Creation

Unemployment rate in the region	Total contribution per one new job
Over 30%	SKK 160,000
Over 25% and up to 30%	SKK 130,000
Over 20% and up to 25%	SKK 100,000
Over 15% and up to 20%	SKK 70,000
Over 10% and up to 15%	SKK 40,000
10% and below	SKK 30,000

Source: Act No. 565/2001 Coll.

The employer, as visible from the legislative measure §93a (4),"is obliged to return the contribution provided to him/her for the newly- created job if the total average book number of his employees (as individuals) within the calendar year in which he/she started to receive this contribution (or in the following four directly succeeding calendar years) was lower than the total book number of employees in the calendar year preceding that in which he/she started to receive the contribution...". New job creation is defined and described by statistical average data and not by individually justified, truly new productive positions.
This kind of measure might by counter-productive, inviting employers to keep some positions with limited productivity as a consequence of such incentives.

The structure of the Slovak economy is visible from the following table.

Tab 11
Enterprises and Entrepreneurs by NACE Sectors in 2000

NACE Sectors	Enterprises		Entrepreneurs-natural persons	
	Total number	Private sector share (in %)	Total number	out of this Tradesmen
Slovak Republic	60920	98,1	296520	269323
Agriculture, hunting and forestry and fishing	3461	97.3	19731	4139
Mining and quarrying	96	85.4	35	33
Manufacturing	9005	98.9	49365	48358
Electricity, gas and water supply	148	79.7	536	536
Construction	4721	99.3	37139	37139
Trade and repair	26322	99.9	103824	103421
Hotels and restaurants	1564	96.9	14694	14694
Transport, storage and telecommunication	2044	97.4	14991	14991
Financial intermediation	563	98.0	325	317
Real estate and business activities	10943	98.4	35307	33110
Public administration and defence	1	-	-	-
Education	545	42.6	2030	2030
Healthcare and welfare	217	89.4	8186	213
Other services	1290	84.5	10357	10342

Source: Statistical Office of the SR

The following Table 12 can also be seen as an added illustration of the aforementioned shock of a politically-biased economy after the 1998 election. In this table we can see the political vulnerability of large enterprises.

Table 12
1997-2000 Pre-tax Earnings in millions SKK

Size in number of employees/Year	1997	1998	1999	2000
250+	17 479	-511	13262	30632
50-249	8 841	3500	7162	9837
0-49	25 863	19767	26705	38753

Source: Ministry of Economy

There is a significant difference in dynamics between enterprises and entrepreneurs (individuals), while in both cases what a tough year 1999 was is also visible from the following table.

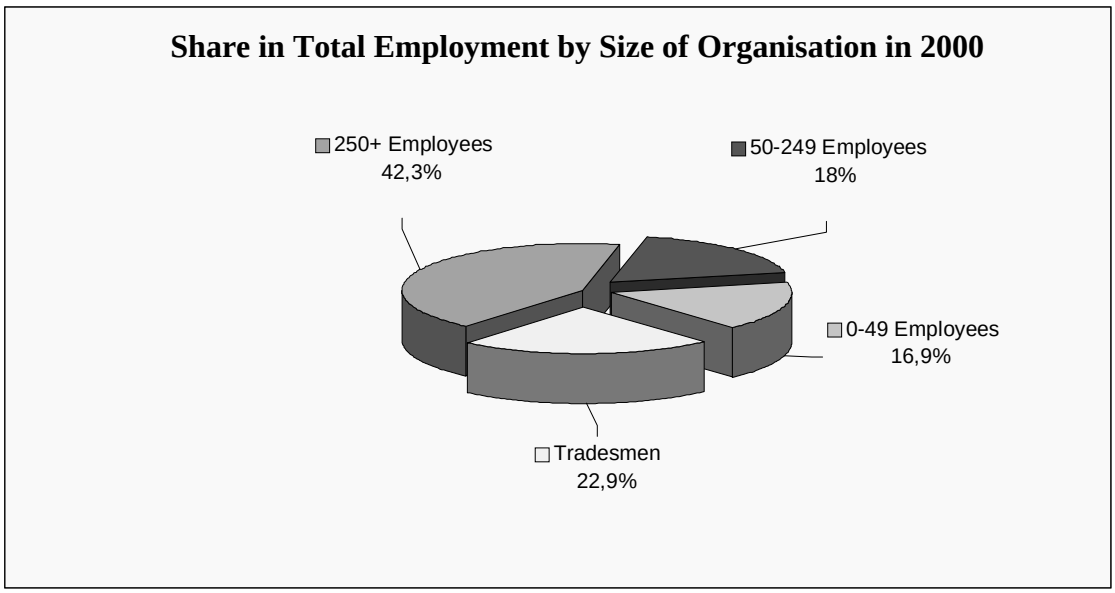
Table 13
1998-2000 Enterprises and Entrepreneurs Starting and Ceasing Activity

Entity		1998	1999	2000
Enterprises	**Starting**	4873	2856	1748
	Ceased	153	569	524
Entrepreneurs - Natural persons	**Starting**	23099	24675	32171
	Ceased	4663	27075	30954

Source: Statistical Office of the SR

Despite hard times in 1998 and 1999 the share of individuals and small enterprises gradually increases while medium and large enterprises decrease in the share of employment. The 2000 situation is depicted in the following graph.

Graph 1
Share in Total Employment by Size of Organisation in 2000



Source: Statistical Office of the SR

SMEs still suffer from limited access to loans, a lack of flexibility in administration and comparatively high tax and levies (discriminating compared to corporations). This results in a tax wedge of more than 50%, which prevents many entrepreneurs from employing staff, and creates good conditions for the development of the shadow economy. Compared to the previous barriers, which could be easily administratively changed in the short term, there are two crucial barriers where the improvement will require a sustained effort and much political courage: law enforcement and making the capital market functional. Similarly, a lot of co-ordinating activity will be necessary for making diverse programmes supporting SMEs transparent and effective. Special skills are necessary for better orientation among fragmented support programmes. The "one-stop-shop system" type scheme providing an umbrella for all support initiatives spread among respective sectors and organisations would be highly welcomed by SMEs.

Although over 200 changes in legislation certainly helped improve the entrepreneurial environment, changes should be accelerated even more. There are just two changes representing direct intervention: the introduction of a lump-sum tax for selected trades sparing people a great deal of bookkeeping, and a corporate tax decrease. However, the further decreasing of taxes and levies is inevitable.

It would be an extraordinary success for the Ministry of Education if part of the tax relief were fixed to investments in human resources development. One of the options is the establishment of vocational education and training funds, as recommended in the conclusions of the working seminar of ETF and tripartite representatives in Senec, 11-12 May 2000. Although, the introduction of a levy-type funding is hardly politically doable, the discussion initiated in Senec should encourage a dialogue looking for alternative incentives for financing lifelong learning. The current system represents a slowdown with regard to VET and is non-stimulating for lifelong learning as a whole.

1.2 Demography

On 31st December 2000 the population of Slovakia was 5.403 million, of which 2 776 thousands (51.37% of total population) were female. 62.7% of total population were persons in the productive age range and the share of the urban population, gradually decreasing, was 56.6%. Population density per square km is 109.9. For more details see Tables II, III, and IV in the Annex.

The overall situation in Slovakia is developing similarly to other central European countries that are set to join the EU. We are experiencing a huge decrease in birth rates and ageing of the population. Basic indicators of demographic development in Slovakia are getting much worse since the beginning of the second half of 20th century, except for the time-period of the early 70s. The share of live-born children dropped from 19.1 per thousand in year 1980 to 10.2/1,000 in 2000. The natural increase of 8.9/1,000 in 1980 decreased to 0.4/1,000 in 2000. Marriages are more rare, decreasing from 8.1 per thousand in 1980 to 4.8/1,000in 2000, while divorces increased markedly, going from 0.58/1,000in 1980 to 1.72/1,000 in 2000. Nevertheless, it's worthwhile pointing out that the working age population is still increasing.

Table 14
Population and Productive Age Population (in thousands)

Population /Year	1970	1980	1990	1995	1999	2000
Mid-year population	4 540	4 996	5 311	5 368	5 399	5 403
Population in productive age (mid-year)	2 547	2 874	3 042	3 213	3 346	3 375

Source: Statistical Office of SR

The age structure of the population, however, has changed significantly, as visible in Table 15.

Table 15
Population by Age Categories as of End of Year

Category/Year	1950	1980	1990	1995	1999	2000
Pre-productive age	29.0	26.1	25.1	22.3	19.8	19.2
Productive age	58.9	57.5	57.6	60.2	62.3	62.7
Post-productive age	12.1	16.4	17.3	17.5	17.9	18.1

Source: Statistical Office of the SR
Note: Pre-productive age (pre-working age): From 0 to 14 year, Productive age (working age): From 15 to 59 years old men, from 15 to 54 years old female, Post-productive age (post-working age): 60 and more years old men, 55 and more old female

Since 1950, the pre-productive segment of the population has decreased. The present trend points toward a regressive 20:50:30 share among pre-productive, productive and post-productive segments of the population in 2020.

Table 16
Ageing Index*

Year	1950	1960	1970	1980	1990	1992	1994	1996	1998	1999	2000	2005	2010	2015	2020
Index	0.42	0.43	0.60	0.62	0.69	0.72	0.76	0.81	0.87.	0.91	0.94	1.11	1.31	1.45	1.58

Source: Statistical Office of SR, Yearbooks (1950-2000 data); 2000+ data from prognosis of development (1996)
* Females 55+ and males 60+ divided by age group of 0-14.

Demographic developments in Slovakia suggest two important features:

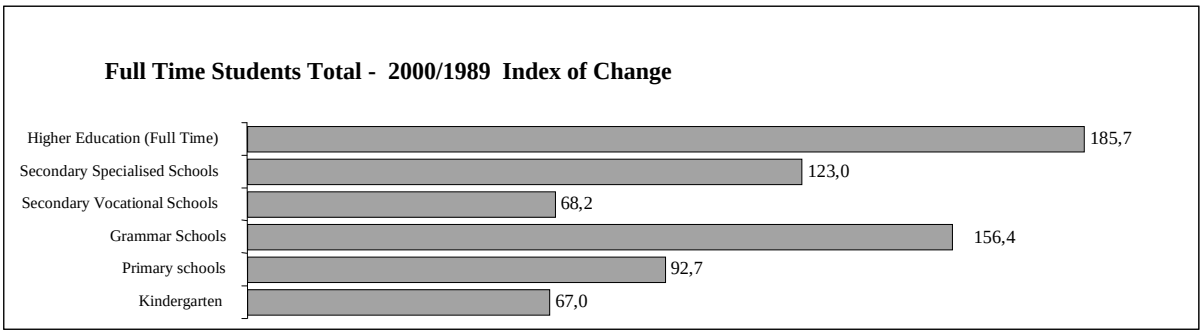
- An unstable PAYG-based pension scheme will have to be reformed and the retirement age will have to be increased. This will affect especially women and, in particular educators, who are mostly women.

- Optimisation of school networks; study and training branches have to reflect both labour market changes and demographic changes.

A tremendous population decrease makes a deep reconstruction of primary and secondary networks urgent. In 1989 there were still 80,116 children born alive in Slovakia, in 2000 only 55 151 children.

It is very easy readable from the figures in the graph below that school networks must be subjected to significant change. The index of change in primary schools is influenced by an expansion of Basic School education from eight to nine years, otherwise the decrease would be more precipitous. Optimisation of the network of secondary schools could be significantly supported by the decision (already agreed) that all secondary schools regardless of the stream, except marginal special cases of schools, will be maintained by regional self-governing authorities as of July 1, 2002.

Graph 2
2000/1989 Index of Change in Numbers of Students in Respective Schools



Source: Institute of Information and Prognoses

So far, the optimisation process of secondary schools has been hampered by the highly complex system of governing of VET and a need to harmonise the points of view of many key players. An amendment No 216/2001 Coll. of the Act No. 29/1984 Coll. (Education Act) transferred the competencies with regard to all types of secondary schools to regional offices, and further Act No. 416/2001 Coll. transferred the competencies to self-governed regions. It is assumed that after the fulfilment of the reform of the administration, where primary schools become maintained by municipalities and secondary schools by regional self-governing authorities, this reconstruction will be fulfilled. Nevertheless, this is not very likely until policy costs are covered by self-administration and while costs are incurred by the ineffective allocation of means by the national government. Before fiscal decentralisation (planned for 2004), a vivid interest from the new maintainers in the optimisation of the school networks can hardly be expected.

2. Labour market background

The slow restructuring process of enterprises still heavily affects the situation in the labour market. Regions along the border with the Czech Republic (Bratislava, Trnava, Trencín, Žilina) and linked by the highway feature the lowest unemployment.

Table 17
Registered Unemployment Rate in Regions (in %)

Year/ Region	SR Total	Bratislava Region	Trnava Region	Trencín Region	Nitra Region	Žilina Region	Banská Bystrica Region	Prešov Region	Košice Region
1998	13.67	4.44	11.37	9.02	15.69	11.91	16.72	19.26	18.88
1999	17.31	6.08	14.34	11.92	19.19	16.12	21.13	23.63	23.91
2000	18.24	6.80	15.26	13.09	21.65	17.00	21.82	22.98	24.92

Source: National Labour Office of SR

Despite the huge increase in unemployment since1998, a modest increase in GDP indicates an increase in productivity.

2.1 Economic activity of population

The activity rate in Slovakia is stable, oscillating around 60 %.

Table 18
Activity Rate Development

Indicator/Year	1995	1996	1997	1998	1999	2000
Economic activity rate	59.8	60.1	59.9	59.9	60.0	60.3

Source: Statistical Office of the SR

It is worth noting that according to the methodology of Statistical Office of the SR the activity rate is calculated as a percentage of economically active population in productive and post-productive age. By using a more natural approach and calculating the activity rate just from productive age, the figures would be significantly higher. Nevertheless, there's a difference in productive age length between Slovakia (male aged 15-59, female aged 15-54) and many other European countries. Recalculated to 15-64 year old males and females, the activity rates would be about 70%.The more detailed activity rate breakdown by age and education and by age and gender can be seen in Tables VIII and IX in the Annex.

The population has been increasing throughout the '90s, and at the same time the productive age and active population has been increasing. This increase, however, has been accompanied by a decrease in the number of employed (see Table 19).

Table 19
2000 and 1995 Comparison of the Balance of Economic Activity of Population

Specification	1994	1995	1999	2000	2000/1995 (%)
Population total*(in thousands)	5337	5356	5393	5399	0.8
Productive age *(in thousands)	3152	3195	3332	3361	5.2
Active population (in thousands)	2444	2471	2573**	2608**	not applicable
Employed (in thousands)	2110	2147	2132	2102	-2.1
Unemployed (in thousands)	334	324	417	485	49.7

Source: Statistical Office of the SR, LFS
* as of January 1 of a given year
** inclusive conscripts in military service

When looking on active population broken down by educational attainment (see Tables VII and VIII in Annex), it's worthwhile mentioning the significant decrease in absolute numbers and activity rates of people with ISCED 0-2. As opposed to this positive development, there's a dangerous decrease in the active population with university level education. ETF Key indicators based on LFS second quarter data indicate the loss of 20 000 ISCED 5+ people in the 1994-2000 period. The 2000 Statistical Office annual LFS data speak even about 40 000 fewer university-educated people in the labour market than in 1994. It would be worthwhile having detailed research to explain this feature in relation to the regularly increasing number of higher education graduates. As will be seen later, the aforementioned decline is related to the decrease in employment of males.
The current structure of inactive population is visible from Table 20.

Table 20
Economically Inactive Population Aged 15 and over in 2000

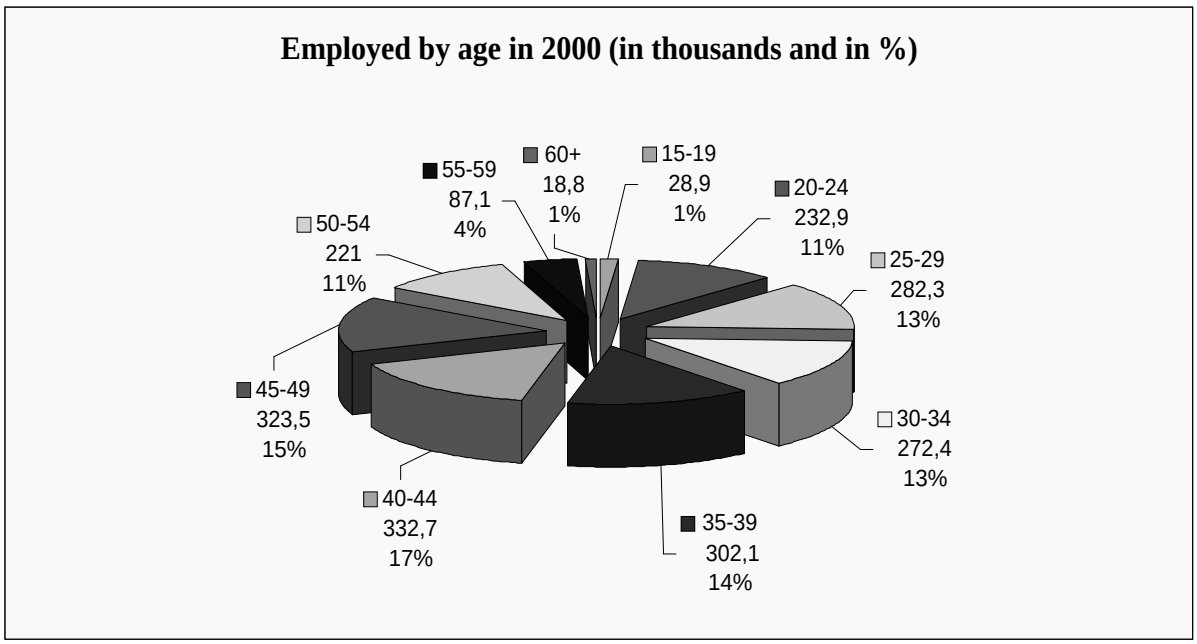
	Retired	In education and training	In households	On additional maternity	Discouraged	Working incapacity	Not interested	In retraining	Other
Persons (in thousands)	1066.6	435	92.7	56.1	10.3	41.4	7.3	2	9.8
Share (in %)	62.0	25.3	5.4	3.3	0.6	2.4	0.4	0.1	0.6

Source: Statistical office of the SR

2.2 Employment

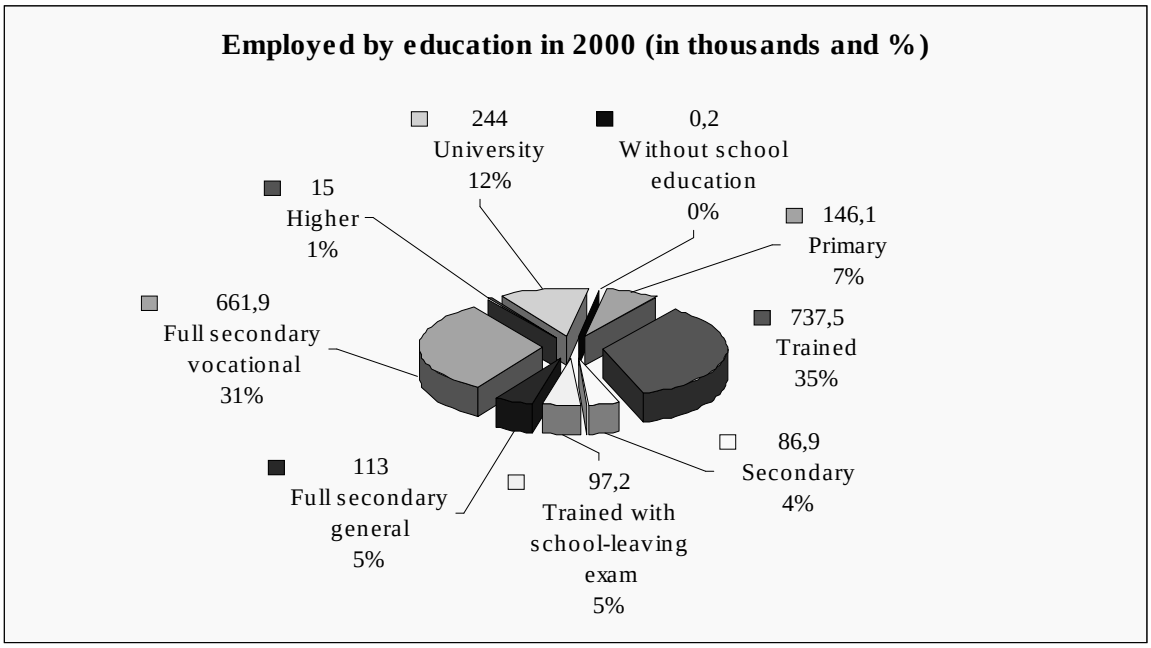
As can be observed from the more detailed data provided in the Annex, employment rose and unemployment decreased only in 1994-1996. Since 1997 the number of unemployed persons has been increasing and the number of employed has been decreasing. Total amount of unemployed in 2000 broken by age and education is depicted in the two following graphs.

Graph 3
Employed by Age Groups in 2000 (in %)



Source: Statistical office of the SR, LFS

Graph 4
Employed by Education in 2000 (in thousands and %)



Source: Statistical Office of SR, Statistical Yearbook of SR 2000

2.2.1 Structural changes in employment

2.2.1.1 Employment by age

The decrease in employment in recent years is visible in more detail in the following table.

Table 21
Employment by Age Groups (in thousands persons)

Age /Year	1998	1999	2000
15-19	52.7	39.5	28.9
20-24	262.9	240.9	232.9
25-29	276.6	275.8	282.3
30-34	291.7	281.2	272.4
35-39	328.3	309.6	302.1
40-44	347.8	343	332.7
45-49	324.8	320.7	323.5
50-54	201.8	211.7	221.0
55-59	89.6	88.7	87.1
60+	22.4	21	18.8
Total	2198.6	2132.1	2101.7

Source: Statistical Office of the SR, LFS

The most significant decrease in employment has affected the age groups of 15-24. This was caused by an increase in the proportion of population within these age groups remaining in education as well as by the reluctance of employers to employ graduates without practice.

2.2.1.2 Employment by education

Unsurprisingly, the most significant decrease in employment has affected low educated ISCED 0-2 and a special, relatively low educated segment of ISCED 3c - SECONDARY education without maturity, only with a final exam but not a Certificate of Apprenticeship.

Table 22
Employed by Detailed Educational Attainment (in thousands)

Level of Education		1994	1998	1999	2000
Without school education		1.5	0.2	0.7	0.2
Primary	**ISCED 2**	247.6	211.9	168.9	146.1
Trained (with Certificate of Apprenticeship)	**ISCED 3C**	689.1	729.1	753.5	737.5
Secondary with final exam	**ISCED 3C**	160.4	153.1	104.7	86.9
Trained with school leaving exam (maturity)	**ISCED 3A**	59.4	106.5	102.1	97.2
Full secondary general	**ISCED 3A**	87.5	127.3	119.7	113.0
Full secondary vocational	**ISCED3A+4A**	589.4	610.3	629.5	661.9
University and Higher	**ISCED 5+**	275.3	260.2	253.0	255.0
out of this males	**ISCED 5+**	164.9	144.1	136.6	134.5
Total		2110.2	2198.6	2132.1	2101.7

Source: Statistical Office of the SR, LFS

Quite surprisingly, there's a tremendous decrease in employment of ISCED 5+ educated however. Interestingly, it is males that showed a significant decrease in this segment (from 164.9 to 134.5 thousand), while numbers of employed females markedly increased (from 110.4 to 120.5). A gradual increase in university graduates (9,149 in 1994 to 19,133 in 2000) apparently does not lead to an increase in the quality of the workforce.
A severe brain drain abroad, speculatively and temporarily profitable self-employment not requiring a high level of education, as well as still insufficient wage gradient for university graduates compared to secondary education graduates, might develop into a serious danger in terms of the quality of workforce in the future.

2.2.1.3 Employment by economy sectors

Employment broken down by NACE branches confirms the expected global trends. There's a definitive decrease in employment in agriculture and a gradual decrease in employment in industry, which might be partly reversed given the successful rehabilitation of industries suffering from a lack of investment and available capacities – enterprises that are slowly restructuring. The construction sector partly recovered due to the government's spending but suffers from a lack of means (both government and households). Private investors in the highway programme might help restart the growth in construction. The modest growth of services is hampered by the low purchasing power of inhabitants and the still limited ability to attract liquid customers from abroad.

Table 23
1995 –2000 Average Employment (NACE branches) in % of total

Indicators	1995	1996	1997	1998	1999	2000
Agriculture and forestry	9.2	8.9	9.2	8.2	7.4	6.6
Industry (excl. construction)	30.3	31	30.2	30.2	29.5	29.3
Construction	8.6	8.5	9.1	9.3	8.9	8.0
Services	51.9	51.6	51.5	52.3	54.2	56.1

Source: Statistical Office of the SR

A more detailed depiction of information about the employment structure in the SR can be found in Tables XI, XII in the Annex.

Insufficient creation of new jobs is significant for the current period of transformation of the Slovak economy. Nevertheless, fundamental preconditions of new jobs creating economic growth are as follows:

- completion of the banking sector reconstruction,
- justice reform and elimination of administrative barriers,
- transparency in bankruptcy and settlements,
- tax reform that is positive towards entrepreneurs, with a significant decrease in the tax and levies load, and
- political stability with all important political parties actively sticking to policies compatible with the EU and NATO

Nevertheless, as stated in Chapter 1, justice remains Slovakia's weak point. The enforcement of the law is still the most important challenge for improvement in the health of both society and economy.

2.2.2 Employment in the private sector

The share of employment in the private sector has increased tremendously, along with the gradual privatisation process. The private sector share in the economy amounted to 83.7% in 2001. The share of employed in the private sector is 63%.

Table 24
Employed Persons by Ownership Sector (in thousands)

Specification	1996	1997	1998	1999	2000
TOTAL	2225	2206	2199	2132	2102
Public sector	1007	913	874	820	782
Private sector	1218	1293	1325	1312	1320

Source: Statistical Office of SR, LFS

Due to the heritage of the former Czechoslovakia, a single central European country with an absolutely diminished private sector during the communist era, there's a significantly lower share of 8 % of self-employed people compared to 14% OECD average. Similarly, there's a traditionally very rigid labour market with extremely low share of part-time employed below 2% compared to above 15% in OECD. The gradual improving of the business environment after the 1998 parliamentary elections seems to make 2000 a turning point. In industry, losses in 1998 were twice as high as profits, and in 2000 this ratio was reversed.

2.2.3 Employment opportunities for graduates (school-leavers) from educational institutions

Pursuant to Article 29 of Act No. 387/1996 Coll. on Employment, in the amended wording, a school graduate is considered "a citizen during a year after completion of his systemic vocational preparation." In accordance with this definition, the population without any employment experience, i.e. persons who fail to find a job after leaving school, represents a wider group than graduates. An amendment of law expanding the status of graduates for students within two years after graduation is discussed and expected to come into force. Due to the absence of practical experience and professional practice, which leads to decreased competitiveness compared to a professionally-qualified workforce, this group is highly at risk.

Table 25
1997-2001 Unemployment Rate* of Secondary Schools Graduates (in %)

Schools/year	1997	1998	1999	2000	2001
Grammar schools	19,.4	20.9	25.1	18.4	11.1
SSS	32.6	38.0	47.0	42.8	34.3
SVS	33.5	35.2	42.0	40.0	39.5
Secondary schools total	30.9	33.8	40.9	37.4	32.6

Source: Institute of Information and Prognoses in Education and National Labour Office of SR
* as of September of a given year representing peak data of annual cycle.

A positive trend of the markedly decreasing unemployment rate of grammar schools and SSS graduates is a result of the increased enrolment of secondary graduates into higher education institutions. Government has stimulated higher education institutions to accept 10% more students by additional funding. SVS, as schools, just secondarily targeted the preparation for higher education, unsurprisingly, feature only very modest decrease. Labour market absorption still remains weak.

Table 26
1990 –2000 Average Monthly Number of Vacancies

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Vacancies	16802	7767	13304	10917	10851	15461	17331	24132	17109	9263	7 697
RU*	14296	169 059	285 511	323 216	366 168	349 821	324 278	336 661	379 466	485 202	517 925
RU/V index	1	22	21	30	34	23	19	14	22	52	67

Source: National Labour Office of the SR
* Average annual number of registered unemployed

A part of the workforce, inhibited by the low absorption into traditional industrial branches, is looking for an easy-going lifestyle, often waiting for a better offer in the future or posing to be engaged in entrepreneurial activities in a service sector. Despite the reliable forecast of a real future increase in employment in the service sector, these forecasts might play a negative role of funnelling youngsters to “soft” study branches. Moreover, currently still unstable enterprises are not able to contribute to the alternative positive vision. Even those who would be interested in blue-collar professions are afraid of unpredictability. Consequently, youngsters are often supported in their visions of an easy career in business, e.g. in the hotel and tourism industry, often in middle management positions or other white-collar positions, leaving without notice training branches leading to manual work.
Over 40% of graduates from SVS branches of the Cluster 64 Economics and organisation, retail and service remain unemployed.

2.3 Unemployment

Comprehensive data on unemployment are presented in Tables XIV-XIX in Annex. A severe increase in unemployment in the late ’90s is depicted in the following table comparing LFS and NLO data. Table XVI in the Annex indicates young women under 24 and older men, close to retirement age, were the most affected by the increase in unemployment.

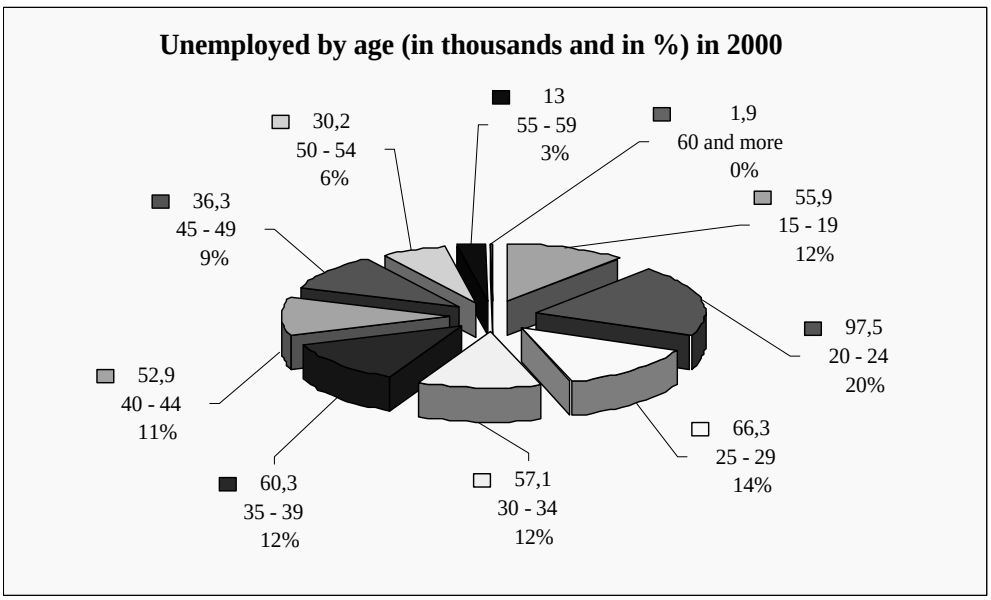
Table 27
1998 -2000 Unemployed Statistics

	1998	1999	2000
Average LFS	317.1	416.8	485.2
Average Registered	379.5	485.2	517.9
End of Year Registered	428.2	535.2	506.5

Source: Statistical Office of SR (LFS data), National Labour Office of SR (registered unemployed data)

The last line decrease of unemployed in 2000 compared to the other two unemployed measures of 2000 indicates the influence of the public works activities introduced in the fall of 2000. However, this approach secures only temporary employment, and registered unemployed in 2001 will again increase. Total amount of unemployed in 2000 broken down by education and age is depicted in the two following graphs. Worthwhile noticing from the first following graph is the high share of 20-24 young people within the unemployed.

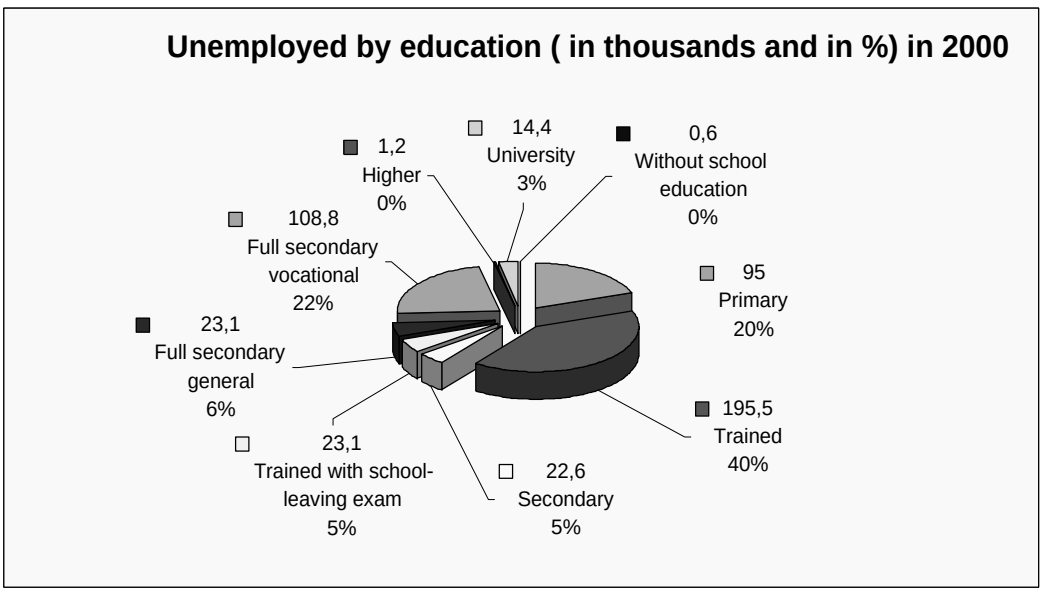
Graph 5
Unemployed in 2000 by age groups



Source: Statistical Office SR (LFS)

The breakdown of unemployed by educational attainment is depicted in the following graph.

Graph 6
Unemployed by education level in 2000



Source: Statistical Office of the SR (LFS)

Up to 70% of unemployed are without ISCED 3A maturita certificate. Nevertheless, up to 50% of the unemployed have achieved a relatively high level of education ISCED 3C. This segment of unemployed containing people predominantly trained for blue-collar professions is suffering from the slow restructuring of industry.
Within the first two low-educated segments, there are two intersecting groups highly at risk: old low educated and Roma low educated.
The educational level of the members of the Roma minority is traditionally very low. There are no current valid data about the educational structure of the Roma population since any statistics of this kind would be considered as a violation of human rights in accordance with current Slovak legislation. Official statistical data refer just to those 89 920 Roma who officially declared themselves as such during the last census on 26 May 2001. Nevertheless, this might represent below 25 % of the ethnic Roma population. From the data obtained before November 1989, it can be estimated that about 80% of Roma had only primary education or failed to complete primary education. These data speak about 9.2% of men and 3.4% of women having secondary vocational education, slightly more than 1.0% of Roma irrespective of gender, had secondary education, 0.3% of men and 0.2% of women had university education, and 5.1% of men and 8.7% of women were without education. The level of education of the Roma is much lower compared to that of the majority population. Due to long-term unemployment, the majority of the Roma depend on social assistance benefits. According to estimates, 80% of the Roma population depend on the benefits of the social network.

Relatively successful results of persons with secondary general education and higher education could be ascribed to their smaller share in absolute numbers. Educational policy makers often advocate that the share of graduates with maturity certificate within the age cohort should be increased. This is undoubtedly worthwhile of support. Nevertheless, it's expected that this would increase graduates' employability.
However, the unemployment rate by level of education and particularly the trend at the end of the 1990s educate us more clearly that the "maturita" value added compared to ISCED 3C is visible but moderate.

Table 28
1994 –2001 Unemployment Rate by Level of Education (in %)

Education	1994	1995	1996	1997	1998	1999	2000	2001 (3.Q)
No education	44.2	39.5	64.3	66.7	88.5	40	100.0	33.3
Primary	27.7	27.3	23.9	27.6	25.8	35.4	47.5	42.4
Trained (with Certificate of Apprenticeship)	14.8	13.4	11	11	12.7	18.1	20.3	20.9
Secondary with final exam	14	13.2	10.2	11.3	10.8	20.6	18.1	20.1
Trained with school leaving exam (maturita)	16.1	9.9	8.2	10.6	9.6	15.6	18.4	17.7
Full secondary general (maturita)	13.8	14.7	12.1	14.6	13.8	17.3	16.2	18.7
Full secondary vocational (maturita)	10.3	7.4	7.7	8.3	8.7	13.6	14.1	14.9
Higher	-	-	3.5	6.1	4.5	6.1	.	.
University	3.9	2.9	3.5	3.3	4.1	6	5.7	6.0
Total	14.1	12.4	10.8	11.6	11.9	17.2	18.0	19.0

Source: Statistical Office of the SR, LFS 4Q

There is a clear value added in ISCED 3 compared to ISCED 2 and in ISCED 5+ compared to ISCED 3, but there is no significant difference among respective ISCED 3 level education types. Additionally, what matters in the labour market, according to some analysts, is soft skill qualities and higher personal flexibility of applicants. This provides for a higher competitiveness of this kind of applicants compared to regular VET school graduates. The value added by VET schools under current conditions of non-restructured industry is less

appreciated, with the exception of some restructured, fast-growing enterprises (e.g. Volkswagen).

A low rate of creation of new jobs leads to a dangerous trend resulting in a high share of long-term unemployment. Thus, over 50% of unemployed people are very likely unable or finally disinterested in getting a job within current employment policies and/or current labour market situation.

Table 29
Unemployed by Duration of Unemployment (in thousands) in 1999 -2001

Age	Duration of unemployed in months																	
	1999						2000						2001					
	Total	0 - 3	4 - 6	7-12	13-24	25 +	Total	0 - 3	4 - 6	7-12	13-24	25 +	Total	0 - 3	4 - 6	7-12	13-24	25 +
15-60+	404	51	64	91	75	112	491	55	63	100	113	151	509	56	70	99	102	178
15-19	52	5	8	24	9	4	51	9	5	21	11	4	48	8	5	24	7	4
20-24	81	12	15	18	19	16	98	14	15	19	26	22	109	16	14	23	25	31
25-29	54	6	11	10	9	18	67	8	9	14	16	20	73	6	11	12	16	26
30-34	54	6	8	9	11	18	60	5	8	9	13	25	59	5	10	8	9	25
35-44	91	11	11	17	17	32	115	11	13	22	26	41	113	12	17	14	24	45
45-54	59	8	9	12	9	19	84	6	13	12	18	33	92	8	11	14	18	40
55-59	11	1	2	2	1	4	14	1	2	3	3	6	13	2	2	2	2	5
60+	2	0	0	-	0	0	2	0	0	0	0	1	2	1	0	0	0	1

Source: Statistical Office of SR (LFS 2Q)

2.4 Labour market policies

The Ministry of Labour Social Affairs and the Family was the single labour market institution till 1997. Since 1997, the Ministry has been responsible for labour market legislation, leaving the responsibility for supervising financial flows and implementing respective labour market policies tools up to a newly created public legal National Labour Office. NLO is built on a tripartite principle, however with the Minister of Labour in the position of the president of administrative board, containing eight regional district offices and 79 district labour offices headquartered in Bratislava.

Table 30
2000 –1991 Expenditures on Labour Market Policies (in thousands of SKK)

Years:	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total	3262454	5523670	2966154	3605869	6080559	7353506	7088593	7773826	7766302	7752873
Index*	100	169	91	111	186	225	217	238	238	238
Active policy	522505	3812793	1107216	1896202	3899107	4290374	3098692	2289140	474032	1570444
Index*	100	730	212	363	746	821	593	438	91	301
Active policy (%)	16	69	37	53	64	58	44	29	6	20.3
Passive policy (%)	84	31	63	47	36	42	56	71	94	79.7
Retraining (% of AP)	9.5	7.7	10.6	5.7	4.2	4.6	8.3	7.3	15.5	4.0

Source: National Labour Office of SR
* Index of change with year 1991 as a base

The early ’90s, with unemployment representing a new phenomenon, are the best times for financing labour market policies. The end of the past decade, with a hard year in 1999, turned labour offices into postmen of benefits with almost frozen employment services.

Any significant effects of passive labour market policies on duration of unemployment are very doubtful. An increasing unemployment and tight situation in public finance led to a decrease in the originally generous expenditures on unemployment benefits and to more strict entitlement rules. Entitlement periods were cut and replacement rates were lowered. Current conditions are described in the following table.

Table 31
Unemployment Benefits* since December 1, 1999

Unemployed	Entitlement period	Replacement rate
Graduates	**0-6 Month**	0**
	6-12	up to 50% of subsistence level
under 15 years	**0-3**	50% of average gross monthly wage
	3-6	45% of average gross monthly wage
over 15 years	**0-3**	50% of average gross monthly wage
	3-9	45% of average gross monthly wage

Source: Act No.387/1996 Coll. on Employment in latter wording
* Maximum benefit could amount to 1.5 times of the subsistence level
** Nevertheless, they are entitled to apply for social benefits

The average number of people receiving unemployment benefits (SKK 3,296 in average) was 111,567 as of the end of 2000.

Table 32
2000-1991 Registered and Benefited Unemployed

Indicator /Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
AA number of RU	14 296	169 059	285 511	323 216	366 168	349 821	324 278	336 661	379 466	485 202	517 925
AA number of BU	7 996	124 624	119 205	112 409	91 143	76 590	85 241	83 939	102 491	130 343	111 567
Benefited (in %)	55,9	73,7	41,8	34,8	24,9	21,9	26,3	24,9	27,0	26,9	21,5
Registered Index of change*	8	100	169	191	217	207	192	199	224	287	306
Benefited (in %) Index of change*	76	100	57	47	34	30	36	34	37	36	29

Source: National Labour Office, tabled by SNO
AA - Average annual; RU -registered unemployed; BU-benefited unemployed from unemployment benefit
* with year 1991 as the base

The number of unemployed persons depending on social assistance follows the increasing number of unemployed. A decrease in the number of unemployed benefiting from employment benefits (due to exceeded entitlement period and gradual tightening of entitlement conditions) will have to be compensated by social assistance benefits.

Table 33
1993-2000 Unemployed Social Assistance Beneficiaries

Average monthly number	1993	1994	1995	1996	1997	1998	1999	2000
Beneficiaries*	121 835	158 329	157 570	141 762	143 386	169 039	236 811	287 690
Index*	.	30.0	-1.5	-10.0	1.1	17.9	40.1	21.5

Source: Ministry of Labour, Social Affairs and Family
* Average monthly number of unemployed receiving social assistance benefits
**Changes over the preceding year in %

In 2000, the registered unemployed represented over 90% of the number of social assistance beneficiaries, and received SKK 9 539.4m from the state budget. An additional SKK 4 412.9m was paid to the unemployed through the National Labour Office in the form of unemployment

benefits. Thus, the unemployed were paid in total SKK 13 952.3m. Compared to the preceding year, these funds slightly decreased (from 14 128.7m).
The first active labour market policies were introduced in 1991 and developed gradually. Until the end of 1996, the active labour market policies in Slovakia contained the following measures:
socially-purposeful jobs (private sector); publicly useful jobs; re-training; counselling; sheltered workplaces for the disabled; subsidies for shortened working hours; jobs for school-leavers.

Act No. 387/1996 Coll. on Employment stipulated in the § 79 the following measures:
- re-training;
- support of job creation;
- support of employment of specific target groups;
- support for prevention of layoffs;
- support for maintenance of existing jobs;
- support for elaborating proposals for revitalisation of employment;
- support for employment of the disabled.

Socially-purposeful jobs were the most important throughout this period, followed by publicly useful jobs and re-training. The latter has been used moderately and the rest of the programmes referenced above occupied only a negligible share of total expenditures. For a more detailed description of the active policy measures till 1998 see Lubyová, Ochranková, Vantuch (1999).
In 1999, the active policy ground almost to a halt due to the lack of funding (see Table 30 above).
Since December 1, 1999 active labour policy tools were enriched (Act No. 387/1996 Coll. on Employment as amended by Act No. 292/1999) adding to the § 79 new indention:
- other measures for improving the labour market situation, featuring predominantly nation-wide measures and programmes in the field of career guidance and counselling.

The only tool contributing to the change, accompanied by significant job creation in 2000, was backed by the government decision of July 2000 to provide SKK 2 billion to engage people unemployed over one year in publicly useful jobs. This decision brought about a temporary decrease in unemployment by creating 65,526 jobs, predominantly in co-operation with municipalities. Municipalities themselves or via their budgetary and contributory organisations created 87.3% of the jobs. Civic associations created 6.4% and other employers together 5.9% of the jobs.

Table 34
Publicly Useful Jobs Created in 2000 by Type of Employer

Type of Employer	Number of publicly useful jobs created	Share in %
Municipalities	53 005	80.77
budgetary or contributory organisations established by municipality	4 353	6.63
civic association	4 226	6.44
non-profit organisation	238	0.36
Foundation	176	0.27
non-investment fund	21	0.03
healthcare institution	751	1.14
social care establishment	888	1.35
churches and religious societies recognised by state	1 479	2.25
Slovak Red Cross	489	0.75
Total	**65 626**	**100.00**

Source: National Labour Office

Final costs of newly created temporary jobs involving in total 67 301 unemployed people covered by the state budget totalled SKK 1 201 391 398 - far from the originally planned amount.
In November 2000, Government approved the National Employment Action Plan (NEAP). NEAP is established on EU employment guidelines and the four „Luxembourg“ pillars and specifies the objectives of all measures, implementation terms and target groups and identifies the respective legislation and source of funding.

2.5 Future skill needs of the economy

In general, language skills, ICT skills, and organisational skills are most desired among employers, making traditional education virtues less attractive on the labour market. Nevertheless, it might be an oversimplification to advocate practical over theoretical education and general over vocational education without concrete clarification in terms of instruction change.
There is a lack of information about business and, in particular, about the private sector's demand on the structure of labour force vocational skills. This is because it’s currently almost impossible to conduct surveys with high methodological standards. Questionnaire techniques and self-reporting suffer from biases caused by a low proportion of respondents. Moreover, quite typically, only successful entrepreneurs are positive in their responses. A qualitative survey initiated by SNO and conducted by the Research Institute of National Economy of the University of Economics in Bratislava (Matulcíková, M., Srna, O., Brendzová, D., 2000) has suggested the following general results:
Personal qualities, predominantly reliability and flexibility and other social skills dominate over specific occupational skills. Higher priority is given to acquisition of cognitive skills, reading with comprehension, information processing and questioning. Learnability is valued as the most important educational output. This is due to high numbers of unemployed already possessing specific occupational skills and by the rapid pace of innovation in technology, making re-training inevitable.
Lack of data on the functional literacy of adults in Slovakia is heavily criticised with regard to this (e.g., Slovakia did not participate in some important international surveys such as SIALS and the first phase of the PISA project).

Slovakia, heading inclusion in a larger geopolitical and economic area, sees human resource development as one of key factors of its economic development, and carefully reflects relevant conclusions of European councils. The “new basic skills” for active participation in working life, and the conclusion that lifelong learning is a guiding principle for the provision of education and training are recognised as a fully acceptable education policy direction by Slovak experts. Nevertheless, such a vision must be complemented by the development of appropriate political agendas, with identification of coherent strategies and practical measures.

2.6 Conclusions as regards the key labour market issues and their influence on aspects of human resource development

Resuming the implications for the education sector, the following conclusions (Vantuch, J. et al., 2001) remain valid:

It is necessary to support current educational services by

- legislative backing of higher professional schools already existing on an experimental basis as a result of PHARE projects from the ’90s; this could open the door for fostering post-secondary studies and non-university tertiary education as a good way to prevent youngsters from entering the labour market too soon, which is currently already short of vacancies;
- legislative backing of a dual system of tertiary education promoting both non-university higher education and short track university education with currently unpopular bachelor's diplomas as fully recognised, effective and tailor-made higher education options;
- stressing and promoting the lifelong learning concept-based education with its lifelong and lifewide aspects;
- improving the quality of legislation (e.g., by amendment to Act No. 387/1996 Coll. on Further Education and/or within the law on higher education expected to come into force in 2002) with the aim to promote lifelong learning and make it attractive for higher education institutions;
- supporting creation of regional educational policies as a consequence of administration reform increasing decentralisation and shifting competencies from state administration to self-governing bodies, coming into force in 2002;
- development of EU compatible UOE standard-based information systems, providing decision makers at central and regional levels with valid and comparable data;
- development of a national quality assurance system as a prerequisite for effective decentralisation with a strong output-driven VET policy with minimal regulation of the process of education and training;
- monitoring the quality of the pre-educational and infra-educational environments penetrating informal and non-formal learning;
- promoting VET social partnership in national and regional levels as the first step in the development of political and administrative skills and expertise within regions, and as a prerequisite for future activities related to EU Structural Funds projects and analogous Slovak central government-based disparity fighting interventions.

3. Modernisation of Vocational Education and Training (VET)

3.1. Introduction

Declarations on supporting the implementation of LLL are contained in all basic conceptual documents regarding the development of human resources, such as

- National Programme of Upbringing and Education in the Slovak Republic (Millennium Project),
- Concept for the Further Development of Tertiary Education for the 21st Century in Slovakia,
- the National Development Plan and Sectoral Operational Plan "Human Resource Development",
- National Employment Plan.

The National Programme of the Development of Upbringing and Education in the Slovak Republic considers lifelong learning

- to be the fundamental and primary principle of education,
- a system that makes the existing education system complete.

The Concept of Further Development of Universities for the 21st Century expressing main mission of the university system identifies six functions, two of which are characterised as

- contribution to educational development on all levels, and
- rendering opportunities to people for continuing education/training throughout their lives.

Human resource development-related documents and particularly employment policy linked documents (see chapter 3.2) fully reflect the crucial role of lifelong learning for sustainable economic growth, improving social conditions and fighting poverty, as well as supporting personal development.

Nevertheless, the process of consultation on the Memorandum on LLL initiated by the European Commission disclosed the importance in Slovakia of further and deeper discussion of intended policies, and measures to be implemented. The National Report for the Slovak Republic explicitly stated that it's not possible to regard the consultation process as completed. Experts preparing the report found out during the consultation process differing levels of sensitivity from respondents including key players on issues relating to LLL. Despite a generally declared positive stance, a lack of operationalisation of respective measures is considered as a threat to the successful implementation of policies. The report states within its proposal No. 3.1 explicitly:

"This points to a number of risks for the future implementation of LLL

- a continuing lack of sufficient practical reflection of the importance of LLL as one of the leading principles of socio-economic measures,
- an insufficiently developed infrastructure in the decisive sphere (insufficient connection of key players in the decisive sphere of operational research, relative weakness of still developing "think tanks", under-financed research at universities and research facilities in social sciences)"

Along with this, the report also stressed the dangers of a continued lack of investment into the modernisation of schools and the decline in the status of teachers in post-communist countries, which "can ultimately reinforce concerns about the irreversible disintegration of the education system". This also applies to the lack of financial incentives for promoting non-formal and

informal lifelong learning. Additionally, accession to the EU is accompanied by an **unintentional and hidden process**, which might even pose a greater threat to education and lifelong learning. In candidate countries with weak economies the education sector might be additionally constrained as a consequence of the pressure of the "difficult" chapters and financially demanding commitments candidate countries must take upon themselves during the negotiation process if they want to reach the European standard.

This is why the Slovak report in its proposal No. 6 addressed to EU, with certain analogies to the recognition of the necessity of protecting and creating the natural environment, put forth the idea of **protecting and creating the education environment** on the national and international stage:

"While fully respecting cultural diversity and respecting subsidiarity in education issues, we regard it as necessary to initiate discussion aimed at testing the accessibility and quality of the common infrastructure of formal, non-formal and informal learning, and

- setting non-compulsory minimum standards for the European extra-curricular environment
- setting European benchmarks for schools' facilities
- setting European benchmarks for the status of educators
- identifying the media themes of protecting and creating the European educational environment,

to regard their realisation as an indication of European quality in the education environment. It is also an indication of the healthy development of society and potential healthy development of the economy, but definitely not as a condition for membership of the EU."

It's worthwhile stressing that the Maastricht criteria, encouraging countries belonging to the Euro monetary area to adopt balanced monetary policy and keep the deficit below 3% of GDP, would start a similar unintentional and hidden process of weakening of education and learning environments. That is, unless the aforementioned action imposing minimum standards is taken. Weak economies of post-communist countries facing the choice will definitely not follow rhetoric calls for increasing financing of lifelong learning, but follow stability pact rules and restrict public expenditures, where education and LLL is very likely the first to be subjected to financial restrictions. The aforementioned minimum standards could prevent irreversible losses, and EU recommendations could help promote the national discourse leading to finding alternative ways to restrict spending.

Currently, there is no legislation providing for mandatory financing LLL in Slovakia. Two laws fundamentally back LLL:

- Act No. 172/1990 Coll. on Higher Education, namely its Article 24 stated that universities should enhance the "lifelong learning of the population, to which particularly continuing learning is rendered, necessary to execute specialised professions or jobs", and
- Act No. 386/1997 Coll. on Further Education considers continuing education/training a constituent part of the educational system in the Slovak Republic and of lifelong learning (Article 1, paragraphs 1 and 3).

A newly prepared draft law on Higher Education, which is under public discussion and expected to come into force in 2002, considers the provision of "further education" a characteristic significant for the fulfilment of the mission of higher education institutions. Nevertheless, financing of "further education" remains unspecified.

Lifelong learning debate strengthened the call for amendment of Act No. 386/1997 Coll. on Further Education. Within an amendment of the Act, 1 % of payroll levy in support of LLL/continuing training was proposed. Despite strong support from the Ministry of Education and the Ministry of Interior, the government as a consequence of negative opinion of the Ministry of Finance turned it down. Thus, all initiatives in creation of VET funding schemes enabling direct financing of VET in the entrepreneurial sphere were torpedoed and the window opened up only in 2001 as a result of the successful political pressure on decreasing of corporate taxing. Generally, the main players now accept that there is no room for further tax decreases. The entrepreneurial sphere was originally positive toward direct funding of VET accompanied by a decreased tax burden. However, this kind of agenda is currently off the table.

3.2. The Human Resource Strategy

In 1998, Slovakia ranked 40th with a 1998 Human Development Index of 0.825, making it the third best of the post communist candidate countries, lagging behind Slovenia (29th) and the Czech Republic (34th) and before Hungary (43rd), and Poland (44th). In 2000, with a Human Development Index of 0.835 Slovakia ranked 36th behind Slovenia (29th), the Czech Republic (33rd) and Hungary (35th) followed by Poland (37th). The following table makes it explicit how two neighbouring countries Hungary and Poland gradually reached the same level in 2000, while lagging significantly behind in 1990. It is clearly visible that Slovakia failed to manage the transformation process in the first half of '90s.

Table 35
Central European Post Communist Countries Human Development Index

Country	1990 HDI	1995 HDI	2000 HDI	2000/1990 Index
Czech Republic	0,835	0,843	0,849	101,7
Hungary	0,804	0,809	0,835	103,9
Poland	0,792	0,808	0,833	105,2
Slovakia	0,820	0,817	0,835	101,8
Slovenia	0,845	0,852	0,879	104,0

Source: UNDP Human Resource Development Reports

Speeding up in the latter half of the '90s, Slovakia compensated its losses, however when looking at the trend Slovakia is at risk to be outperformed by all of these countries soon.

The actual Human Resource Development strategy is worked out within the National Development Plan (National Plan of Regional Development of the Slovak Republic), which is based on the resolution of Slovak Government No. 242/2000 of 12 April 2000 and was finished in March 2001. Initial activities related to this document were in detail commented on within the SNO document Modernisation of Vocational Education and Training in Slovakia, National Report 2000. The SWOT analysis of human resources elaborated by the workgroup of experts under the surveillance of the Ministry of Labour, Social Affairs and Family is in Annex B.

The major strategic intent of the National Development Plan was achieving GDP growth reaching the level of 60-65 % of the EU average GDP by 2006. This goal however seems to be too ambitious. Here are the prognoses of the Ministry of Construction and Regional Development expressed in basic labour market indicators.

Table 36
Primary Indicators of Unemployment and Development of Wages

Year	Rate of unemployment	Nominal wages
1995	13.8	7195
1996	12.6	8154
1997	12.9	9226
1998	13.7	10003
1999	17.3	10728
2000	18.2 (18.3)	11440 (11430)
2001	16.9 to 18.1	12200 to 12510
2002	16.0 to 17.5	13200 to 13630
2003	15.0 to 17.0	14200 to 14900
2004	14.6 to 16.6	15200 to 16300
2005	14.0 to 16.0	16300 to 17700
2006	13.0 to 15.0	17400 to 19200

Source: The National Plan of Regional Development of the Slovak Republic
Note:
Rate of unemployment – average annual registered unemployment rate
Nominal wages – average monthly wages of an employee of Slovak economy (in SKK). 1995 to 1999 actual,
Source: The Statistical Office of the Slovak Republic, 2000 estimate and 2001 to 2006 forecast of MCRD SR.
2000 data in brackets are real data supplemented by SNO.

Analogous to human resource development strategy as reflected within the aforementioned documents, employment policies reflect the importance of lifelong learning for employability as well. Conception of Employment Policy adopted by the Slovak Government on 25 November 1999 followed by the National Employment Plan approved in 2000 served as essential strategic documents for the period to 2002. Employment policy documents in Slovakia fully adhere to the European four-pillar approach reflecting relevant employment guidelines. The draft document Joint Assessment of Employment Priorities in the Slovak Republic (JAP) is expected to be signed in Brussels in late autumn of 2001. The soon-to-be prepared National Action Plan of Employment for 2002 and 2003 (NAPE) is expected to be approved..

These two documents are aimed at provision of concrete proposals for change, followed by concrete measures. Nevertheless, any serious educational analyst must consider stepping up calls for “harmonisation of vocational education with requirements of labour market demand” as needing additional clarification. Re-thought measures that prevent degenerated regional labour markets from harming educational profiles of graduates must accompany any kind of such a harmonisation. In regions in decline and/or suffering from pending restructuring “harmonisation with the labour market demand” could result in a human resource underdevelopment trap.

3.3 Preparation for European Social Fund Implementation

1998 PHARE Special Preparatory Programme for Structural Funds, aimed at the improvement of programming and administrative capacity for regional and structural policies in Slovakia, has been successfully accomplished. Slovakia, however, still has to improve respective administrative structures for the management of programmes aimed at the development of human resources and their better assertion on the labour market.

The National Training Institute, the organisation responsible for provision of training on European Social Fund (ESF) to officials in state and public administration in the Slovak Republic, established at the National Labour Office (NLO) and supported by ETF, analysed and quantified the training needs in Slovakia. Pursuant to the results of training needs analysis it would be necessary to train approximately 1,600 people. The strategic document “National

Training Plan for ESF" elaborated by training managers was approved by the European Commission. In order to support realisation of the plan a project aimed at receiving technical assistance for dissemination of know-how from EU member states was submitted within the PHARE 2001 programme.

The need for the reinforcement of administrative capacity of the Slovak Republic was also emphasised in the document Accession Partnership with the Slovak Republic (1999) and in 2000 Regular Report from the Commission on Slovakia's Progress towards Accession (released November 8). That's why the SPP Diploma programme was aimed at improving theoretical knowledge and support of development of practical skills of people working in the field of regional development. The task was to Providing participants with basic knowledge in regional policy in Slovakia, within the context of EU integration, was the basic task. Programme participants included employees of state administration, self-administration and the third sector actively involved in regional development. The total number of participants within the first and second SPP Diploma rounds held during 2001 was about 380. The project run within SPP 3 was devoted to the issues of regional development in Slovakia and the EU. It was focused on senior state administrators. In total, an SPP Diploma was awarded to 324 participants.

The process of adaptation of Slovak regional and sectoral policies to EU compatible economic and social cohesion terms continues.

3.4. Modernisation of initial vocational education and training (IVET)

3.4.1 Structure and organisation of the IVET system

3.4.1.1 Formal Education and Training System

There are three streams of secondary education within the Slovak formal education system - an academic ISCED 3A general stream and two vocational streams represented by secondary specialised schools (SSS) and secondary vocational schools (SVS) following the nine-year basic school (See the chart in the Annex C).
The duration of compulsory education is fixed at 10 years and thus it has to be completed at secondary school. The end of compulsory education is not certified. Despite progressing policy of inclusion, there is a traditionally a well-developed system of special schools for physically and mentally handicapped children. Except those mentally disabled, all children with special needs are given an opportunity to achieve at least an ISCED 3C level education.

Private and church-affiliated schools are entitled to operate within all segments of the educational system. As visible from Table XX in the Annex, the share of students within non-public schools is marginal, with exception of grammar schools. It is worthwhile mentioning that church-affiliated schools dominate in numbers over private schools in general education, and private schools dominate in numbers over church-affiliated schools within VET (see Table XXXII in Annex).
An analogous situation is observed in two newly started non-state higher education institutions: Private Management School in Trencín is business oriented and Catholic University in Ružomberok humanities and teacher training oriented.
The whole formal education system is in detail described in the SNO document Modernisation of Vocational Education and Training in Slovakia, National Report 2000. For detailed description of education and training provision in terms of ISCED see chapter 3.4.1.4.

3.4.1.2 Entry to the initial VET system

In Slovakia, initial VET starts after the ISCED 2 level – graduation from the Basic School. During the communist era, the numbers of graduates of worker professions and technical intelligence were planned in accordance with the command economy. According to this, just 15% of Basic school leavers had to go to Grammar schools, 25 % to SSS and 60 % had to go to SVS. In 2000, enrolment was as follows: GS and SVS 24.4% and 34.3% respectively, while SVS just 41.3 % inclusive ISCED 2C type non-secondary school students.
Furthermore, it's worthwhile stressing that over a third of SVS newly enrolled enter an ISCED 3A study programme. Furthermore, those enrolled in the ISCED 3C programme are given the opportunity to continue in follow-up programme leading to an ISCED 3A level. In aggregated data more than a third of ISCED 3C apply for such a follow-up (see Table 38). The following table could be interpreted as indicating the interest in this type of school as well as the capacity of respective types of schools.

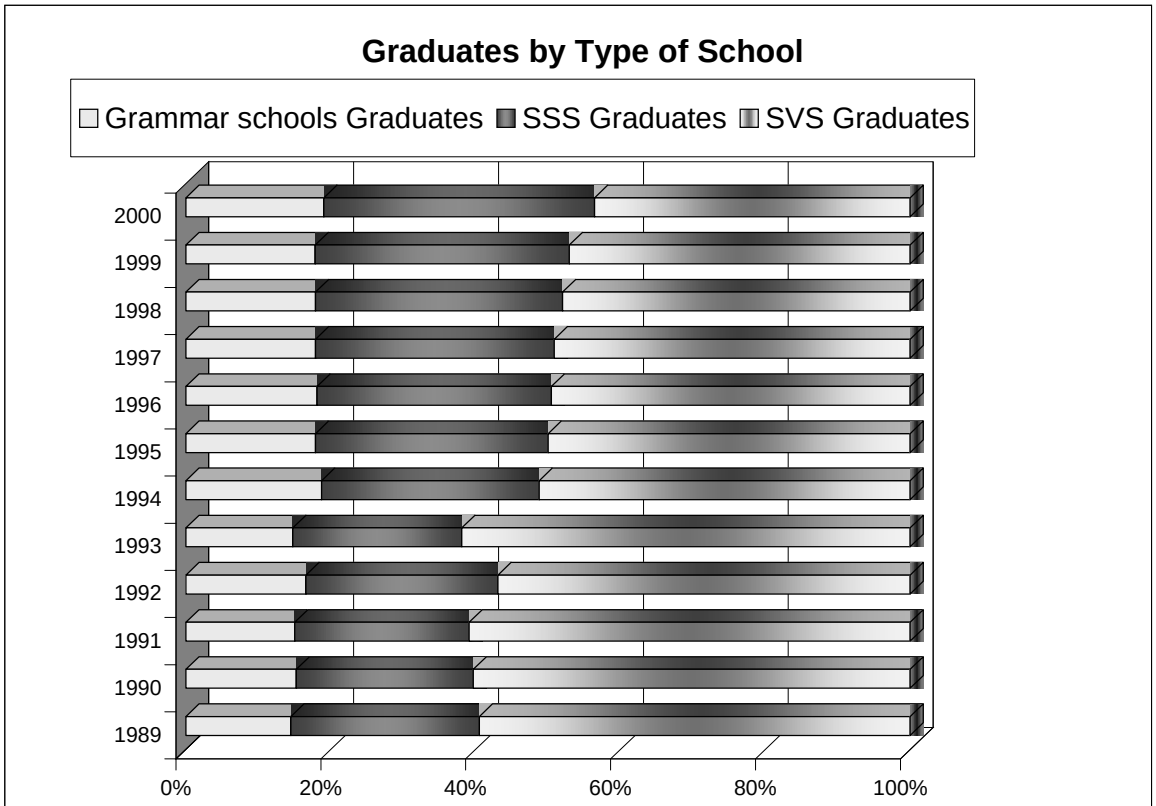
Table 37
Newly Enrolled (full-time) by Type of School

Year/ Type of School	GS *	SSS 3A+3C	SVS 3A+3C
1989	14017	20992	51 807
1990	15475	24185	46 302
1991	15957	27503	44 654
1992	17623	29300	45 645
1993	18551	29197	45 434
1994	19294	28895	43 905
1995	19612	28810	41 831
1996	19708	29499	39 435
1997	17213	22779	31 854
1998	16787	21593	27 750
1999	11648	15405	18 560
2000	20337	28561	34 325

Source: Institute of Information and Prognoses of Education,
Note: In the years 1997 to 1999 data are influenced by the gradual expansion of 8 year to 9 year basic school
* All in GS newly enrolled from diverse age cohorts are included

Graduates trends, which are more important than enrolment trends of students in upper secondary education after the political change, are shown below. In the following graph the output of respective types of schools with graduates from all programmes (incl. follow-ups and ISCED 4+) are shown.

Graph 7
1989 –2000 Graduates by type of schools



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
SVS Graduates	42	45	50	44	57	41	42	44	44	42	40	36
SSS Graduates	18	18	19	20	21	24	27	28	29	30	30	30
Grammar schools Graduates	10	11	12	12	13	15	15	16	16	15	15	15

Source: Statistical Yearbook of the Slovak Republic 2001, 1997, 1994, VI.2-2, VI.2-3, and VI. 2-6
Note: Graduates from all full time programmes (incl. follow-ups and ISCED 4+) are included

In the '90s strong pressures occurred with respect to enhancing the academic, general education stream capacity. Simultaneously, with enterprises facing restructuring, the economic base of SVS collapsed. Weak enterprises were losing interest in operating their vocational schools and they were disinterested in training the working youth, which was accustomed to lots of benefits and future jobs guaranteed according to their contracts with enterprises. A strong shift from SVS ISCED 3C to SVS and SSS ISCED 3A was fuelled by both an interest in maturita ISCED 3A education and the worsening status of blue-collar professions training.

Table 38
Newly Enrolled (full-time) by Type of School and ISCED

Year	GS*	SSS 3A+3C	SVS 3A	SVS 3C+2C	SSS follow-up 3A	SVS Follow-up 3A	SSS Post-maturity 4A	SSS 5B
1991	15957	27503	7305	37349	0	0	1103	0
1992	17623	29300	9905	35740	28	0	1642	274
1993	18551	29197	10339	35095	58	363	2076	359
1994	19294	28895	10409	33496	574	2028	1997	534
1995	19612	28810	9988	31843	939	4846	1802	809
1996	19708	29499	10263	29172	1061	6296	1700	1069
1997	17213	22779	8435	23419	898	7453	2082	1193

1998	16787	21593	6947	20803	802	8610	2336	1350
1999	11648	15405	4521	14039	481	11341	2880	1452
2000	20337	28561	9750	24575	146	9896	2450	1470

Source: Institute of Information and Prognoses of Education,
Note: In the years 1997 to 1999 data are influenced by the gradual expansion of 8 year to 9 year basic school
* All in Grammar schools newly enrolled from diverse age cohorts are included

The follow-up ISCED 3A courses offer additional opportunity to graduates from blue-collar profession courses to reach maturita, which is a prerequisite for both better salary/promotion in the profession and admission to higher education. There is a significant increase in enrolment in these programmes within SVS and low demand in this at SSS, as ISCED 3C courses at SSS are marginal. Within these figures, young people dominate. The adult population predominantly enrol in part-time courses, which are not reflected by the table above. They are discussed later in this chapter.

Typically, students who apply for SSS ISCED 4A programmes are graduates from ISCED 3A general education programmes of grammar schools. Quite typically, grammar schools graduates with "general maturita" and those not continuing in higher education look for specific "vocational maturita" facilitating their placement on the labour market. SSS ISCED 5B programmes, which usually resulted from international projects, alternate the role of non-university tertiary education attracting all secondary school ISCED 3A graduates.

SVS are advised to reflect the labour market, nevertheless, due to missing information on the future labour market needs they are able to estimate what study branches are not fully marketable rather than leading to human resource development. As a consequence of non-transparent and weak labour market demand, SVS continue to turn their attention to the education service market and try to satisfy the needs of Basic school leavers. In fact, SVS continuously make attempts to attract basic school leavers for new study branches that would be competitive with those at SSS. Hence, the way was paved for the integration of both VET streams. Act No. 29/1984 Coll., as amended in May of 2001 by Act No. 216/2001 Coll., has finally backed the possibility to establish integrated schools, drawing on the conclusion of the aforementioned trend and successful experiment of the late '90s with integration of SVS and SSS. SVS-SSS convergence is expected to be supported within the new Education Act in force in 2002.

The following table indicates a good situation in provision of ISCED 3 education for youngsters within the full-time regime compared to higher education. A decline in population opened up the latitude in schools to acquire ISCED 3A directly or through follow-up courses. This is not the case in higher education, where almost a third of all students study in part-time courses predominantly, resulting from the limited capacities of higher education institutions rather than from deliberate choice of students preferring part-time over full-time study.

Table 39
Number of Part-time Students (adults) within the Formal Education System in 2000/2001

	ISCED 3				**ISCED 4**	**ISCED5+**
	Total	**ISCED 3A General**	**ISCED 3AVocational**	**ISCED 3C**		
Total	9077	1532	6222	1323	1474	43097
Males	4744	663	3619	462	476	18392
Females	4333	869	2603	861	998	24705

Source: Institute of Information and Prognoses of Education, calculated and tabled by SNO

Basic trends after the political regime change in 1989-90 are presented in annexed Tables XXX and XXXI and indicate:

- demand-driven unregulated development of schools and classes within secondary education and
- structural changes in enrolment caused by both more free choice of students and restructuring of the economy which could be summarised as follows:

In SSS branches the most significant increase in newly enrolled can be observed in “Economics and organisation, retail and services“ branch (from 4399 to 10947 in 1989 and 2000, respectively) and the major decrease in “Metal engineering and metal-processing“ branch (from 2706 to 1278 in 1989 and 2000, respectively).
With regard to SVS study programmes, the most significant increase in newly enrolled can be seen in “Economics and organisation, retail and services“ branch (from 959 to 2512 in 1991 and 2000, respectively), „transport, posts and telecommunications“ (from 166 to 872). The major decrease was in “Metal engineering and metal-processing“ branch (from 2,060 to 1,157 in 1991 and 2000, respectively).
In SVS training programmes the numbers of newly enrolled have decreased in almost all branches with the most significant decline observed in “Metal engineering and metal-processing“ (from 10,292 to 4,891 in 1991 and 2000, respectively). There are however some branches with increased numbers of newly enrolled, e.g. “Food-processing“ (from 1,122 to 1,567 in 1991 and 2000, respectively) or “Arts, applied arts and folk crafts“ (from 13 to 281 in 1991 and 2000, respectively).

3.4.1.3 Training levels and paths within IVET and certification of outputs

There are no “regular” VET schools within level less than ISCED 3 in the Slovak Republic. Nevertheless, there are non-secondary vocational schools affiliated with the secondary vocational schools typically providing two-year training courses with curricula especially adjusted for marginal low achievers with trouble finishing basic schools, referring to level ISCED 2C. The official documents on completion of education within programmes with specially-adjusted curricula are a certificate on final exam and a sort of Certificate of Apprenticeship. This certificate, however, is a certificate of training attendance rather than a regular certificate of apprenticeship. Nevertheless, in practice it is considered a certification of qualification for low-skilled work.

Secondary specialised schools finishing with maturita provide ISCED 3A education. An official document on completion of education is a maturita certificate. Very rarely SSS offer ISCED 3C programmes.
Study branches at secondary vocational schools finishing with maturita provide ISCED 3A education. The official documents on completion of education are a maturita certificate and a Certificate of Apprenticeship.
Training branches at secondary vocational schools finishing with a final exam refer to ISCED 3C level. The official documents on completion of education are a certificate on final exam and a Certificate of Apprenticeship.
Programmes at secondary specialised schools finishing with final exam refer to ISCED 3C level. An official document on completion of education is a certificate of completing the final exam.

Vertical permeability at secondary vocational schools and secondary specialised schools is provided for within follow-up programmes leading to maturita for those students who completed their study with a final exam only. Follow-up programmes refer to ISCED 3A level of education. An official document on completion of education is a maturita certificate.

Secondary school graduates possessing a maturita certificate can apply for studies within post-secondary or tertiary levels of education.

Secondary specialised schools offer post-maturity programmes leading to additional vocational qualification. This type of study refers to ISCED 4A level. An official document on completion of education is a maturita certificate.
Some secondary specialised schools provide experimentally post-secondary higher professional education programmes finishing with absolutorium referring to ISCED 5B level.
A special type of secondary schools, conservatoires, provide six-year programmes referring to ISCED 3A level within the first four years completed by maturita, and ISCED 5B level within the 5th and 6th years completed by absolutorium. An official document on completion of higher professional education is a graduate diploma.

Higher education institutions provide closed bachelor's programmes referring to ISCED 5B level, open bachelor's studies, determined as a pre-stage to Masters study, referring to ISCED 5A level. They also provide Masters study (magister's study, engineer's study and doctor's study) referring to ISCED 5A level, and Ph.D. study referring to ISCED 6 level. An official document on completion of education is a diploma.

Assessment and certification procedures are fully school-based. There are no specialised bodies for assessment, certification, and award of diplomas and qualifications. The full responsibility lies with secondary schools, which have to follow a special decree of the MoE. A "Monitor" National Institute of Education and School Inspection-backed project is aimed at the comparison of educational outputs nation-wide and a gradual introduction of "state matura", a national standardised exam in Mathematics, English and Slovak languages in 2005.
Higher education institutions are fully autonomous at the faculty level. Assessment and certification procedures are developed by the faculty's dean and its senate. They are limited only by the framework stipulations of the Higher Education Act. A Rector can refuse to sign the Diploma based on doubts about the fulfilment of the formal criteria of accreditation of the respective educational programmes. An Accreditation Committee as an advisory body to the government has a responsibility to check the fulfilment of the formal accreditation criteria of educational programmes. However, it has limited tools and power to evaluate output quality.
The soon-to-be prepared draft-law is expected to impose more strict regulation on both assessment and certification procedures.

3.4.1.4 Description of the training provision within each level and/or path

ISCED 2 level
There is only general education offered at this level in nine grades in Basic school and the lower stage of "long form" (eight grades) of Grammar schools. Low achievers with difficulties to finish Basic school successfully are offered a two-year non-secondary training at vocational schools affiliated with Secondary vocational schools considered ISCED 2C with respect to the content of the training (see chapter 3.4.1.3).
Due to the decrease in population as a whole and decreasing interest in ISCED 3C education, SVS are more interested in opening those affiliated vocational schools and accepting trainees for such a programme (see the table below). It would be worthwhile doing further research to clarify whether there is an increasing number of low achievers nation-wide.

Table 40
Number of Schools and Trainees in Vocational Schools (as of 30 September)

Year	Number of Vocational Schools	Number of Trainees
1998	43	1798
1999	57	2523
2000	64	2872

Source: Institute of Information and Forecasts on Education

ISCED 3 level

Secondary specialised schools (SSS – ISCED 3A, rarely ISCED 3C, ISCED 4B and ISCED5B, see Table 38 represent the first of two secondary VET streams. These schools provide for good quality general and professional education with a firm grounding in theory.

In SSS, general subjects represent 42-45%, VET subjects 55-58%, out of which 25-30% is practical training.

SSS specialised in technology (the official name is Secondary Industrial Schools with indicated specialisation, e.g. „of machinery“, „of construction“, etc.) could be considered “technical grammar schools”. Graduates of these SSS often apply successfully for higher education, mainly for technical universities. Other SSS are specialised in agriculture, economics, forestry, healthcare, library sciences and pre-school teacher training, all typically offering four-year studies finishing with „maturita“. Some SSS are called Academies (e.g. Academy of trade, Academy of hotel trade, etc.) offering five-year studies. Conservatories are a special case rather close to non-university tertiary education offering four-year studies, or six-year and eight-year studies finishing with the „absolutorium“ (its content bases are rated ISCED 5B). SSS graduates with an absolutorium diploma have reached the level of “higher professional education”. SSS also offer traditional post-secondary non-tertiary education completed with “absolutorium“ and, very marginally, ISCED 3C programmes culminating in a final exam not entitling one for admission to higher education.

A mushrooming number of schools with significant increase of teachers and declining pupil/teacher ratio as well as number of pupils per class indicate that a reconstruction of the network of schools will be required by economists soon. Full table offering 1989-2000 data is annexed. Furthermore, ETF teacher/students ratio is also included within Key Indicators set of tables in the annex. .

Table 41
Secondary Specialised Schools: Basic Indices

Year	Schools	Classes	Pupils	Graduates	Teachers	Pupils/Teachers	Pupils/Classes
1989	181	2 677	80 545	18 747	7 941	10.1	30.1
1992	317	3 382	103 793	20 726	10 849	9.6	30.7
1998	376	3 839	111 191	30 081	14 067	7.9	29.0
1999	379	3 632	99 070	30 242	13 253	7.5	27.3
2000	374	3 699	99 079	31 120	13 117	7.6	26.8

Source: Institute of Information and Prognoses of Education
Notes:
Since 2000 including SSS of the Ministry of Interior and the Ministry of Defence
All data without part-time studies
Teachers - internal and external together; external teachers calculated as persons, not as full-time equivalents

The vocational stream of training for worker occupations is represented by Secondary Vocational Schools (SVS – ISCED 3C and ISCED 3A). SVS offer three-year studies in ISCED 3C „training branches“ ending with a Certificate of Apprenticeship, four-year (sometimes five

years) studies in ISCED 3A ”study branches“ ending with “maturita“ and a Certificate of Apprenticeship.
In SVS ISCED 3A branches, general subjects represent 25-50%, VET subjects 50-75% out of which 35-40% is practical training. In SVS ISCED 3C branches general subjects represent 20-40%, VET subjects 60-80%, out of which 50% is practical training.
ISCED 3C ”Training branches“ graduates are qualified workers. They are not allowed to enrol for tertiary education. They might apply for two years follow-up study providing them with an ISCED 3A level “maturita” examination.

It is expected that all, except extremely low achievers, finish at least three years of ISCED 3C education to obtain a certificate of apprenticeship, which is under Slovak legislation terminology described as a fulfilment of “secondary vocational education“. Those VET students who finish four- or five-year courses finish with a “maturita“ school leaving certificate (ISCED 3A) and are assigned as fulfilling „complete secondary vocational education“. These unfortunate terms often lead to confusion. It would be misleading to consider those not having the “maturita“ certificate as having not „completed“ secondary vocational education.

Significant decrease in all indicators is visible from the following table, except for the number of the schools.

Table 42
Secondary Vocational Schools and Vocational Schools: Basic Indices

Year	Schools	Classes	Pupils	Graduates	Teachers, Directors and Vice-Directors	Teachers	Pupils/ T+D+VD	Pupils/ Teachers	Pupils/ Classes
1989	311	5 953	155 240	42 898	8 756	7426	17.7	20.9	26.1
1992	344	5 704	139 408	44 567	8 315	7119	16.8	19.6	24.4
1998	349	4 776	117 507	42 275	8 225	7231	14.3	16.3	24.6
1999	361	4 374	102 522	40 588	7 892	6916	13.0	14.8	23.4
2000	368	4 491	105 838	36 073	7 383	6715	14.3	15.8	23.6

Source: Institute of Information and Prognoses of Education
Note:
All data without part-time studies
Teachers - internal and external together; external teachers calculated as persons, not as full-time equivalents

The table offering detailed 1989-2000 data is annexed. Furthermore, ETF teacher/students ratio is included within Table XXII in the Annex.

Drop-outs do not represent an urgent problem so far, as visible from the following table, with only female dropping out from ISCED 3C over 5 % limit.

Table 43
Drop-outs from Secondary Education in 1999/2000

1999/2000	ISCED 3A General			ISCED 3A VET			ISCED 3C VET			Total Secondary VET		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Number	318	505	823	2999	2083	5082	1602	1169	2771	4601	3252	7853
Rate (%)	1,33	1,57	1,47	4,30	2,63	3,41	4,39	5,57	4,82	4,33	3,24	3,80

Source: Institute of Information and Prognoses in Education

There might however be a problem with early school leavers within youngsters indicated by LFS where ISCED2 and below and not continuing in training represent a significant group.

Some 41,000 among 18-24 year olds with education level ISCED 2 and not attending further education or training represent 6.3% of the overall population in this age group.

Table 44
Early School Leavers by Gender and Working Status (in thousands)

Specification	Total	Male	Female
Population of 18-24 year olds total	652.3	332.5	319.8
Population of 18-24 year olds with education level ISCED 2	107.2	58.9	48.3
Of which			
Students of secondary schools	66.2	36.0	30.2
Not attending further education or training	41.0	22.9	18.1
Of which			
Employed	6.0	3.1	2.8
Unemployed	21.0	14.5	6.5
Military service	0.7	0.7	0
Inactive	13.3	4.5	8.8

Source: Statistical Office of SR, LFS 4 Q 2001

The number of study areas within SVS and SSS programmes is considered high. In the academic year 1999/2000 there were 28 study areas comprising in total 1,104 specialisations and sub-specialisations (detailed data broken by branches are provided in Table XXXIII in the Annex).

Table 45
Study Programmes at SVS and SSS in the School Year 1999/2000

Schools	SVS	SSS	Total
Number of specialisations and sub-specialisations	622	482	1104

Source: State Institute for Vocational Education and Training

Since criticism of the PHARE Strategic study on VET (Birks, Sinclair 1993), this issue has been repeatedly discussed. Nevertheless, only after the severe decline of the population and a gradual decrease in funds for education, both a reduction of school networks and study programmes developed into a political agenda. For example, in 2000/2001 163 study branches understood as providing training not demanded on the labour market were proposed to be phased out. The situation should be significantly changed with the adoption of the soon-to-be prepared Education Act. Following the National Standard of Secondary VET prepared by the State Institute of Vocational Education and Training and approved by the Ministry of Education, a set of 22 integrated groups of study and training branches is as follows:

1. Metallurgy
2. Engineering and other metal-processing
3. Electrotechnics and information systems
4. Technical chemistry and food-processing
5. Processing of hides, plastics, rubber, shoes production and haberdashery
6. Textiles and clothing
7. Transport, posts and telecommunications
8. Building, geology, mining and stonemasonry
9. Land surveying, cartography, land register
10. Ecology and environmental protection
11. Agriculture and forestry, water and veterinary sciences
12. Wood-processing and musical instruments production

13. Economics and organisation
14. Retail
15. Services
16. Catering and tourism
17. Health
18. Social work
19. Pedagogy
20. Librarian and information systems and services
21. Printing
22. Arts

ISCED 5+

Higher education is considered to be under initial VET. The Act on Higher Education coming into force in 2002 opens the window for diversification within tertiary education. It is proposed that non-university education and non-research based tertiary education be allowed. Short-track education should be popularised and should no longer be considered to be an incomplete master's study by graduates of secondary schools. Higher professional education, predominantly with regional influence, should be supported. The new structure of tertiary education should be compatible with the Bologna Declaration. Currently, master's study in Slovakia lasts five years, though sometimes four or six years. Bachelor studies lasting three years have limited popularity and are still rather rare, largely due to the fact that tertiary education is free. Some universities are already in the process of reshaping their studies to a three-cycle model: with bachelor's, master's, and doctoral studies, however, bachelor studies are still conceptualised rather as a sort of first phase of education, with a mid-term exam without recognised qualification.

Table 46
Higher Education: Basic Indices

Year				Full Time			Part Time		
	Schools	Faculties	Teachers	FT Students Total	FT Enrolled	FT Graduates	PT Students Total	PT Enrolled	PT Graduates
1989	16	46	8 059	49 588	13 007	9 517	9 729	2 383	967
1992	14	59	8 103	55 564	16 008	9 114	7 281	1 629	1 553
1998	18	83	8 948	85 742	23 212	12 753	23 590	8 839	2 282
1999	18	86	9 049	88 192	22 866	13 827	29 240	9 353	4 452
2000	20	89	9 047	91 263	24 648	14 241	33 073	9 678	4 892

Source: Statistical Yearbook of the SR 2001 (VI.2-8, years 1998, 1999, and 2000), Statistical Yearbook of the SR 1994 (VI.4-8, years 1989, 1992)

3.4.1.5. Access to further levels of education and employment

The ISCED 4A and 5B programmes at SSS represent a single post-general education and non-university vocational education option.

ISCED 4A enrolled between 2,000 and 3,000 and about 1,500 enrolled in ISCED 5B annually by the end of the ’90s, representing a marginal number of students compared to the number of secondary graduates. Although the enrolment into higher education is on the rise and gradually approaching a set goal of 30% of secondary graduates, post-secondary education capacity in total is undoubtedly underdeveloped. The numbers of students in aforementioned post-secondary non-university education are negligible in all study branches except economics and legal science and healthcare within ISCED 4, and economics and health within ISCED 5B as

visible from annexed Tables XL and XLI showing data on newly-enrolled students by branches.

The ISCED 5+ share within the 25 years + population is still very low, below 12% according to Census 2001 and new impetuses are needed. Supply of tertiary education for free encouraging demand along with limited resources from the state budget braking the demand creates an imbalance in higher education and, typically, unresolved problems in education policy. Future plans for provision of higher education for fee should contribute to the development of shorter forms of tertiary education and making currently less appreciated bachelor studies more popular. Current situation indicates the possibility of speedy development of higher professional education after introduction of dual tertiary education via the new Higher Education Act, if desired by decision-makers.

A detailed analysis of the educational attainment of 18-20 year olds in school year 2000/01 offers an unbiased picture about youngsters' reflections concerning access to further levels of educational opportunities. Slightly over 22% of 20 year olds in ISCED 5A and marginal numbers in ISCED 5B indicate the need for the change.

Table 47
Full-time and Part-time Students in 2000/2001 by Age Cohorts and Level of Education

Age	Pop. Total	Of which													
		ISCED 1		ISCED2		ISCED 3		ISCED 4		ISCED 5B		ISCED 5A		ISCED 1-5	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
18	89406	6	0.01	97	0.80	36527	40.86	1333	1.49	724	0.81	12320	13.78	51007	57.05
19	89816	2	0.00	22	0.11	7237	8.06	2031	2.26	1085	1.21	19146	21.32	29523	32.87
20	91321			7	0.02	1791	1.96	1268	1.39	933	1.02	20427	22,37	24426	26.75

Source: Institute of Information and Prognoses of Education

Underdevelopment of higher professional schools and a relatively modest offer of post-secondary non-tertiary education might be one of reasons for the difficulties of non-academically oriented secondary VET school graduates in the labour market. Unemployment of these graduates remains high, indicating a turning point in 2000.

Table 48
Unemployment* Rate of Graduates by Type of Schools (in %)

Schools/Years	1997	1998	1999	2000
Secondary Schools Total	30,9	33,8	40,9	37,4
Grammar schools	19,4	20,9	25,1	18,4
Secondary specialised schools	32,6	38,0	47,0	42,8
Secondary vocational schools	33,5	35,2	42,0	40,0

Source: Ministry of Education and National Labour Office
*Registered unemployed as of September of the Given Year

Restructuring in industry and partial decline in both sectors is confirmed in the following table, where unemployment of SVS graduates in two sectors is above the total SVS figures. With regard to SSS graduates, industry is below the total figures, leading to the assumption that SSS graduates might substitute SVS graduates on the blue-collar professions market. As well as agriculture graduates, social science and service SSS graduates perform significantly worse than SVS graduates.

Table 49
Unemployment Rate of SSS/SVS Graduates by Branches (in %)

SSS in 2000	SSS in 1999	Branch cluster	SVS in 1999	SVS in 2000
40,50	45,7	**Industry (Code Number 2,3)**	42,2	39,7
51,9	58,0	**Agriculture (Code Number 4)**	56,1	52,2
50,9	54,4	**Social science and service (Code Number 6,7)**	38,6	37,0
21,9	30,0	**Arts (Code Number 8)**	37,9	39,5
42,8	47,0	**SSS Total / Total SVS**	42,0	40,0

Source: Ministry of Education and National Labour Office
*Registered Unemployed as of September of the Given Year

The other option – to enter the higher education – is however for SVS ISCED 3A graduates unattractive or too demanding, as visible from the following tables.

Table 50
Newly Enrolled into HEI, Full-time Study by Secondary Education Streams in 2000/2001

Type of HEI	Total	GS graduates			SSS graduates			SVS graduates		
		Total	From school	Not directly from school	Total	From school	Not directly from school	Total	From school	Not directly from school
Public	24279	13752	10290	3462	8870	6323	2547	1657	1093	564
Non-public	369	226	152	74	118	66	52	25	12	13

Source: Institute of Information and Prognoses of Education, Statistical Yearbook of Education 2000

This is again a reason for the establishment of practice oriented and regional demand driven higher professional education.

Table 51
Further Activities of Graduates by Type of Schools in 2000

Schools/Years	Graduates Full-time	Graduates Part-time	Graduates Total	Graduates directly enrolled in full-time tertiary education		Graduates Unemployment Rate**
GS	15754	448	16202	10442	64.4%	18,4%
SSS	30943	2175	33118	6389	19,2%	42,8%
SVS*	36 073	4682	40755	1105	2.7%	40,0%

Source: Ministry of Education and National Labour Office
* Inclusive large amounts of ISCED 3C graduates not entitled to admission to HEI
** Registered unemployment

It is not intended that this table be considered as the rate of successful admission of respective secondary school graduates to HEI. Newly enrolled into HEI who finish the secondary school in previous years and those who are enrolled in part-time studies (usually paid compared to full-time studies offered for free) are not included in this table. We recommend looking at this table as information about the mainstream behaviour and the indication of the room for diverse post-secondary education.

With regard to the flow of students between different paths, data have not been statistically monitored. However, secondary school students are allowed to transfer to another school. Headmaster of the secondary school to which that student applied makes decision on transition and differential examination requirements.
Transfer from ISCED 3A to ISCED 3C is however considered more typical than the opposite approach. Academically capable ISCED 3C students usually apply for follow-up courses, with one year of study more a disadvantage under the current situation of low absorption on the labour market.

Thus, the relatively low horizontal permeability is considered less important than current gaps in vertical permeability of the system Lack of vertical permeability affects predominantly VET ISCED 3A and partly unofficial and marginal ISCED 2C level, as discussed earlier. The quite premature streaming seems to be appropriately addressed by establishment of integrated secondary schools, which is in progress.

Tertiary education students have the right to apply for study at another higher education institution. Within higher education institutions students are allowed to transfer from one study branch to another under limitations set up by higher education institutions. New Higher Education Act should promote such transferability by cancelling the legal entity of faculties making students study at the university as a whole and not just at the respective faculty. This is one of the reasons often cited for the introduction of the new legislation, however, faculties point out that the transferability cannot be raised just by the abolition of the legal entity of faculties.
Generally, there's no problem with students returning to formal education. The system is dedicated to providing students with ISCED 2+ level of education, e.g. the compulsory education of 10 years is constructed in a way that pushes the main stream of students to continue after nine years of basic school for at least one year longer. In society, education has a very high status and an ISCED 3C is considered a minimal level of education. Currently up to 25% of the overall population have ISCED 2 and less education according to the Census 2001. Of course, this reflects the high number of elderly people in Slovakia and their limited opportunities to further their education in the early decades of the past century. . The following table offering data about 16 year olds indicates below 10% of ISCED 2 and less educated among this age cohort.

Table 52
16 Year Old Full-time and Part-time Students in 2000/2001 by Level of Education

Age	Population Total	Of which							
		ISCED 1		ISCED2		ISCED 3		Total ISCED 1+	
		N	%	N	%	N	%	N	%
16	88105	39	0,0	8 220	9,3	78 813	89.5	87 072	98.8

Source: Institute of Information and Prognoses of Education

There are, however, regions and minorities estimated to perform significantly poorer, such as segregated settlements of Roma in eastern Slovakia. With increasing poverty, in regions in decline, youngsters might be pushed to leave education sooner. A systemic failure is vitally worth mentioning, since it illustrates a lack of coherence and social policies: Some of the students completing compulsory education are absorbed by a social system immediately offering them a small amount of money (about EUR 42). For a lot of students from Roma families facing future unemployment even after completing training, it's an attractive incentive to leave formal education too soon. This indicates that a voucher scheme funnelling all these social benefit recipients to further training or internships at their place of work might be a good measure for separation of those who are not interested in working from those interested yet lacking opportunities and/or experience.

3.4.2 Responsible bodies

Slovakia is divided into eight regions of state administration with eight regional offices and 79 district offices. Regional offices containing specialised departments of education are responsible for maintaining grammar schools and secondary specialised schools, while secondary vocational schools were under the responsibility of relevant sectoral Ministries until July1, 2001 as visible from the following table.

Table 53
Secondary Vocational Schools and Vocational Schools by Founders before July 1, 2001

Founder	Number of SVS	Number of VS
Ministry of Education of SR (in fact by Regional Offices)	50	5
Ministry of Economy of SR	129	31
Ministry of Agriculture of SR	63	25
Ministry of Construction of SR	22	11
Ministry of Transport, Post and Telecommunications SR	11	0
Ministry of Defence of SR	1	0
Slovak Union of Production Co-operatives	3	0
Slovak Union of Building Co-operatives	7	0
Private	10	0
Church affiliated	5	0
Stakeholder company (enterprise)	5	0
Regional Office	1	0
Total	307	72

Source: Ministry of Education of SR

Since July 1, 2001 this competence was transferred from respective ministries, to Regional Offices, which are now responsible for all secondary schools and establishments within their territory. Regional Offices (VUC) decide on opening/closing a school/study branch, on directors' appointments, and serve as a second level of the state administration. This responsibility, among other things, could include dealing with appeals of people dissatisfied with a decision of the director, who represents the first level of administration on admissions to secondary schools or non-acceptance of qualifications acquired abroad).
Through this, the so often criticised fragmentation of governance within VET is eliminated.
Additionally to the concentration in the middle management level (aforementioned maintaining of SSS and SVS by one entity – regional offices), here is an example from the top level. Council of the Government for the Issues of Preparation of Youth for Occupations in Secondary Vocational Schools and Practical Training Establishments was abolished as at 30 April 2001. This body, focusing just on one segment of VET, was replaced by the Council of the Minister of Education of SR for Vocational Education. It was established based on Resolution of the Government of SR No. 213, point H.1 of 7 March 2001 as the body dealing comprehensively with VET issues, with its basic mission as follows:

- debate and assess the situation and standard of vocational education and training, submit proposals for improvement of VET with regard to methodology, contents, structure, management, financing, legislation, links with labour market, employment of graduates, economics and other problems in schools and establishments in SR,
- contribute to preparation of principal measures for resolving problems of quality and contents of education, financing and management of VET in schools and training establishments,
- debate and comment on proposals and recommendations submitted with regard to important issues and concepts concerning the provision of VET in schools and training establishment,

- based on its own initiative, propose to the Ministry of Education or relevant bodies possible ways of resolving problems concerning training in schools and training establishments,
- if exact information and standpoints are needed, to ask relevant institutions for elaboration of scientific analyses, studies, expert opinions in the field of VET in schools and training establishments and their impact on employment policy,
- co-operate with ministries, state administrative bodies, self-governing bodies, employers' representatives, trade unions research and other institutions dealing with VET in schools and training establishments.

Directors of schools are appointed by the founder, i.e., by a Head of a Regional Office, while a Head of Department of Education of a Regional Office has no direct official influence on the personnel policy. In 2002, Heads of higher territorial unit will be given this competence, as explained later.
A teaching staff policy, including other staff recruitment policies, is the full responsibility of directors of schools. Teaching and learning methods are the complete responsibility of a teacher, though school methodological bodies can discuss and agree upon recommendations with regard to this. Four methodological centres (originating within four administrative regions) as well as SIOV could stimulate teachers to investigate innovations by provision of ad hoc lectures and/or in-service training courses stipulated by the respective decree of the Ministry of Education.

The scheme of the current VET macro-management structure is in Annex D. It's only a temporary model however, valid until July 1, 2002. In 2002, Slovakia divides into eight self-governing regions, so called higher territorial units (VUC), which are territorially identical with current eight state administration regions. These regions however represent autonomous power complementing local self-government in municipalities at a higher level. With eight governors and regional parliaments elected in December 2001 the implementation of the reform and "modernisation of public administration" starts.

Currently the educational authority is within the state administration the Regional/District (state) office. But since July 1, 2002 some competencies will be shifted to self-government: Simply put, one could say that responsibility towards primary schools and secondary schools will be transferred to municipalities and higher territorial units (self-governing regions) respectively.

Nevertheless, there are schools of special importance, which are over the natural municipality/region importance e.g. bilingual grammar schools established under the international agreement, or a highly specialised school for handicapped pupils from throughout Slovakia, and therefore they will remain under the responsibility of Regional state administration.

Despite significant decentralisation, it is not possible to understand this reform as creation of independent regional school systems. Regardless of the financing model, which remained temporarily centralised, there is an important competence concerning management of the school system as a national institution preserved within Ministry of Education: The Ministry of Education is responsible for the "Network of schools and school facilities". This register, maintained by the Institute of Information and Prognoses in Education, is issued annually and contains a list of schools and their study programmes approved by the Ministry of Education after sessions with other key players. Enrolment in this register (usually referred to as a "Network of Schools") is a pre-condition for the existence of a school.

State-budget based financing of schools (including non-state schools) is linked to this network of schools. Therefore, the founders of church-affiliated schools and private schools have a duty to submit applications for enrolment to secure its continuity.

The text below explains the competencies of the self-governing regions based on Act No. 416/2001 Coll. on transition of some competencies from state administration bodies to municipalities and higher territorial units:
Secondary schools, vocational schools and centres of practical training shall be established and closed by self-governing region, in concord with the network of schools and school facilities, and in concord with the list of centres (workplaces) of practical training. Before establishing or closing the school or school facility, the self-governing region must ask the Ministry of Education to include school or school facility into the network of schools and school facilities or exclude the school or school facility from the network. With regard to centres of practical training the self-governing region shall ask the Ministry of Education to include/exclude them to/from the list of centres of practical training. With regard to establishing or closing secondary vocational school and centres of practical training the self-governing region shall ask the MoE for approval and relevant state administration bodies and social partners for their statements. The self-governing region shall inform the regional office about its proposal for including/excluding to/from the network of schools and school facilities.

Concerning investments, the self-governing region (VUC) shall prepare the plan and the budget for schools and school facilities it has established.
The self-governing region shall administer schools and school facilities and shall provide for
- premises and equipment
- didactical technology
- financial means for operation and maintenance
- investment from the state budget and own sources.

Furthermore, the self-governing region will
- check the fiscal management and the property allocated and assigned to the school according to special regulation.
- allocate financial means to private secondary schools, church-affiliated secondary schools, private school facilities and church-affiliated school facilities according to special regulation, and oversee the management of these financial means.
- provide for catering and accommodation for pupils and students at schools or school facilities in which it has a founding role..

In the case of excluding the school or school facility from the network and subsequent closure, the self-governing region shall determine which school or school facility will fulfil which tasks with regard to students of the closed school or educational facility. The self-governing region shall process and provide state administration bodies and public with required information on upbringing and education within the area of its operation. The self-governing region shall discuss with the School Council and the director of the school or school facility within the area of its operation predominantly:

- concept of the development of school or school facility
- budget and material conditions for school or school facility operation
- personal and social conditions of school or school facility staff
- requirements of the self-governing region on improvement of care and educational services provided in schools and school facilities and the method of covering increased costs

- proposals for implementation of study and training branches
- reports on educational outputs at schools

Based on a tender and from it the resulting proposal of the relevant School Council, the self-governing region (as a founder) will have the competence to appoint (and in co-operation with School Council recall) the director of the school or school facility.

The Ministry of Education will further remain responsible for legislation concerning education, inclusive of general financing schemes and for overall educational policy. MoE has lost since 1996 a substantial part of its power by no longer controlling the financing flows from the state budget to regional schools via Regional Offices. As of July 2002, Regional (self-governing) offices allocate state budget-based means – the so-called "decentralisation subsidy". This process will adhere to the allocation formulas developed by MoE. The fiscal decentralisation is planned to come into force in 2004.

3.4.3 Financing

3.4.3.1 Financing of state schools

Financing of initial VET, inclusive practical training is dominantly state-budget based. New financing scheme is to be implemented as stipulated by Act No. 506/2001 on financing Basic schools, secondary schools and school establishments. It is based on normative and allocation formulas worked out by the Education Ministry as part of a package of regulations. . Despite the original intentions, some of the formulas are based on per class principle instead of the per capita principle. The following is an example of such allocation formulas, aimed at stipulation of the number of teachers of a secondary specialised school to be financed from the state budget:

PUoš =∑ PUtoš +∑ PUtošz+ *PUzu* + *PUtp* + + *PUiž*
PUtoš = (PSpž : Class) x **NPUt0š,**

where Class = PŽhh , if PSpž is over upper limit
where Class = PŽdh , if PSpž is below lower limit
where Class = PSpž , if PSpž is within limits

The first equation means that the number of financed teachers on the SSS (PUoš) is the sum of financed teachers of respective classes in the school plus the total of financed teachers of respective part-time classes in the school. Plus there are some additional corrections marked with italics left unexplained here for the sake of clarity. The second equation is based on the calculation of the number of financed teachers per class:

Putoš -number of teachers per class in respective school
PSpž - real number of students in the class,
PŽhh - Class upper limit of students by normative set for respective type of school, e.g. 32 in agricultural SSS),
PŽdh - Class lower limit of students by normative set for respective type of school, e.g. 23 in agricultural SSS),
NPUtzš -number of teachers per class by normative in respective type of school, e.g. 2.4 in agricultural SSS.

The variable costs (purchasing goods and services) are offered per capita adjusted with regard to the specific economy coefficient of respective study and training branches set by MoE.

Nevertheless, the total sum of adjusted (recalculated) basic contributions must be equal to the relevant within state budget allocated sum. With increasing possibilities of state budget the basic contribution increases, with decreasing state budget sum the basic contribution decreases. Thus, the basic per capita contribution depends on the relevant item of the state budget and not on the real needs of education.
This legislation and allocation procedures coming into force as of 2002 contribute significantly to the transparency of the allocation of means without, however, providing additional funding or stimulating the entrepreneurial sphere to direct fund VET. Compared to traditional philosophy of financing, however, this change is considered by educators as "fair and transparent allocation of the same nothing left for education as previously." Due to the lack of means, fundamental investments in equipment improvement are extremely rare. The first priority to be covered is wages of educational staff and operational expenditure for the basic running of schools.

The current system of financing with analysis of the structure of expenditures and of regional disparities in financing is in detail described in the 2000 SNO VET Report. Here just some important features are highlighted:
Currently, there are two basic types of state-run organisations within the education system: contributory and budgetary, with an advance payment organisation as a derivative of the budgetary organisation. Just the first two are legal entities. Within VET, SVS belongs to contributory organisations and SSS to budgetary organisations.

Financial management of budgetary organisations is based on a system according to which all costs of schools except for capital funding are covered from the budgets of schools. Schools are given funds from the state budget via local educational authorities, currently Regional (state) offices and in the future Regional (self-governing) offices (later RO). Any capital investment is allocated directly by RO.

All school incomes except those provided by parents and parents' organisations are conveyed via the state budget. It means that schools are not allowed to use their own incomes directly. This keeps all budgetary organisations, which are due to return their incomes to the state budget, passive with regard to fundraising. On the other hand, due to insufficient funding schools are pushed to fundraising in co-operation with affiliated non-profit organisations. Such an affiliated but independent organisation, with strong but often not visible links to school, has actually one main task – raising funds that are not "eaten" by the state budget. These extra-budgetary funds are predominantly used for school equipment improvement, compensating for a shortage of funds allocated for these purposes within obtained budget.

Financial management of contributory organisations is based on the subsidy from the state funnelled through RO. This subsidy should cover personal and operational expenditures. The establisher of the school covers the school capital investment. Contributory organisations can keep their income from their productive work and from depreciation. Nevertheless, they are systematically pushed to extend their profit-making operations by cuts in the state subsidy. Shares of the subsidy decline dramatically.

Table 54
Selected SVS Basic Financial Data (in thousands SKK)

Secondary vocational school	1996	2000	2000/1996 Index
Expenditure total	11,069	19,743	178
Wages inclusive levies and insurance	4,001	6,716	168
Subsidy of state	6,262	7,299	117
Earn from own activities	4,807	12,444	259

Source: Information from school management, tabled by author

In fact, these schools can expect only wages and levies to be covered by the state under the current trend. Such a method of financing does not motivate schools to expand their profit-making activities in an open way. They, similar to budgetary organisations, co-operate with affiliated non-profit organisations.

The aforementioned Act No. 506/2001 opened the door for additional source of financing from 1% of income tax purposely allocated by taxpayers for the sake of schools. Nevertheless, one month later this regulation was cancelled by the amendment of the Act No. 366/1999 on income tax making just 3rd sector non-profit institutions eligible. Thus the co-operation of schools with the affiliated non-profit organisations got an additional boost.

The system of contributory and budgetary organisations described above has roots in a previous regime and is characterised by rigid control of the subordinated organisation. The dominant governing body presides over school initiatives. Schools respond by bypassing the rules in co-operation with non-profit organisations.
School budgets, with an extremely high share of fixed costs, feature budgeting best described as barebones, leaving absolutely no fat to cut. In fact, public funding has no influence on the improvement of the quality of the educational output. Schools have no means for improving of the educational environment. Almost all contributions to the improvement of the quality of education come from sponsorships or directly from parents. Parents are often asked for contributions that should, in fact, be covered by the state budget (e.g., new textbooks for English, just to name one typical example, or unspecified contributions for copying, paper purchases, etc.).

The following tables offer time series of data on educational expenditures and distribution of expenditures among respective segments of schooling:

Table 55
1990-2000 Educational Expenditures - Specialised Indices

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1999 + H,I,D	2000	2000+ H,I,D
Total EE in c.p.	14.20	17.60	19.60	19.20	19.30	26.10	26.20	30.80	32.00	34.20	35.8	36.36	38.13
Central Government (%)	100*	100*	100*	100.0	98.30	98.66	98.32	98.6	98.56	98.30	98.4	96.9	97.04
Total EE in %GDP	5.10	5.51	5.90	5.20	4.38	5.05	4.55	4.71	4.46	4.39	4.59	3.97	4.17
ISCED 0-2	1.90	2.00	2.20	1.89	1.61	1.97	1.92	1.83	1.73	1.76	1.76	1.19	1.19
ISCED 3 Gen	0.50	0.18	0.19	0.15	0.13	0.17	0.17	0.19	0.17	0.16	0.16	0.15	0.15
ISCED 3 Voc	0.59	0.73	0.92	0.89	0.74	0.94	0.61	0.91	0.84	0.79	0.86	0.71	0.79
ISCED 5+	0.97	0.95	0.97	0.826	0.65	0.78	0.74	0.77	0.75	0.7	0.87	0.66	0.76

Source: Institute of Information and Prognoses of Education
H,I,D - inclusive health schools, police schools and military schools
Total Education Expenditure in current prices (bill. SKK), inclusive extra-budgetary sources
Central Government Ed. Exp. in % of Total Ed. Exp., rounded up to 100% due to a lack of more precise data
Total Education Expenditure in % of GDP inclusive extra-budgetary sources
ISCED 0-2 Education expenditure in % of GDP, without special, church affiliated and private schools
ISCED 3 General Education Exp. in % of GDP, without special, church affiliated and private schools
ISCED 3 Vocational Education Exp. in % of GDP, without special, church affiliated and private schools
ISCED 4 Education Expenditure in % of GDP
ISCED 5+ Ed. Exp. in % of GDP inclusive R&D and social services (e.g. accommodation and catering)

Table 56
1995-2000 Total Education Expenditures in Segments of Education (in %)

Segment of education	1995	1996	1997	1998	1999	2000
Kindergartens	9.09	10.23	9.42	9.53	9.89	8.99
Basic Schools	29.98	31.97	29.38	29.11	30.12	27.72
Grammar Schools incl. Sport schools	3.50	4.03	4.13	4.04	3.83	3.67
SSS incl. Schools of Arts	6.54	7.11	7.11	6.64	6.48	7.79
SVS under governance of Min. of Education	11.61	1.15	2.65	2.68	2.33	9.8
Special schools	2.98	3.19	3.19	3.25	3.13	3.03
SVS under other governance	0.00	4.47	8.91	8.95	8.48	-
Church-affiliated schools	1.78	1.58	1.84	1.85	1.74	1.77
Private schools	0.22	0.18	0.26	0.27	0.23	0.2
Other activities within regional schooling	14.45	14.01	11.37	11.40	11.34	12.88
Higher education institutions	16.45	17.70	17.59	18.11	17.31	18.87
Other activities outside regional schooling	3.17	4.06	3.93	3.88	4.98	5.28
Education total	100	100	100	100	100	100

Source: Institute of Information and Prognoses of Education

A different kind of analysis of educational expenditures is offered in the following table. It is worthwhile mentioning here that total secondary education expenditures on vocational programmes are over six times higher than expenditures on general programmes.

Table 57
Public expenditures on education in 2000 by segments (in SKK)

Education/ Budget Line	Total (100)	ISCED level									
		0-2		3 general		3 vocational		4		5+	
		N	%	N	%	N	%	N	%	N	%
Total	37 002 756	15 824 184	42,77	1 324 853	3,58	7 036 848	19,02	xx/	xx/	5 675 670	15,34
of which:											
Investment	1 772 164	486 246	27,44	107 403	6,06	276 169	15,58	xx/	xx/	690 070	38,94
Wages	14 987 346	7 403 491	49,4	750 791	5,01	3 043 629	20,31	xx/	xx/	1 877 950	12,53
Social service*	3 013 780	xx/	xx/	xx/	xx/	Xx/	xx/	xx/	xx/	672 598	22,32

Source: Institute of Information and Prognoses, tabled by author
Notes
* grants to students, accommodation, meals, etc.
xx/ data on accommodation and meals are not monitored according to ISCED (except ISCED 5+)
Total - includes total expenses from the state budget (incl. supportive activities and social service)
Inclusive expenses on health, police and military schools.
ISCED 4 is included within ISCED 3
ISCED 5+ includes universities, theological faculties, foreign students care, foreign information,
School agricultural and forestry enterprises
Wages -include data taken from payroll lists; wages of all educators inclusive health, police and military schools without private schools means.
Total social service- includes expenses at state schools on school catering, dormitories, accommodation and catering facilities for universities, scholarship; with regard to individual ISCED levels (except 5+),
Church-affiliated and private schools data are not available in details.

Increase of enrolment in general and gradual decrease in some of vocational programmes visible from annexed time series could support policies aimed at shifts from “expensive” to less costly educational programmes. Indeed, there are other solid reasons for this, lasting overhang

in interest in grammar schools when looking at educational service market demand side and high share of unemployed graduates from vocational schools when looking at the labour market.

Table 58
Average Monthly Wage of Employees (in SKK)

Year	National Economy	HEI Educators		Educators in regional schooling	
		SKK	Compared to National Economy	SKK	Compared to National Economy
1993	5 379	7 731	144	4 862	90
1994	6 294	8 288	132	6 187	98
1995	7 195	10 599	147	7 260	101
1996	8 154	11 738	144	7 739	95
1997	9 226	12 584	136	9 112	99
1998	10 003	13 456	135	9 689	97
1999	10 728	13 861	129	9 988	93
2000	11 430	14 260	125	10 743	94

Source: Economic Yearbook of Statistical Office of SR (National economy data), Institute of Information and Prognoses of Education

More detailed analysis of Teacher Trade Unions indicates the following data in comparison to 2000 National economy average monthly wage: 105.9; 102.4; and 125.3 for Grammar schools teachers, SSS teachers and HEI teachers respectively. These data are gradually decreasing; e.g. in 1995, the same indicators were as follows 110; 110; and 148. These data are available just for budgetary organisations. Therefore, we cannot present data on SVS teachers and trainers, as SVS are contributory organisations.

3.4.3.2 Financing of non-state schools

As a consequence of current accounting practices, there are no nation-wide data about the state budget-based education expenditures of private and church-affiliated schools, calculated by the type of school, within regular annual statistics. Valid nation-wide data would have to be collected by special action.

There is a difference between financing of church-affiliated schools and financing of private schools. There is no legal basis for distinguishing between the financing of public and church-affiliated schools. Thus, in principal, church-affiliated schools are to be financed equally with public schools. In contrast to church affiliated schools, the financing of private schools was originally stipulated by Government decision 113/91 of the Law Code, which left decisions about the upper limit of subsidies to the discretion of the MoE (now at the discretion of the Regional Office). Just a minimal level of funding was prescribed, which, simply put, equals the costs saved by the public school sector due to provision of this service by the private sector (variable costs impacting various teaching aids inclusive of textbooks).

For 2002, financing of church affiliated and private schools is stipulated by Act No. 506/2001 on Financing. These schools will receive from the state budget the contribution representing 100% of the comparable kind of state school current expenditures, provided they will stick to standard curricula and will not require tuition fees. Per capita contribution annually announced by the MoE by January 31 might be subjected to cuts by 30% if school requires school fees and additional 10% if school does not stick to the approved curricula. Non-state schools are not given means for capital investment.

3.4.4. Social dialogue and involvement of social partners

The Act on Economic and Social Partnership - Act on Tripartite approved in 1999 regulates the tripartite relationship and also defines the representation of different social partners in the Council of Economic and Social Agreement (CESA) of the Slovak Republic. In CESA, there are 21 members representing the Government of the Slovak Republic, the Federation of Employers' Association of the SR and the Confederation of Trade Unions of the Slovak Republic with an equal share of seven members each.
The Federation of Employers' Associations (FEA) of the SR is the umbrella employers' organisation in the Slovak Republic. Its members are employers' and entrepreneurial unions and associations. FEA is a special-interest association with the status of a legal entity. It was established in 1991 to protect common employers' and entrepreneurs' (inclusive small and medium-sized enterprises) interests and to create conditions for the dynamic development of enterprises in the SR. FEA membership is voluntary.

The Trade Union Confederation of the SR (KOZ) is the largest trade union organisation in Slovakia associating almost all branch trade unions. The original number of almost 2.4 million trade union members in 1990 gradually dropped to its current 650,000 members. KOZ associates more than 90% of all trade unionists in Slovakia. According to its statutes, KOZ represents a voluntary association of independent trade unions established for defending the rights and justified interests of employees. Several working groups operate within CESA, focusing on elaboration of standpoints and comments upon documents discussed by the government and proposals of legislative norms regulating specific fields. At present, the social dialogue in the Slovak Republic has a solid legislative provision but it is better developed at the top level than at regional and local levels. Thus, macro-economic and macro-societal processes are monitored rather than practical problems at regions, municipalities and enterprises. It should be stressed that in the General Agreements, as well as Higher Collective Agreements, VET policy-related measures are not yet tackled in an explicit form with any indication of action that is accountable.
Social dialogue focused on vocational education and training is a quite new issue within Slovak education. So far, vocational education and training, as a subject of social dialogue, is not sufficiently developed at the top, as well as at sectoral or enterprise levels. Successful development of social dialogue at regional and local levels is conditioned by solving two systemic issues, as already pointed earlier (Vantuch, J. et al., 2001) :

- administrative reform leading to decentralisation and de-etatisation of decision making, which is already in progress, and
- reform of financing of VET which is still even not developed as an agenda for discussion by key national players.

With the creation of an institutional infrastructure in the natural regions in Slovakia and with further development of local policies, regional social dialogue and even regional social dialogue related to VET will increase in importance. Nevertheless, the extent of fiscal decentralisation, still not agreed upon, is of the highest relevance with regard to this.
Changing the system of financing VET is a basic prerequisite of VET reform as well as of social dialogue and meaningful involvement of social partners in VET at regional and sectoral levels. The current model of financing VET is outdated and hampers the initiatives of social partners, who are too often represented by "adopted" directors of schools or other educators. They, however, cannot represent a genuine social partner position. Without financing reform, social partners will not be given stimulus for development of their own VET experts. Without creation of natural economic conditions – direct participation of employers in financing VET –

social partners will continue to fail to present genuine standpoints and develop its future position with regard to formulating graduate profiles, co-designing any VET output standards, and substantial participation in VET quality control.
The ETF initiated a working seminar on social partners' involvement in VET that was held in Senec on May 11-12, 2000 and contributed to the revival of this agenda. Co-operation with social partners was especially addressed within the National Conference on VET in the Slovak Republic on October11-12, 2001. The conclusions of the conference related to this issue were as follows:

- Promote the social dialogue at central, sectoral, regional and enterprise levels as a basic precondition of VET functioning and effectiveness.
- Establish the efficient system of economic and taxation stimulation for financial involvement of employers and entrepreneurs in VET.
- Update the document of the Ministry of Education of 1996 „The Concept of Co-operation between Educational System and Labour Market Institutions“.
- Harmonise training and study branches characteristics and school leavers profiles with the standardised classification of occupations. Develop the system for carrying out the efficient occupation analysis.

3.4.5 Curricula development

The Ministry of Education keeps overall responsibility for curricula and methodology at the schools. They are quite autonomous in decisions within the framework of officially-proposed alternatives, yet strongly limited in their development plans financially by the Regional Offices. Regional offices allocating state budget funds might indirectly influence the “pedagogics” by decisions about the number of classes to be opened, number of lessons eligible for splitting into smaller working groups, and per capita contributions provided for the next school year.
All schools are free to renew up to the 30% of the content and reallocate up to the 10% of week hours in accordance to the study programme priorities, however they must stick to the list of obligatory subjects. Schools are also free to introduce new subjects, however, without claims for obligatory funding from the state budget.

There are two institutions managed by the Ministry of Education with responsibility for issues related to the content of education. The National Institute for Education is responsible for curricula at basic schools and grammar schools and for general subjects within SVS and SSS. SIOV is responsible for content-related issues at SVS and SSS sharing its responsibility with NIE (concerning general subjects). NIE is fully responsible for preparation of documents providing the framework for curricula for relatively few general subjects. NIE makes use of advisory bodies consisting predominantly of teachers of relevant subjects for elaboration of the documents, which are approved by the Ministry of Education ultimately.

SIOV acts as an interface between the Ministry of Education and other key players in VET. It would be not possible to produce all documents for all branches and specialisation by the limited SIOV staff and it would be impossible to respect the complexity of VET curricula.
There have been 16 expert commissions headed by the expert representing sectoral ministries and 18 expert commissions headed by an expert from the State Institute of Vocational Education and Training. These commissions deal with SVS are to be replaced by new commissions responsible for the whole secondary VET.
With the competence towards SVS transferred from respective Ministries, to Regional Offices since 1 July 2001 also the competence for establishment of all expert commissions with regard

to VET was transferred to the Ministry of Education (MoE). MoE appointed the State Institute of Vocational Education and Training (SIOV) to deal with this task.
In all commissions SIOV staff members will be responsible for following the methodology of preparation of documents and for administration finalised by approval of the Ministry of Education.
New Principles of Establishing, Organisation, and Activity of Expert Commissions (EC) and Co-ordinating Council (CC) for Vocational Education and Training at Secondary Specialised Schools, Secondary Vocational Schools and Integrated Secondary Schools in the Slovak Republic adopted by MoE, will come in force since 1 January 2002.
In 2002, a new EC should be established at SIOV for Secondary SSS, SVS and Integrated Secondary Schools following the groups of study and training branches. EC should include representatives of SIOV, respective sectors, labour market institutions, professional chambers, employers' associations and federations, companies, secondary schools, HEI, regional offices, institutions, etc. Over 200 professionals are expected to serve on the EC, with additional professionals participating in sub-commissions. Composition of EC and sub-commissions, as well as temporary sections or task force groups is considered an open system.
The main task of EC is to deal with the content of VET, and conceptual and methodological issues of VET. They should ensure balance between the social, individual and economic needs and labour market requirements, and the development in science and technology, sectoral concepts, and the national programme of upbringing and education in the Slovak Republic. EC should discuss, assess and express standpoints to the content of draft basic pedagogical documents, the aims and tasks of VET with regard to the content, forms and methods of instruction, the aims and tasks of educational standards, didactic tests, experiments. EC should assess educational programmes in VET schools. At the request of MoE they should assess personal and material readiness of VET schools to implement educational programmes. EC should participate in evaluation of educational programmes and assess tools for evaluation of VET schools students. Within its mission the EC co-operates with state and private educational institutions, employers, businesses, private companies and social partners.
EC are advisory bodies to MoE at national level in VET issues. Conclusions, standpoints, and expressions of Expert Commissions and the Co-ordinating Council (CC) have the character of proposals and recommendations and create basis for MoE decision-making with regard to VET. The Co-ordinating Council should be established in 2002. The Chairman of CC is ex officio the director of SIOV, and CC members will consist of chairpersons of individual EC. The main tasks of CC is to co-ordinate, direct, and unify activities of EC, generalise outputs of EC activities, develop proposals for addressing key issues resulting from EC outputs, submit proposals to the Council of the Minister for VET.
Any of the subjects represented in the EC could start the initiative to develop/adjust "basic documents ", but typically, it is schools that are most active in promoting innovations. Other subjects might initiate changes as well, but schools are pushing the finalisation of the process mostly whenever it might increase their chances of attracting more students. Thus, these kinds of innovations are predominantly student demand driven. Not surprisingly, the establishment of the National Curriculum Committee was proposed within the Millennium project in order to provide for over-arching backing of all national key players initiatives towards economy of knowledge requirements and its impact on inevitable curricular renewal in Slovakia. In 2002, this Committee should be established according to the adopted National Programme of Upbringing and Education in the Slovak Republic.

Simultaneously of course, Adjustment of study programmes has been in progress. Tables XXXIV, XXXV and XXXVI in the Annex present the numbers of programmes innovated and newly implemented at SSS and SVS since the 1994/95 to 2000/2001 school years. Despite a

lot of changes within “basic pedagogical documents,” the lack of a VET quality assurance system in general and insufficient quality of classes and workshop equipment in specific remained the greatest threat to VET in Slovakia.
Relatively underdeveloped labour market intelligence with very little information on future companies needs makes adjustment of curricula to the future labour market needs very difficult. It is therefore worthwhile mentioning that very promising Canadian-Hungarian-Slovak project run by SIOV in assistance of Saskatchewan Institute of Applied Science and Technology (SIAST) is aimed at innovation in curriculum of hotel management and tourism based on requirements of employers. Coherence in analysis elaboration of occupational profiles, identification of educational resources, methodology of assessment of educational output and setting of profile achieved within the work helped Slovak experts better understand how to interlink curriculum development with labour market needs. DACUM Guide to be issued by SIOV is useful not just for respective sector but also offer very useful example of know-how, which could serve as inspiration for other curriculum developers.
It will be necessary to strengthen the involvement of employers and professional organisations in VET. Employers’ federations, Slovak Chamber of Commerce and Industry, Slovak Small Business Chamber, Slovak Agriculture and Food Chamber, Slovak Craft Industry Federation, professional associations, guilds, and the whole entrepreneurial sphere should play a more significant role in stating requirements for graduates' profiles. Also, they should have a greater role in projecting conditions for the employability of graduates. A precondition for any such involvement however is a new system of financing, with incentives for involvement entrepreneurs in financing VET and, consequently, all these players in power-sharing with respect to VET.

The current certification process is school driven within the framework stipulated by the Decree of the Ministry of Education. It is based predominantly on internal quality assessment, and as a consequence is not sufficiently protected against erosion of quality. There is no systemic force counterbalancing the tendency of schools to soften the required output standard if it is inevitable for the school (e.g. due to the decline of quality of newly-enrolled students caused by population decrease or by loss of experienced teachers, etc).

In 2004 national standards should be set with introduction of a national maturita exam containing two parts, external (based on standardised tests approved by the Central “Maturita” Commission with percentiles as outputs of the assessment) and internal (traditionally organised and graded school based exam). Principles of legislative backing of the national maturita exam were elaborated and adopted by the MoE. The national maturita exam in VET schools will be based on the Standard of Secondary VET. The draft version of standard was elaborated by SIOV in 2000. There is a detailed description of the work on this standard in 2000 SNO VET report. In 2001, the Council of the Minister of Education of SR for Vocational Education discussed the relevant document submitted by SIOV and recommended some changes. The final version is expected to be approved by MoE in 2002.

State School Inspection is together with directors of schools directly involved in the assessment of the quality of VET.
Within the reform of the state administration in 1996 the independent school inspection was cancelled. All of its competencies were transferred to District and Regional (state) offices. Since January 1, 2000, renewed State School Inspection is a central state administration body headed by the Chief School Inspector appointed for a 5-year period by the Minister of Education. The School Inspection supervises schools according to the general plan or in response to a request of either the Ministry of Education or in extraordinary cases the Regional

Office. It predominantly focuses on the observance of legal rules and implementation of principles set up by the Ministry of Education for educational management of schools. Except for the very important annual "Monitor" measuring the quality of educational output in selected general subjects within the "maturity obliged" cohort, there are hardly any other valid data about educational output. Further solid data are expected with regard to OECD led PISA project, however, Slovakia failed to participate at 2000 data collection and will join only in the 2003 survey on Mathematics. Nevertheless, there are no valid and comprehensive data measuring specialised VET competence outputs. As a consequence, Inspection lacks efficient tools for quality assessment for the sake of its annual report on the status of education in the SR. Pursuant to Act 301/1999 Coll., Article 8a, §3b State Inspection annually prepares the Report on situation and standard of upbringing and education in schools and educational establishments in the Slovak Republic." The State School Inspection findings on the status of VET in the school year 2000/2001 are presented in the chapter 3.4.7.

3.4.6. Legislation

3.4.6.1 Legislation adopted in 2001

Undoubtedly, the most important legislative change is adoption of Act No. 302/2001 Coll. on Self-government of Higher Territorial Units (Act on Self-government Regions) adopted on July 4, 2001. Act No. 416/2001 Coll. on transition of some competencies from state administration to self-government adopted on September 20, 2001, stipulating further transfer of competencies with regard to education since July 1, 2002 is also significant. With these two acts the reform of decentralisation and modernisation of public administration has started. Those acts are not in full compliance with the original draft policy for decentralisation and modernisation of public administration. Within the first law, originally proposed 12 higher territorial units (self-governing regions) were replaced by 8 regions identical with existing 8 regions of state administration. Despite transfer in more than 300 hundred competencies from state to self-government not all originally recommended competencies were shifted. Some analysts criticise preservation of some competencies in social sector (such as distribution of social benefits) as well as in education (concerning maintaining of over-regional schools and remuneration of teachers at least for interim period covered by state).
Transfer of competencies is gradual, with the education sector undergoing change since July 1, 2002. Before this deadline "delimitation protocols", sort of passports of all organisations subjected to the transfer, must be prepared and signed by new establishers by the end of August 2001. The impact of this reform on education is described in detail in Chapter 3.4.2.

In July 2, 2001, two laws were passed by the Parliament - Act No.312/2001 Coll. on civil service and on Act No. 313/2001 Coll. public service. The latter applies to state budget funded organisations and therefore affects educators. This law will come in force since April 1, 2002, introducing a new tariff wage scheme, and new administrative regulations. E.g. as public servants educators in managerial positions are subjected to special restrictions in order to avoid the conflict of interest, and all educators have to prove their moral integrity by submission of a default sheet. Besides the honour of being public servants, educators will need to defend the specificity of their profession in order to avoid the treatment applied to officials and to ensure a sufficient payroll increase. Quite often a tariff wages increase goes at the expense of bonuses, punishing the best educators for the sake of educators with little or no bonuses. In 2001 the wage tariff was increased by 4% since July 1, 2001, and by 3% since September 1, 2001. Increase in wages was, however, below inflation.

At the same day a new Labour Code, Act No. 311/2001 Coll., replacing the more than 30-year-old labour code, was passed by the Parliament as well.

In 2001, Act No. 29/1984 Coll. (School Act) was amended by Act No. 216/2001Coll. and Act No. 416/2001 Coll. By the former law, the competence for establishment and closing Secondary Vocational Schools, Vocational Schools and Centres of Practical Training (further SVS) was transferred from central bodies – respective Ministries, to Regional Offices since July 1, 2001, as discussed in detail earlier. Simultaneously, the possibility to establish integrated schools was embedded in law. The latter amendment was the consequence of the public administration reform. Analogously, Act No. 542/1990 Coll. on state administration in education and self-government in education was amended as a consequence of the same Act No. 416/2001 Coll., and by the Act No. 506/2001 Coll.

Act No. 506/2001 Coll. on financing Basic schools, secondary schools and school establishments introduced a new philosophy of financing state and non-state schools based on allocation formulas. This law will be complemented by special regulation by the Ministry of Education specifying all allocation formulas and normatives. The law is presented in more detail in Chapter 3.4.3.

Act No. 279/1993 Coll. on school establishments, amended in 1996 and 2000, was amended again by 202/2001 Coll. This amendment has however marginal influence on VET.

3.4.6.2 Key policy document and draft legislation

The Government on 19 December 2001 approved the National Programme of Upbringing and Education in the Slovak Republic for next 15 to 20 Years (Millennium project). This key policy document was within preparatory phase two times publicly discussed. It was successfully subjected to the negotiation within the Economic Council of the Government of SR on 25 June 2001 and in the CESA on 29 June 2001. The Government approved it, but did not accept financial requirements on increasing the share of GDP offered for educational expenditures. Similarly as in previous case of Concept of Development of Higher Education for 21st Century, and not surprisingly for education policy analysts, the Government under the pressure of the Ministry of Finance refused to be bound financially. The Government –- facing the continuing period of unemployment up to 20% with pessimistic prognoses towards sufficient decrease of unemployment till 2007 and an expectation of moderate GDP increase which is further vulnerable due to recession in world economy – is cautious in promising increases of public expenditures. The most important VET-related issues of the National Programme (Millennium) are presented in Annex E.

The Ministry of Education should submit by March 2002 to the Government the new Education Act "on Upbringing and Education in schools and educational establishments". This new Education Act and its VET-related principles were presented within the National Conference on VET in SR, 11-12 October, 2001, and the whole draft version of the act was submitted to the public discussion few days later. Within this law the following issues are worth of mentioning:

- "New rights" seems to be underlined and better legislatively backed: Access to lifelong learning for all and social inclusion of handicapped into mainstream schools and school establishments.

- Formal system should be changed with one year of kindergarten obligatory. Class Zero should be introduced at Basic school for those socially disadvantaged and not prepared for entering Basic school, which should expand its first stage from four to five years. Consequently, Basic school second stage (lower secondary) should be shorter and SVS and SSS replaced by one stream of VET schools.
- The definition of education levels and certification of VET reflects the International Standard Classification of Education (ISCED) filling gap in the system and offering more entry/exit flexibility.
- Framework upbringing and educational programmes centrally prepared and school specific programmes adjusted to school and students needs are distinguished; framework programmes should offer the state standards.

On the other hand, the draft law is criticised as less liberal and insufficiently reflecting the National programme (Millennium). E.g. the drafted wording of the act introduces a certain contradiction with regard to the framework programmes. If the programme is to be really a framework, it should always lead to the need of its completion, and that is the development of a school-specific programme. The Act, however, gives an opportunity to take over a framework programme without any changes. As a result, the programme offered by state may not be developed and taken as a framework but as a basis or even a model. It is therefore proposed that the Ministry issue framework programmes as a service for mainstream schools that do not feel any need of specification. The Ministry might ask National Institute for Education and the State Institute of Vocational Education and Training or other entities in charge to prepare the "basic upbringing and educational programmes" that may be taken over without changes "as a whole".
Should the lawmakers want the "framework programme" developed centrally by the Ministry to be taken over without any remodelling, its attribute "framework" should better be replaced by the attribute "basic". In addition to these basic programmes, obligatory framework programmes (needing further school-based development and adjustment) should be offered.
Furthermore, the law is considered too extensive and simultaneously in some issues very detailed and in other issues too soft. Delay in submitting the law to the government would very likely lead to rejection of the Parliament to deal with the act due to coming elections in September 2002, and exclusive priorities for European integration-linked legislation from May to August 2002.

During 2001, work on a new Higher Education Act (which should replace Act No. 172/1990 Coll.) continued. This Act should be linked to the aforementioned "Concept on further development of higher education in Slovakia for 21st century" already approved by the government. The draft law introduces a new status of higher education institutions. Universities should become single legal entities within public law. A development plan for respective faculties and thus the structure and profile of graduates should derive from a university development plan respecting the content of education and training autonomy of faculties, which however should lose the legal entity for the sake of higher coherence within university performance. The most important message for VET is the legislative support for establishment of higher professional schools. Lawmakers at MoE, supported by group of experts from HEI participating in the preparation of the draft –law, have so far failed to find agreement with the Council of Higher Education. This senior academic self-governing body is highly critical of the draft law.

3.4.7. Weaknesses, strengths and future government priorities in Initial VET

Simply said, main weak points of the VET at both SSS and SVS seems to be
- assertion at the labour market,
- quality of practical/vocational training and
- worsening of equipment and the learning environment as a whole

Nevertheless, presented bellow are major positives and negatives as well as development trends taken from the School Year 2000/2001 State School Inspection Annual Report on Situation and Standard of Upbringing and Education in Schools and Educational Establishments in the Slovak Republic.

Conclusions of State Schools Inspection towards secondary vocational schools

Major positives:
- strategic planning takes into account labour market needs and competitiveness of environment,
- students interest in vocational training overall good standard of professional skills,
- overall good standard of foreign language teachers competence, significant efforts of teachers, predominantly in non-productive branches, in modernising instruction,
- students achieved good environmental knowledge, they consider school as the major source of environmental information, school has the major influence on creating students positive attitudes within the field of environment,
- better standard of final exams preparation (participation of chambers), students self-activity within the practical part of final exam, higher standard of students preparedness and respect for exam, certain standard of standardisation of exams in individual branches,
- follow-up study offers possibilities for promotion of qualification, overall good conditions for upbringing and education, completion of this study provides graduates with better possibilities for their assertion,
- good standard of organisation of entry procedures and entry exams, good standard of head masters decision-making on admission or non-admission of pupils.

Major negatives:
- material and technical conditions get worse,
- students remain not interested in metal processing training branches, workshop capacities are unused,
- vocational subjects textbooks (predominantly of technologies and economics) are obsolete,
- little attention is paid to graduates' assertion on the labour market,
- absence of specific syllabi and basic textbook for foreign language education, worsening material conditions for education, low stimulation of foreign language teachers for promotion of their qualification, legislative definition of temporary qualification of foreign language teachers does not differentiate the level of the state language exam as the professional prerequisite,
- weak offer of specific educational activities for teachers from the side of methodological centres, low offer of methodological materials for teachers, syllabi in environmental education at basic schools and secondary schools lack objectives of upbringing and education,
- unsolved financial provision of final exams involving participation of chambers, project directions were not applied consistently, delegates of the Slovak Chamber of Commerce and Industry participated only in part of the final exam,

- within the follow-up study, problems in provision of vocational training, financial donations requested from students to complete schools,
- non-compliance by Regional Office with respect to legal regulations in law determining number of classes and number students that can be admitted to the first class, non-compliance with administrative regulations,
- shortcomings in form and content of decisions issued.

Trends:
- differences in equipment among secondary vocational schools are deepening, there is a continuous interest in retail and services branches linked to better possibilities for assertion on the labour market,
- within the follow-up study there is a trend to open classes at the lowest limit with regard to the number of students,
- non-compliance with continuity of training and study branches in attempt to preserve this study,
- significant innovations in content of vocational subjects.

Conclusions of State Schools Inspection towards secondary specialised schools

Major positives:
- clearly stated main objectives of upbringing and education with regard to conceptual intentions,
- relatively high professional standard of instruction, quality and functional internal information system,
- good standard of teachers' professional competence, provision for of continuity in foreign language instruction, prevailing positive motivation for language education,
- students achieved good environmental knowledge, school has the largest influence on creating students' positive attitudes within the environmental field,
- positive assessment of continuous vocational practice by students,
- high professional standard of instruction in post-maturity study programmes in SSS
- good standard of organisation of entry procedures and entry exams, very good standard of headmasters decision-making on admission or non-admission of pupils,
- elimination of identified shortcomings resulted in improvement of school activities standard.

Major negatives:
- not consistent compliance with curricula and syllabi,
- low standard of equipment of laboratories and specialised vocational schoolrooms by up-to-date instrumentation and teaching and learning aids,
- weak assessment of graduates' assertion at the labour market,
- qualitatively diverse approach in teaching of professional terminology within the foreign language instruction (in some cases insufficient), Russian and French languages teachers' qualification not used due to the low interest of students in learning these languages,
- in the field of environmental education low influence of vocational subjects on students' environmental knowledge and attitudes,
- from the side of methodological centres, a weak offer of specific educational activities with regard to environmental education and methodological materials for teachers,
- absence of objectives of upbringing and education and requirements on students' knowledge and skills in environmental education pedagogical documents

- most of instructors of continuous vocational practice lack pedagogical education, the negative features include the obligation of schools to get every year subjects for performing continuous vocational practice, weak material equipment and conditions of continuous vocational practice in schools,
- legislative shortcomings predominantly in admission of students, and instability in numbers of applicants, significant decrease in numbers of students during post-maturity study,
- non-compliance with legal regulations in law determining number of classes and number students, which can be admitted to the first grade, by regional offices
- non-compliance with administrative regulations, there have been shortcomings in form and content of issued decisions.

Trends:
- worsening of equipment of laboratories and specialised vocational schoolrooms by up-to-date instrumentation, shortage in teaching and learning aids, worsening of technical conditions of buildings,
- increase in interest in study branches in the field of economic services and a decrease in interest in technical study branches within post-maturity study.

The Ministry of Education reflected inspection findings and recommendation as follows:

- to specify more precisely in educational programmes of part-times studies the requirements of practical training,
- to provide for new text-books of VET subjects, at least in the form of supplements to existing textbooks,
- to elaborate the curriculum of follow-up courses for the schools with the minorities languages as languages of instruction,
- to support innovations within vocational training at SVS,
- to continue the experiment aimed at final exams at SVS conducted in co-operation with Chambers of Commerce and Industry and other institutions of employees

Weaknesses and strengths of IVET were thoroughly discussed within the aforementioned National VET Conference and within consultation process to the Memorandum on Lifelong learning. The former conference conclusions are presented in the Annex F, the latter conference finding annexed in the annex H will be discussed in detail later. Within the 2000 SNO VET Report presented strategic goals identified in accordance with the Programme Statement of the Government for Years 1999-2002 remain valid. Aforementioned part of 2000 Report on strategic goals is presented in the Annex G.

There are, however, just two VET relevant priorities of the government, when preferring a practical point of view:
Adoption of pending new Higher Education Act, which is almost completed and submission the Education Act “on Upbringing and Education in schools and educational establishments” to the government. 2002 is an election year.

3.5 Modernisation of Continuing Vocational Training (CVT)

Within the aforementioned National Plan of Regional Development, the document of Slovakia’s regional policy implementation to 2006, the actual situation of the labour market in Slovakia is characterised as “marked by a high disproportion between labour offer and labour

demand, low adaptability and high rigidity". The result is as follows: the surplus labour force is forced into the grey and black economies, and to work abroad.
Besides fighting economic deformations as a whole and introducing incentives for creation of new jobs, an "enhancement of labour market adaptability and flexibility" is explicitly seen as one of three tools for "the solution of this situation".
Furthermore, within setting of a "Specific target: Increase of flexibility of labour market in regions ", explicitly "Assurance of ... regional, district and local programmes for the support of the development of employment and re-training programmes for harmonisation of structure of labour demand and offer" is mentioned.
No doubt, however, that two aspects of any measures are to be strengthen - "regionalisation" and "harmonisation with requirements of labour market demand".
While the first issue depends primarily on the institutionalisation of regions and ongoing process of decentralisation is an appropriate respond and precondition of further actions, the latter issue remains to be insufficiently operationalised, even insufficiently clarified within the policy discourse.
There is a natural gap between continuing vocational training traditionally conceptualised very pragmatic as utility linked with work or even work place and new visions of lifelong learning. It will take time and will require a lot of policy work to develop appropriate measures for supporting learning environment and motivate learning subjects instead of supporting and financing institutions used to offer education and training instead of facilitating learning.
Compared to initial VET, continuing vocational training is less regulated and monitored, and quite naturally there is less information about the situation there. On one hand, there is a fatal weakness of missing statistics, Slovakia did not participate at international CVT surveys, on the other hand there is a vivid market developed within some segments of continuing training.

3.5.1. CVT Provision (from the Supply Side Perspective)

The system of continuing vocational education and training has undergone more significant changes than initial vocational education has in the '90s. With the economic decrease in early 1990s, continuing vocational education lost its economic backing. Many training centres closed down or changed their field of operation. Since 1993, interest in continuing education has been increasing with the economical revival. There have been non-state institutions already established that are on the market. Continuing education and adult education have been provided by tradesmen and by institutions established under the Trade Code, as well as under the Act on Foundations and the Act on Association of Citizens. By the end of 1997, some 7,000 entities were registered with the Ministry of Interior SR with their declared scope of operations covering education. Many of non-state institutions, which declared education to belong to their scope of operation, however, did not provide education. The Trade Licensing Act considers provision of training/education a free trade and when filing for the Register, no professional qualification and experience is requested. As a consequence, many starting institutions include provision of education activities (this in practice means continuing training) to the institutions scope of operation just for the case of future opportunities. Currently, about 3,500 entities are said to be engaged in CVT in some way.
CVT is provided both by schools and non-school entities. The largest from the non-state training institutions is the Academy of Education with its centres/branches in 38 Slovak towns or cities. Secondary schools and universities may provide specialised courses or post-maturity training mainly in the fields of study provided in the format of daily studies. The type of offers, however, highly correlates with their provision of initial training.
The Slovak Distance Learning Network, consisting of distance study centres at universities in Bratislava, Košice, Nitra, Zvolen, Žilina established within PHARE programme, provide for

training in a distance format. Online learning projects are in progress, however they suffer from a lack of means, as several times stressed within the consultation process on the Memorandum on lifelong learning.

At several universities, centres of lifelong or continuing education have been established for the provision of training, however, many HEI usually at the level of the faculty or even department provide for lifelong learning opportunities in co-operation with affiliated non profit organisations.

Specialised continuing training, aimed at educators, is offered by universities, their affiliated non-profit organisations and other in-service teacher training specialists (see chapter 5).

On the national level, legislation also regulates continuing training of other specific professional groups like healthcare staff, fire protection and civil defence crews, employees of the power sector, environment, veterinary care, forest management, police corps members, and judges and other justice officers, etc.

Thus, continuing vocational education is also provided by sectoral educational institutions (Ministry of Interior, Ministry of Agriculture, Institute of Bank Education) and in collaboration with non-state institutions providing continuing training, various professional associations run continuing training programmes for professional staff groups as required.

Schooling and training centres in large enterprises or companies provide training tailored to the current needs of the company making use of the foreign investor training experience and culture.

Finally, well-developed specialists in provision of education and training from abroad start to test the Slovak market with the country's gradual efforts to integrate into EU.

For the time being, the statistics of continuing vocational training cannot be seen as being highly transparent. It is impossible to obtain reliable quantitative data on institutions providing continuing training. Some information may be derived from surveys of the Institute of Information and Progn Education conducted annually from 1997 and based on its report form on continuing education Dalv (Ministry of Education SR) 1-01 approved in 1996.

Table 59

Number of Educational Institutions Offering CVT/LLL in 2000 by Type/Sector

Educational Institutions (EI) offering continuing training and/or Lifelong learning opportunities	Number of Educational Institutions		Number of trainees	Graduates
	Abs.	%		
Secondary schools	64	21,69	9322	8331
Higher EI	51	17,29	15102	9668
EI of state administration bodies	31	10,51	119680	60427
EI of municipalities and cities	5	1,69	9510	9017
EI of professional association	1	0,34	567	650
EI of co-operatives	2	0,68	1479	1479
EI of civic associations	17	5,76	68292	68175
EI of trade unions	0	0,00	0	0
EI of churches and religious societies	1	0,34	79	43
EI of entities from culture sector	4	1,36	3649	97
EI of individuals and legal entities	106	35,93	48844	46374
Others	7	2,37	3667	1990
EI not included – dates missing	6	2,03	3724	1938
Total	295	100%	283915	208189

Source: Institute of Information and Prognosis in Education

The obligation to file annual statistical reports by educational institutions is laid down both in the Act on statistical surveying and the Act on further education. Nevertheless, the responsibility rate is very low. E.g. in 2000 the institute distributed 1,250 report forms on continuing vocational training. From this number 295 reports were returned. In 2001 the institute distributed 3,373

report forms. The discipline of statistical reporting is expected to improve with time. The 2000 statistics refer just to these 295 education institutions.

Table 60

Number of Educational Institutions Offering CVT/LLL in 2000 by Ownership

Ownership of EI	Number of EI		Number of trainees	Graduates
	Abs	%		
Not available	3	1.02	1031	1028
International with major public sector	1	0.34	471	429
Private domestic	87	29.49	61051	50533
Co-operative society	4	1.36	1495	1495
State	144	48.81	135204	72346
Municipal	11	3.73	2558	1085
Ownership of associations, incl. political parties	19	6.44	68607	68415
Foreign	3	1.02	777	559
International with major private sector	1	0.34	0	0
Mixed	10	3.39	598	5587
Not included (data are missing)	12	4.07	7123	6712
Total	295	100%	283915	208189

Source: Institute of Information and Prognosis in Education

About a half of these institutions are state managed institutions and about one third are private ones, as visible from this table. A detailed description of distribution of these educational institutions by legal form is presented in Table XLII in the Annex.
The following are the other data describing aforementioned institutions.

Table 61

Number of Educational Institutions Offering CVT/LLL in 2000 by Form of Networking

Network of EI	Number of EI		Number of trainees	Graduates
	Abs	%		
Independent EI, local operation	67	22,71	25211	17801
Independent EI, regional/nation-wide operation	171	57,97	142365	88639
Network of EI in regions	13	4,41	11979	8441
Network of EI in each district	6	2,03	68029	67990
Other	23	7,80	11331	10368
Not included (data are missing)	15	5,08	25000	14950
Total	295	100%	283915	208189

Source: Institute of Information and Prognosis in Education

It is visible from the table above, that there is a lot of space for restructuring of institutions at the market, in particular for vertical networking. There is a modest share of institutions spread throughout the country trying to cover the market as a whole, however with subsidiaries in all sub-markets (districts). Training institutions with a chain of facilities in various Slovak regions represent some 4.4% and in every district some 2%.

All the data offered above were biased on the low responsibility rate of report forms and the absolute numbers should be considered only as rough estimates. However, these are the only official data based on data collecting. Instead of absolute data with very limited reliability, we therefore present distributions represented by percentage within absolute numbers available from the Institute of Information and Prognoses. Despite the aforementioned bias, it might be interesting to compare the structure of reporting institutions in time series. This should include the changes introduced from 1997-2001.

Table 62
1997 -2001 Educational Institutions by Type (in %)

Type of Educational Institution	1997	1998	1999	2000	2001
Secondary schools	30.46	24.83	26.53	21.69	16.95
HEI	7.38	10.74	15.99	17.29	11.46
EI of state administration bodies	9.54	9.06	8.84	10.51	8.35
EI of municipalities and cities	1.85	1.68	2.04	1.69	0.95
EI of professional associations	1.54	0.67	2.04	0.34	0.48
EI of co-operative society	0.62	0.67	0.68	0.68	0.48
EI of civic associations	8.92	8.05	4.76	5.76	6.21
EI of trade unions	0	0.34	0.34	0	0
EI of churches and religious societies	0.31	0.34	0.68	0.34	0.48
EI of cultural institutions	0.31	0.67	1.02	1.36	1.43
EI of natural persons and legal entities	29.23	27.52	25.51	35.93	36.99
Others	9.85	15.44	8.50	2.37	13.84
EI not included – data are missing			3.06	2.03	2.39
Total	100	100	100	100	100

Source: Institute of Information and Prognoses of Education

These data indicate a gradual decrease in the share of secondary schools (from over 30% to 22%) and gradual increase of active private entities (from 29% up to 36%). Similar data on educational institutions' legal forms and type of networking are shown in Tables XLIII and XLIV in the Annex.

There are no detailed analyses available concerning the quality of educational programmes, trainers, working methods, etc. Educational programmes are offered very likely in a traditional "school" form, because it is less expensive. According to the Institute of Information and Prognoses aforementioned survey, only 37 programmes representing less than 2% were offered as distance learning programmes. On the other hand, difficult market conditions and a high share of private companies contribute to permanent innovative attempts in "pedagogy", e.g. in working methods with a client-centred approach dominating. Modular approach is in progress due to easier marketing and higher efficiency reasons. Despite criticism, e.g. within the consultation process to the Memorandum on LLL, the quality of service remained unregulated and left to market forces. General information about programmes for the purpose of registration should be considered as part of administrative procedure rather than part of quality assurance procedure. Nevertheless, we can identify there a precondition of quality assessment within three different systems:

Formal education system-associated programmes (i.e. continuing training provided by secondary schools) are assessed by the Ministry of Education within regular procedures of inclusion/exclusion from the network of schools and/or network of study and training branches. Universities and faculties are accredited by the Accreditation Committee of the Slovak Government, pursuant to criteria laid down for the individual branches of studies. Parts of those programmes make a specialised offer of continuing vocational training. However, universities also prepare new educational programmes based on the said accreditation and delivered by their own teachers.

Continuing training institutions submit to the accreditation process, compliant with Act No. 386/1997 Coll. on Further Education. For that purpose, the Accreditation Committee (of the Ministry of Education – not to be confused with that just mentioned) was appointed and regulated by a statute issued by the Ministry of Education. Since 1991, the Accreditation Committee of MoE has accredited 12,000 educational activities of 1,452 educational institutions. Details on the accreditation procedure are described in the Vantuch, J. et. al., 2001.

3.5.2. CVT provision from the (demand side perspective)

3.5.2.1 Participation of employed in vocational training

According to Act No. 386/1997 Coll. on Further Education, continuing vocational education and training has become a legitimate part of the education system of the Slovak Republic. Everybody, regardless of age and educational attainment, has the right to continue his/her education in accordance with his/her abilities and interests. The act specifies establishment of continuing training institutions, conditions of accreditation, issuance of certificates of completed training, etc. However, there are no mandatory sources for financing continuing training identified. It is listed what sources are eligible for financing training, but this list of sources is just a demarcation of possibilities of financing and no funds are secured and no incentives for allocation of own means towards companies and individuals set. Thus, the declarative essence of the law provides for the institutional backing of the establishment of educational institutions and their activities as opposed to the creation and further regulation of the market. Without solid measures inhibiting emerging market by identification and allocation of liquid assets, the CVT will remain within

- formal learning-linked activities,
- pragmatic in job training activities, and
- non-formal learning of a limited number of solvent clients and limited number of attractive fields of training (foreign languages, ICT, personal communication).

When enterprises frequently combat manufacturing, technical, and pressing financial problems, under the existing conditions the training of workers in the enterprise is forced to the background, considered less crucial. In that situation, enterprises resist investment into the training of their workers and focus rather on recruitment of a “plug-and-play” qualified employee. By contrast to this, prosperous enterprises make a considerable contribution to CVT development. Companies with foreign investors or foreign owners follow a firm own culture and provide for enrichment of experience with CVT practice countrywide. Highly appreciated good practice example of a foreign company is Volkswagen, a good practice example of local tradition is the refinery Slovnaft.

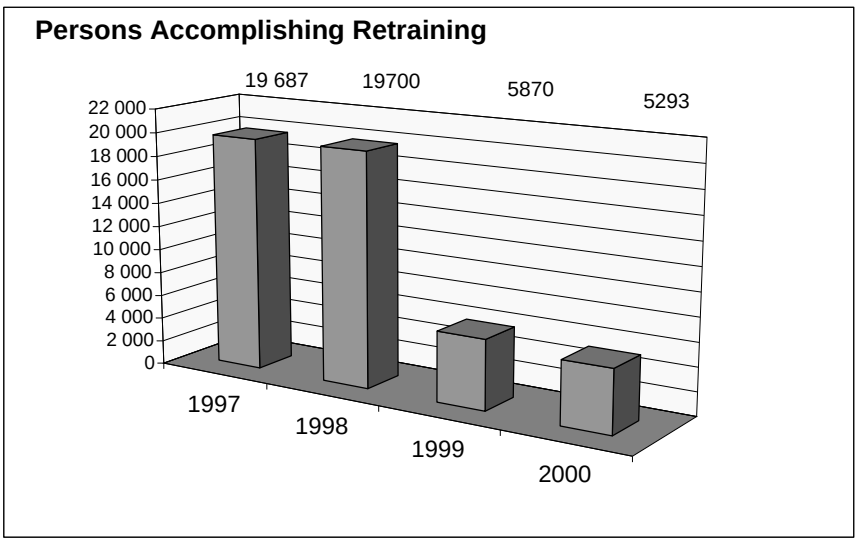
There is a lack of data about CVT demand side. Some of the limited surveys results are mentioned in the 2000 SNO VET Report. Meanwhile, 2003 represents a turning point in the collection of hard data. That’s thanks to the introduction of a renewed version of the Labour Force Survey. New items on CVT within LFS are expected to lend new insight into the issue.

3.5.2.2 Participation of Unemployed in Vocational Training

The Administrative Committees of District Labour Offices govern the training of unemployed people. They approve re-training priorities worked out by the employment and development departments and decide on criteria of selection of training firms and allocation of means for respective educational programmes. Any programme for unemployed paid from NLO means must be accredited by the MoE. Examples of regional priorities were in detail presented in the 2000 SNO VET report.

In 1999 the number of persons who completed their re-training compared to 1998 and 1997 sank considerably. In 2000 we see this decrease confirmed. Lack of financial resources allocated to re-training is caused by extensive unemployment benefits consuming means for active labour policy as a whole. This alarming trend is presented in the following graph.

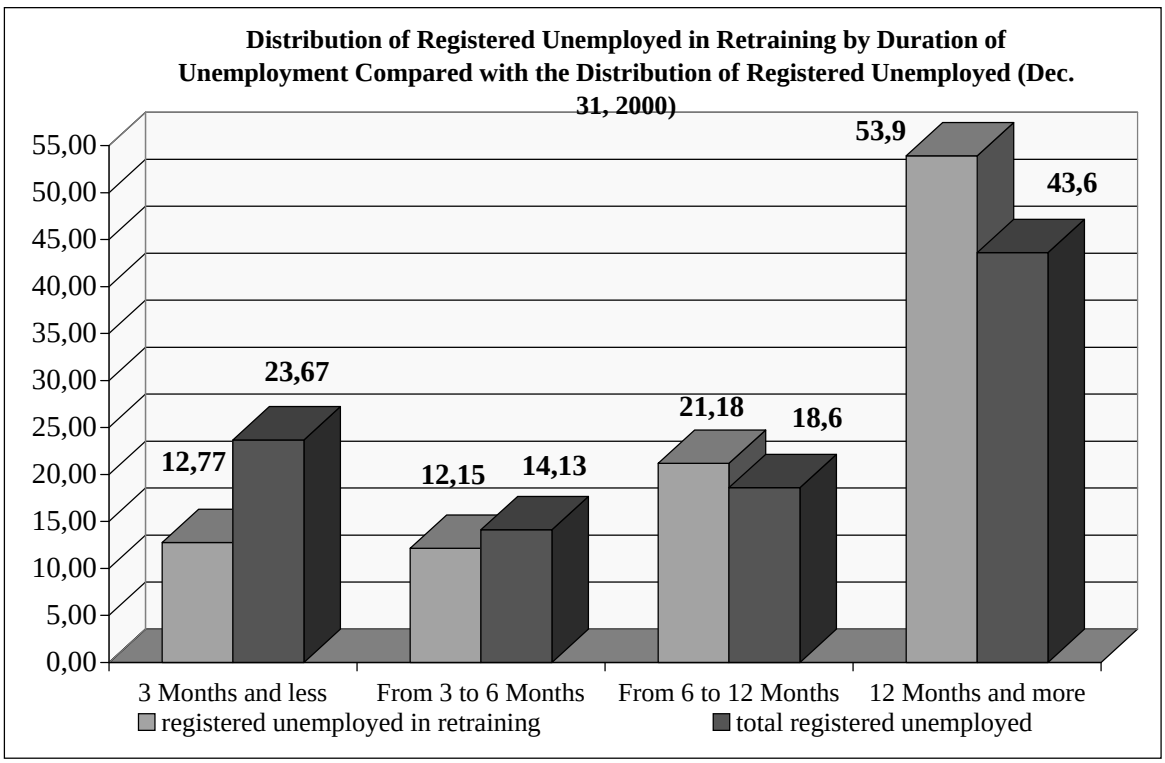
Graph 8
Persons Accomplishing Re-training



Source: National Labour Office of SR

Since 1997 the number of people interested in re-training has been in gradual decline. In 2000, 14,749 registered unemployed people were interested in re-training. Out of 5,293 registered unemployed completed re-training, 61.5% were registered unemployed with disabilities and 41.4% were registered unemployed more than 12 months.
The following graph presents the re-training admission policy, with clearly visible positive discrimination of long-term unemployed.

Graph 9
2000 Re-training Admission Policy with Regard to the Length of Unemployment



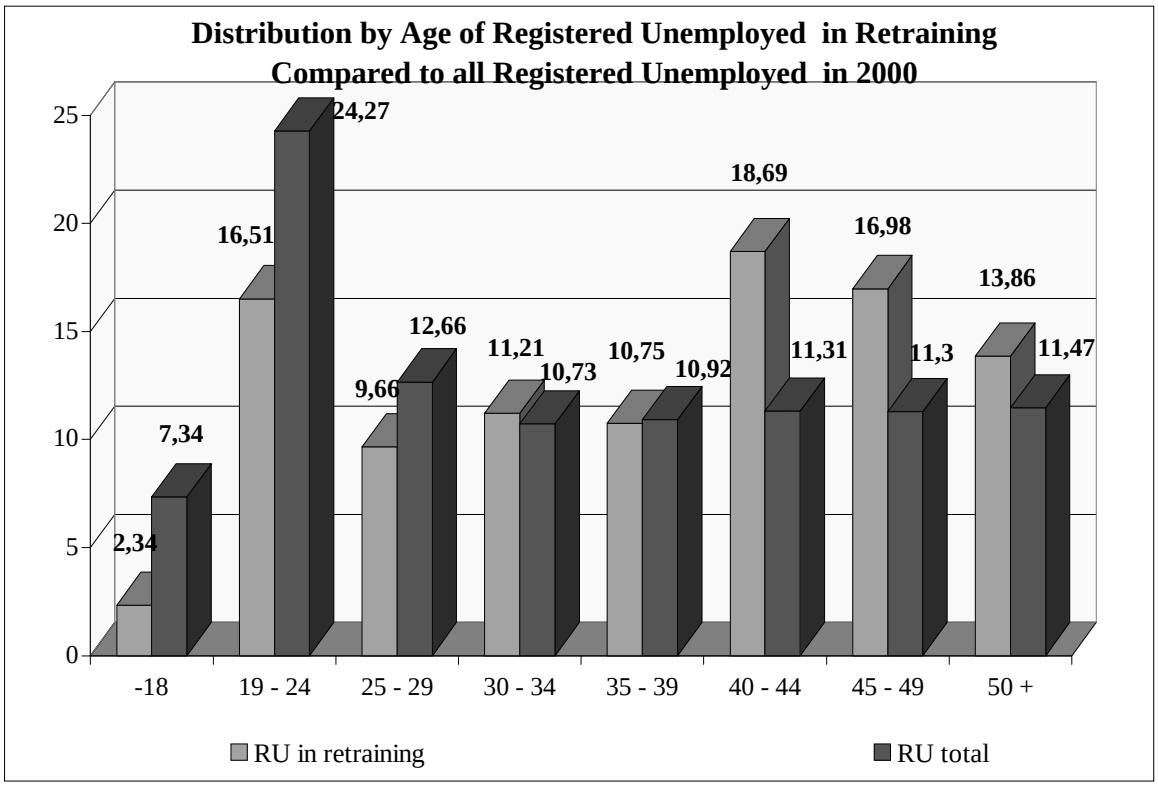
Length of RU before re-training	-3 Months	3-6 Months	6-12 Months	12+ Months
1999 RU in re-training	1,40	5,88	29,35	63,38
1999 RU total	20,63	14,48	21,69	43,20
2000 RU total	23.67	14.13	18.6	43.60
2000 RU in re-training	12.77	12.15	21.18	53.89

Source: National Labour Office of SR

There is a change in policy compared to the previous year. Short-term unemployed developed into the target group significantly benefiting from the 2000 admission policy. Policy makers seem slightly resigned to targeting the hard core of over a year unemployed and preventing short-term unemployed from developing an unemployment mentality.

The age structure of registered unemployed in re-training courses is visible from the following graph. Unemployed people over 40 years of age are positively discriminated.

Graph 10



2000 Re-training Admission Policy with Regard to the Age of Trainees

Age groups	-18	19-24	25-29	30-34	35-39	40-44	45-49	50 +
1999 RU in re-training	2,49	20,83	13,62	12,53	14,47	14,10	13,60	8,37
1999 RU total	8,23	23,55	12,29	11,15	11,45	11,87	11,40	10,07
2000 RU total	7.34	24.27	12.66	10.73	10.92	11.31	11.30	11.47
2000 RU in re-training	2,34	16.51	9.66	11.21	10.75	18.69	16.98	13.86

Source: National Labour Office of SR (Data as of 31.12.2000)

There is an interesting change in re-training admission policy in 2000 compared to the previous year. The admission policy towards young unemployed aged 19-29 is significantly harder. It is worthwhile mentioning, that the hardest decrease affected the sensitive age bracket of 19-24 year olds.

Re-training success has been derived from the total number of registered unemployed that completed their re-training courses in 1999 and later found jobs. . During the period studied, in

total 2,924 persons were employed, which represents 46 % of the total number of registered unemployed who completed their re-training.

3.5.2.3. Participation in Individually Motivated Vocational Training

Information concerning this issue is based on statistics from the aforementioned Institute of Information and Prognoses with limited reliability, and rather qualitative surveys and subjective opinions available from statements of managers and human resource development specialists.
The following table addresses the activities of educational institutions indirectly marking the clients' preferences according to data from 295 institutions covered by the Institute of Information and Prognoses survey.

Table 63
Educational Programmes by Kind of Education in 2000

Kind of Education	Number of EP		Number of trainees		Graduates
	Abs	%	Abs	%	Abs
Continuing vocational training sensu stricto (linked to the professional career path)	1218	55.69	148315	52.24	114758
Supplementary pedagogical studies	32	1.46	2063	0.73	666
In-service teacher training	45	2.06	1915	0.67	864
Re-training –accredited	327	14.95	43375	15.28	21017
Re-training without accreditation	43	1.97	4118	1.45	832
Civic education	135	6.17	8082	2.85	7364
Socio-cultural and special-interest education	133	6.08	11464	4.04	5785
Other	225	10.29	59193	20.85	52919
Data not submitted	29	1.33	5390	1.90	3984
Total	2187	100%	283915	100%	208189

Source: Institute of Information and Prognosis in Education

Over half of the programmes as well as over the half of trainees are included within traditional continuing training schemes, usually strongly institutionalised and related to the formal educational system. The second larger number, almost 15%, represents training of unemployed covered by District Labour Offices. Thus, almost all programmes are highly institutionalised following hard core regulations. Just the aforementioned 6,08% are identified as successful in attracting people looking for education based on intrinsic motivation. It is assumed that low purchasing power of inhabitants rather than a lack of motivation causes a relatively low participation in CVT of individuals intrinsically motivated.

Thus, access to CVT is limited by a lack of incentives providing for financing of CVT. There are no other essential restrictions with regard to CVT. On the other hand, policies supportive for CVT should be elaborated. As stressed within the consultation process on Memorandum on LLL, there is no cohesive strategy backed by a cohesive financial scheme, which could turn the positive attitude of decision-makers from positive declarations to positive actions. There are no incentives towards enterprises and individuals enabling direct players on the market to shape their training plans. The institutional approach is preferred and service institutions rather than direct beneficiaries are supported.
Moreover, due to wage equalisation without merit incentives, a standard motivation - higher wages - stimulating employees to acquire higher qualifications has been absent. People, except freelancers, are not used to taking care of increasing their prices on the labour market.
There is no reliable and detailed analysis of the individually-motivated training available. With aforementioned renewed LFS and the entering of Slovakia into next CVTS more data may soon be available.

3.5.3 Responsible Bodies

Decision-making powers and obligations vis-à-vis respective segments of CVT are as follows:
Company-based training is unregulated, left on firm policy with no incentives and central government measures supporting CVT.
Training for the unemployed is in the full competence of NLO with District Labour Offices effective in managing district tripartite Administrative Committee decisions on allocation of means and selection of training providers. Funding of training for the unemployed is, however, sensitive with regard to the Ministry of Labour, Social Affairs and Family policies and, finally, government decisions towards active labour market policy priorities and resources.
Individually-driven training is a market issue. As mentioned above, there are no entry regulations for provision of CVT. The Trade Licensing Act considers provision of training/education a free trade. When filing for the Register, no professional qualification and experience is requested.

Accreditation is within the powers of two Accreditation Committees and the Ministry of Education. Accreditation of training institutions applied to universities (Accreditation Committee of the Government SR), secondary schools (by including them in the network of schools maintained by the MoE). This is derived from the assessment of branches of studies, staff and institutional provision, and accreditation of non-school educational institutions and ad hoc CVT/LLL activities of schools (Accreditation Committee of the MoE). There is however an obligation to accredit only re-training courses covered by NLO; other programmes may be accredited but don't have to be.

3.5.4. Financing

Under Article 10 of Act No. 386/1997 of the Law Code on Further Education as amended, continuing education may be financed by:

- Payments of participants in continuing education/training
- Employer funds paid in the form of income taxes
- A special subsidy from the state budget
- The Budget of the National Labour Office for re-training of the unemployed or employees
- Funds of municipal budgets
- Funds of foundations and other legal and natural persons as well as funds of employers
- Other

Continuing education institutions stressed the need to amend Act No. 386/97 Coll. on further education with regard to the clarification of criteria for accreditation and setting incentives for (co-)financing activities. By the amendment 567/2001 Coll., the former issue has been partly addressed, while the latter remained unchanged. The proposal within the draft law to introduce earmarking of 1% of the company payroll for continuing training was rejected by the government.
From its budget, the Ministry of Education co-funds the operation of state schools (secondary and universities), contributing in particular to their operation and to the wages of their staff, who also deliver continuing training.
Under its active labour market policy, the Ministry of Labour, Social Affairs and Family supports and the National Labour Office funds accredited re-training activities. Re-training is covered by the means from the Basic fund of the National Labour Office destined for active labour market policies. Active labour market policy measures (as well as passive labour policy measures) are covered from contributions to unemployment insurance. Collection of

contributions is the responsibility of executive bodies of NLO. Contributions to unemployment insurance should be obligatory and be paid by

- employees, 1% of stated assessment basis,
- self-employed, 3% of stated assessment basis,
- employers, 2.75% of total assessment basis of their employees (if more than 25% of employees are handicapped the contribution is 0.9% of total assessment basis of their employees).

Voluntary contributions are obtained from persons working abroad, limited company partners, special partnership members, members of co-operatives, 3% of stated assessment basis. The management of continuing training is based on the relationship between the central authorities (Ministry and NLO Headquarters) and the local level. Labour offices have been established on the regional and district levels with tripartite administrative committees. On lower levels, employers' associations, educators and local governments or state administration have been established within these committees to co-ordinate development and performance, monitor the quality, decide as necessary on the need to change the content of education/training or distribution of funds within their powers. Compliant with re-training plans based on letters of offer and personal negotiations with training institutions, district labour offices prepare their financial plans, and completely cover the costs of re-training of the registered unemployed..
It is however necessary to point out that the contribution has been permanently declining in recent years (see Table XLV in the Annex), and that the monitoring of quality suffers from a lack of methodology and experience. Usually, retraining leading to employment is considered quality training regardless of its content and the level of risk of dead weight.

According to the experts, training activities are financially depending predominantly on payments from participants. A single important institutional source of financing CVT is the National Labour Office (in particular vis-à-vis re-training). A complete picture of the structure of resources for financing of continuing training is not available, as the network of institutions has not been completely addressed by the Institute of Information and Prognoses in Education statistics. Data identified by the Institute covering years 1997 to 2000 are summarised in the following table. Similarly to the previously presented time series, distribution in % rather than absolute numbers is offered.

Table 64
1997-2000 Distribution of Sources for Financing of Continuing Education (in %)

Source of financing	1997	1998	1999	2000
Subsidies from the state budget	17.50	18.48	19.18	21.67
Extra-budgetary sources	1.64	5.62	3.77	4.25
Ordering legal entities	29.77	20.53	15.97	16.32
Trainees	25.12	35.68	37.10	34.83
Labour offices	8.90	5.70	0.54	2.59
Donations from local entities, individuals, natural and legal persons	0.25	1.21	0.10	0.21
Donations from foreign entities, individuals, natural and legal persons	0.42	0.20	0.04	0.14
Revenues from other operations of training entity	7.55	8.05	7.53	4.00
Other sources	8.85	4.52	15.76	15.98
Total in %	100	100	100	100
Total in Euro (1EUR = 42 SKK)	13 017 452	16 216 786	19 134 048	17 999 354

Source: Institute of Information and Prognoses of Education

A decline in financing training from the NLO presented earlier in absolute numbers is visible in

relative figures here as well. The relative weight of institutionalised funding is increasing and trainees' fees are confirmed as the most important source of funding within these statistics. There is an unpleasant trend indicated here with a decreasing share of funding offered by employers of trainees.
The data provided by 258 out of 295 of the aforementioned reporting training providers indicate a high share (2:1) of wage costs of full-time staff compared to the part-time lecturer and trainer fees. This figure is about the description of the "sample" of the disciplined training providers reporting to the Institute. But it also indicates two assumptions worthy of further research: a high share of regular staff seems to indicate a lack of flexibility on the market of lecturers and free space for additional marketing aimed at special needs of individuals, which usually cannot be covered by the regular staff.

Here are the main obstacles and proposals of change with regard to three segments of CVT resumed:

Employees training: There are no incentives for companies promoting CVT/LLL. The Social Fund is a weak instrument for providing the CVT resources. Undercapitalised companies, quite often newcomer and small and medium-sized enterprises, are unable to allocate the means for CVT. Tax-related tools (inclusive tax credits) should be introduced to facilitate identification of means for CVT within company budgets.
Unemployed training: High unemployment causes substitution of active labour market policy by passive policy. Almost all-available means are consumed by unemployment benefits, the rest by higher level policies aimed at attracting foreign investors rather than by activities for unemployed individuals.
Individually-driven training: Low purchasing power disables individuals to enter training. Tax-related schemes have to be introduced, predominantly with regard to ICT training. The state should support individuals in purchasing equipment and acquiring the skills needed via tax credits or other income tax related incentives.

3.5.5. Social dialogue and involvement of social partners

In 1999, Act No. 106/1999 Coll. on economic and social partnership (a Tripartite Act) was approved. This law regulates the tripartite relationship and defines the representation of social partners in the aforementioned Council for Economic and Social Agreement. Social dialogue on this level results in the General Agreement concluded between the Government, the Trade Union Confederation and the Federation of Employers' Associations. On the branch level, social dialogue is carried out through collective bargaining. Partners for collective bargaining are the respective employers' union, and branch trade union. Collective bargaining on this level results in collective agreement at the master agreement level (CAMAL). Analysis of CAMALs valid for the 1999-2003 period was done in the 2000 SNO VET Report.
Although vocational education issues were covered in 23 out of 56 CAMALs, they were tackled just within indirect general proclamations.
On the basic level, social dialogue is carried out in enterprises and organisations and results in collective agreements regulating specific employment conditions, wage developments, adjustment of working hours, working conditions, social care etc. Vocational education and training issues are included on different levels of elaboration. Quite often continuing vocational training is still not perceived by employers as a strategic tool that may contribute to raising the efficiency of the company's operation, and by employees as a tool for increasing employability. Undoubtedly, there is a room for social partners to make CVT a valuable agenda for social dialogue. Trade unions should develop this agenda recognising that training provided by

employers could be considered as a benefit comparable with a wage increase, and often easier to agree with employers as being cheaper (at equal value for employee) for employer than the wage increase.

A special form of social dialogue is institutionalised by various tripartite advisory, expert or consulting bodies, commissions etc. They are often established within state or public legal organisations. The aforementioned Council of the Minister of Education of SR for VET is an example of the former type, and District Labour Offices management of active labour market policy the latter type. Administrative Committees on the regional and district labour office levels consist of equal numbers of representatives of employees, employers and the state. With regard to continuing vocational education, particularly re-training, their competencies are important in the following:

- elaboration of labour market policy priorities and labour market policy measures drafts
- approval of procedures of execution of labour market policy, and approval of principles regulating utilisation of funds on active labour market policies.

3.5.6 Curricula Development

There is no national policy concerning CVT curricula development. Only schools deriving their CVT activities from their mainstream educational programmes are influenced by regulations related to enlistment into the network of schools/programmes and the accreditation procedure mentioned earlier. Similarly to the Ministry of Education looking for "basic pedagogical documents" in the formal case and the Accreditation Committee of the Government following strictly regulated procedures when accrediting HEI programmes in the latter case, the Accreditation Committee of the Ministry of Education requires submission of detailed, specified documents.

With regard to the **project and pedagogical documentation of educational activity**: there is an obligation of defining all the following information:

name of educational activity

defining organisational form of education targeting educational activity (by which the schooling is going to be performed) and educational process (what is the participant supposed to learn),

target group (description of the social group to which the schooling is directed),

demanded incoming education (for acceptance of the applicant),

profile of the graduate (characteristics of gained knowledge, skills and abilities for a particular professional activity, chances on the labour market),

teaching methods (description of educational methods),

form of final exam (final attestation of gained knowledge, skills),

total volume of educational activities stated by the number of hours (theoretical and practical part of the schooling),

educational plan and schedule (didactic elaboration of the contents of the schooling).

Although this regulation only provides for the framework rather than in-depth worked out extensive documentation, it's enough incentive for providers who want to receive accreditation of the programme to engage experienced people in the development of curriculum. Of course, as mentioned earlier, the provider has to fulfil formal requirements rather than prove guarantee of quality of training. Furthermore, it's up to providers whether they want to receive accreditation or not, unless they require a contribution from tax money (e.g. NLO re-training).

In general, curriculum development as well as CVT provision for individuals is market-driven and minimally regulated, as explained within Chapter 3.5.3. That is, unless it's certified for

special purpose, as regulated by specific legislation (e.g. in-service training of teachers or welding certificate, just to name a few which are strictly regulated by respective decrees).

There is no direct link between training content and the labour market. Working standards prepared on a central level leading towards educational standards are absent. On the other hand, in corporate training the content of courses is tailored to the employer requirements, and with regard to individually-motivated learning trainees they have freedom to choice, make decisions and pay for the courses. Some analysts consider this better than any additional regulation applied without further and deeper knowledge about the current status of the system. Without focused and intensified research in this field and more detailed statistics, it is considered better to leave the market unregulated in terms of entry and process. It is expected that educational output standards within the formal system might help assess the quality of CVT as well. On the other hand, some analysts prefer to leave non-formal and informal learning free of regulation in order to prevent imposing formal system failures on it. Nevertheless, accreditation of prior and experiential learning is considered a great challenge, however controversial. The current status of the effort as well as experience already gained is presented within the National Report on the consultation process on the Memorandum on LLL.

3.5.7 Assessment and Certification of Skills Including Access to Formal Qualifications and Diplomas

Institutions which provide CVT according to special legislation (e.g. school-based programmes or courses aimed at acquirement of skills stipulated by specific decrees, e.g. fire protection, welding etc.) issue certificates according to the relevant specific legislation. Certification of other CVT courses is stipulated by par. 8 of Act No. 386/1997 Coll. on further education in latter wording, predominantly as amended by Act No. 567/2001 Coll. A Certificate has a nation-wide and unlimited validity.

3.5.8 Legislation

There are four basic legal regulations relating to the field of continuing vocational education: Act No.29/1984 (the School act), Act No. 172/1990 Coll. on Higher Education, Act No. 386/1997 Coll. on Further Education, and Act No. 387/1996 Coll. on Employment. In addition to the acts listed above, specific parts of other legal regulations or complete legal regulations regulate specialised CVT in specific fields and with regard to specific professions. A detailed description of relevant legislation is offered within 2000 SNO VET Report. (see also the Annex H).

In 2001 Act No. 386/1997 Coll. on further education was amended by Act No. 567/2001 Coll. approved by the Parliament on December 12, 2001, with validity since January 1, 2002. As commented in relevant chapters earlier, this amendment contributed to the precision of the accreditation and certification procedures and failed to identify mandatory resources of financing CVT (see Chapter 3.5.4.). During the same Parliament session in direct relation to the 567/2001 Coll. Discussion, Parliament approved the resolution requiring the Ministry of Education to submit to Parliament a new Concept of Further Education by the end of June 2002. Meanwhile, based on the consultation process, the Ministry decided to elaborate the LLL Concept for the Slovak Republic for 2002 to 2010 by the end of 2002.

3.5.9 Weaknesses, Strengths and Future Government Priorities in CVT

Future Government Priorities in CVT will be presented within the Concept of Further Education due by the end of June 2002 and the LLL Conception for the Slovak Republic for 2002 to 2010 due by the end of 2002.
Nevertheless, there are CVT- and LLL-linked SWOT analyses worked out that might support the development of official government priorities. The SWOT contained in the National Development Plan has been presented within the 2000 SNO VET Report. The newest SWOT prepared during the consultation process on the Memorandum on LLL addressed CVT and LLL broken by the Memorandum key messages agenda. These six SWOT analyses are annexed to the National Report for the Slovak Republic on the Process of Consultation on the Memorandum on LLL (available e.g. on the Europa server).
In short, we could highlight

- major strengths as extensive network of providers with pool of experienced lecturers and solid background legislation,
- major weaknesses as lack of financial resources, predominantly missing financial incentives promoting CVT/LLL among social partners as well as inhabitants within relevant legislation.

It has been several times expressed during the consultation process, that “financing the development of education with respect to human resources was not a priority in the process of economic transformation”. Furthermore, there were fears expressed within the National Report, which calls for increasing investment in education will not be followed through on by the government (facing macroeconomic imbalance exceeding Maastricht criteria and large investments required and agreed within EU accession negotiation process within other fields).

3.6 Links between IVET and CVT

Further strengthening of links between IVET and CVT is hampered by current financial regulations separating respective segments of VET and respective sections (Higher Territorial Units Regional Schools Section, MoE Higher Education Section, MoLSAF/NLO training for the unemployed). In fact, it is difficult to make use of means originally addressed to IVET, CVT and training for the unemployed in synergy; and it’s hard to bridge gaps between these three budgets and sub-systems.
Furthermore, the non-existence of financial incentives involving employers in financing (and benefiting from) vocational training does not allow bridging the gap between training providers (and predominantly schools) and the working world. Financial stimulation of employers to the involvement in VET is a precondition of strengthening links between IVET and CVT. All other measures are of less importance and could be consequentially identified in a straight-forwarded way.
Valuing learning, regardless of the status of the way leading to acquirement of relevant skills and competencies, is again hampered by non-existing financial incentives more than the non-existence of legal regulations concerning informal and partly non-formal learning outputs.
Massive stimulation via financial incentives and boosting acquirement of skills through non-formal and informal learning should lead to pressure to remove the respective formal obstacles to the recognition of competencies and qualifications, making this easier than under current conditions of fragmented VET. The same is true with regard to permeability of IVET and CVT. Any further efforts aimed at improvement of permeability have to be seen with an eye to measures bridging gaps between respective VET segments resulting from the current system of financing.

Transparency and equivalency of acquired qualifications and skills is addressed with regard to the standard European Commission activities in this field. The Ministry has drafted a law on recognition of professional qualifications and it's expected to be passed by Parliament. The ENIC/NARIC agency offers standard service comparable with the service in EU. Recognition of qualifications and transparency of qualifications issues are addressed within Leonardo da Vinci projects, as mentioned in the 2000 SNO VET Report and the National Report on consultation process on Memorandum. Slovakia should, however, be more active in the European level expert bodies.
There are no analyses comparing training quality within IVET and CVT. Nevertheless, this is just a sub-component of a more general issue – VET quality assurance as a whole. VET quality assurance is still considered as insufficiently developed. Any remedial activities should start with dismantling the current obsolete scheme of financing VET.

3.7 Vocational guidance and counselling (VGC)

A three-pillar VGC system, which has been established in the Slovak Republic, is in detail described in the 2000 SNO VET Report.
The first sub-system is based on the traditional guidance system of the educational sector. It is represented by a school counsellor at schools (teachers with special training, usually without special qualification however), and in some schools, but rarely, supported by school psychologist. Counselling facilities located at administrative centres of the Slovak Republic (with specialists in counselling, usually trained psychologists) should provide VGC and offer information about school profiles and the situation on the labour market. This is in addition to the main service: consultations to students, parents and educators, providing psychological diagnostics and submitting proposals for the improvement of the psychological and social development of students.
The second sub-system is based on institutions managed by the Ministry of Labour, Social Affairs and Family represented by the network of Psychological Counselling Services Centre with its local unit centres. Its service is predominantly in family counselling and vocational and career guidance is present as a sub-component of family counselling. The scope of VGC is sensitive to the competence of the staff.
The third sub-system with close links to the second one is composed of the network of the regional and district labour offices of the public legal National Labour Office. They provide counselling services under the responsibility of the respective department of counselling of the Labour Office.
All pillars suffer from brain drain of specialists in labour market intelligence and the weak system of labour market intelligence in Slovakia. As a consequence VGC is focused on personal counselling rather than vocational guidance. Earlier identified weaknesses and the recommendations remained valid (Vantuch, J. et.al., 2001):

- It's necessary to adjust the pre-graduate education of educators and in-service training of educators to the new labour market conditions.
- Opening of educational programmes aimed at preparation of career advisors is inevitable
- Access to quality information on an individual basis with Internet services is more important than the coverage of information services by a brick-and-mortar institution.
- A regulating body responsible for quality assurance in provision of employment services is of crucial importance.

It is worthwhile mentioning that the privately-managed portal www.profesia.sk has developed into a successful service provider, highly appraised by young ICT skilled people. This could be

considered a confirmation of the importance of the third item listed above and the challenge with regard to detailed regional labour market intelligence accessed within Internet portals.

Conclusions and recommendations on VGC identified within the consultation process on memorandum on LLL also stressed quality assurance and control of guidance and counselling within the whole system. Accomplishing this requires elaboration of quality standards for guidance and counselling, elaboration systems for the accreditation and certification of institutions and creation of new models for the training of vocational and career advisors.

Worthwhile mentioning is the recommendation to restructure the schools and local libraries as information centres at the local level. Internet-based services are explicitly recommended with explicit requirement to make available and connect existing information databases both for career advisors (irrespective of their institutional background) and for the clients. They should be accessible as a priority at specialised Internet sites for both counsellors' and clients' needs as a prerequisite for the development of electronic services.
The need to systematically create an information system compatible with the systems of EU countries has also been explicitly stressed with regard to Slovakia's accession to the EU.
Recognition of VGC as a priority within European and Slovak employment policies as well as within Leonardo da Vinci programmes has been reflected by the State Institute of Vocational Education-managed "Modular Distance Learning for European Mobility Career Counsellors" project approved in 2001.

4. Management Training

Management training is generated from two main sources. The first is related to the firm culture of strategic investors and new foreign owners significantly present in Slovakia since the early '90s. The second source is in essence domestic, however influenced by having windows opened with respect to international experience.
Six years of publishing of the newspaper for management development "Manager", which is issued by a private institution and backed by the Association for Human Resource Management and Development, confirms a revival in this field. Well-established private institutional activities go far beyond provision of tailor-made management training. These institutions create an influential network able to change the traditional culture of management in Slovakia.
The EFQM Excellence model introduced as the framework for assessing applications for The European Quality Award since the early '90s seems to influence Slovak managers and is expected to be used for the development of the National Quality Awards.

There are no reliable quantitative research data on management training provision available. Nevertheless, compared to the data obtained within the research already mentioned within 2000 SNO VET Report, no significant changes are expected by experts in this field. Reflecting a point of view of analysts, training providers consider the management training market as supply driven, however, through multi-faceted marketing strategies disguised as demand driven.
Training courses of leading training providers are based on analysis of training needs, and as a rule tailored to top management requirements. Compared to line and middle management training within which standard modules are offered, for top managers of prosperous companies offering training based on analysis of company/trainee needs is part of the marketing strategy of the training provider. Tailor-made training is sold better than standard courses. E.g. the Management Partner Group works with 40 pre-fab training modules (such as managerial skills, personnel management, marketing etc.) adjusting final training to client requirements and

needs. Quite often training is tied in with attractive trendy label, e.g. learning organisation in practice, corporate identity forming, personnel networking role in implementation of firm strategy of development, etc.
Prosperity of the company matters more than its size. Prosperous SMEs are more open to purchasing management training than low profit-making SMEs. Very rarely low profit-making SMEs consider management training as a remedy for the company's troubles. A significant value added from management training is linked to optimisation efforts following basal stability and some ground level of profit making.
Similarly, the size of company is irrelevant to the choice between traditional VET system and "direct impact type of training." Nevertheless, as a rule, companies with a highly developed internal structure and firm culture look for tailor-made training offered by private providers or freelancers belonging to the wider environment of the company.
Flexibility of VET providers depends on the level of the institutionalisation and on the providers' position on the market. Well-established providers that are successfully selling their products are pushed toward innovations to a lesser extent than providers fighting to survive. On the other hand, well-established players have more space for absorption of new stimuli and creation of new products, if necessary for enrichment of their profile.

5. VET teacher/trainers, manager and administrators

5.1 Teachers, schools/training institution managers and administrators competencies

Qualification requirements for teachers and other educational staff within IVET are stipulated by the Decree of the MoE No. 41/1996 Coll. on professional and educational competence of educational staff.
Graduating from university, one is granted a general professional competence for the teaching profession, which must be completed by educational competence unless one has graduated from a teacher-training programme. Even a graduate from such a programme interested in teaching at a school for children with special needs is required to pass an obligatory in-service training programme in special education (unless they graduated from special education as well).
Young teachers, even those considered fully qualified, are supported in their transition to direct service by an experienced teacher appointed by the director of the school. The quality of this assistance is supervised by the director of the school who decides upon prolongation and/or other changes in the organisation of this assistance.
Passing the so-called first qualification exam, which is due just after five years of practice, is a precondition for promotion to a better wage tariff due to the gained certification of higher professional competence.
Passing the second qualification exam is again certified, however, without obligatory promotions. Employers may add a bonus to the obligatory tariff wage.
Institutions authorised for conducting qualification exams are regional methodological centres (in-service teacher training centres), the National Institute for Education, higher education institutions and, especially with regard to VET, also sectoral institutions of ministries running secondary vocational schools.
There are three typical paths to advanced careers of educators

- from teacher to director and higher administrator
- from teacher to methodologist – organiser of in-service training or curricula specialist at the National Institute for Education or SIOV
- from teacher to inspector

Directors of schools and almost all institutions within the education sector, as well as administrators, are former teachers.
Qualifications for educational leaders, e.g. director of school, are five years of practice at school, completing in-service training in leadership stipulated by a Decree of MoE No. 42/1996 Coll. on in-service training, and passing the first of two qualification exams. All educators might be subjected to these exams during their professional career, based on their choice. Similarly, methodologists and inspectors are required to pass required training in accordance with the decree and serve a precisely set amount of the year at school.

The following table presents the number of educators in VET in Slovakia.

Table 64
Educators in VET (as of 27 April 2001)

Schools	Teachers		Trainers		Sport instructors		Tutors		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Total SR	96 674	86.54	6 348	5.68	375	0.34	8 172	7.32	136	0.12	111 705	100
of which												
SSS	11 983	96.86	60	0.48	2	0.02	310	2.51	17	0.14	12 372	11.08
SVS and VS	7 947	56.68	5 445	38.83	27	0.19	560	3.99	43	0.31	14 022	12.55
CPT and CVP	0	0.00	265	98.15	0	0.00	5	1.85	0	0.00	270	0.24

Source: Institute of Information and Prognoses of Education
Note:
Total SR – all educators within regional schooling, i.e. without HEI staff
SSS – secondary specialised school
SVS – secondary vocational school, VS - vocational school
CPT – centre of practical training, CVP – centre of vocational practice (these centres provide for practical training, usually outside the school)

Despite severe brain drain from education in the ’90s and reluctance of young professionals to enter the profession, the qualification among VET teachers is still high. Qualification of trainers is significantly lower as visible in the following table and has to be improved, according to policy makers.

Table 65
Educators in VET by Qualification (as of 27 April 2001)

Schools	Teachers				Trainers				Sport instructors				Tutors			
	With qual.		Without qual.		With qual.		Without qual.		With qual.		Without qual.		With Qual.		Without qual.	
	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%	Σ	%
Total SR	84 522	**87.4**	12 152	**12.6**	5 068	**79.1**	1 340	**20.9**	281	**74.9**	94	**25.1**	6 646	**81.3**	1 526	**18.7**
of which																
SSS	10 628	**88.7**	1 354	**11.3**	52	**86.7**	8	**13.3**	2	**100.0**	0	**0.0**	258	**83.2**	52	**16.8**
SVS and VS	7 011	**88.2**	937	**11.8**	4 354	**80.0**	1 091	**20.0**	20	**74.1**	7	**25.9**	495	**88.4**	65	**11.6**
CPT and CVP	0	**0.0**	0	**0.0**	203	**76.6**	62	**23.4**	0	**0.0**	0	**0.0**	4	**80.0**	1	**20.0**

Source: Institute of Information and Prognoses of Education
Note:
Total SR – all educators within regional schooling, i.e. without HEI staff
SSS – secondary specialised school
SVS – secondary vocational school, VS - vocational school
CPT – centre of practical training, CVP – centre of vocational practice (these centres provide for practical training, usually outside the school)

The qualification of VET subject teachers by branches is presented in Table XLVI in the Annex.

When surveying subjects taught at VET schools by teachers who are not qualified or are qualified teachers, but for other subjects than taught in reality, the weaknesses are as follows:
In SSS, the worst situation is in the following general subjects - Ecology (30.2%), Civics (31.2%), Ethics (26.2%) and Informatics (21%), and the following VET areas: economics and organisation, retail and services (14.3%), technical chemistry of silicates (11.12%) and vocational practice (11.2%).
In SVS, the worst situation is in the following general subjects - Civics (41.5%), Ethics (30.4%), English (29.4%) and Informatics (28.6%). The highest share of VET subjects taught by teachers without specialisation for relevant subject is in the following study programmes: security services (22.9%), economics and organisation, retail and services (21%).

There are no formal requirements concerning CVT lecturers. There is no legislation stipulating qualification requirements. However, as a rule, CVT providers, exposed to the market conditions, engage the most appropriate staff for their courses, often HEI teachers and experienced practitioners. When looking at accreditation of their activities by the MoE Accreditation Committee, providers have to submit the list of lecturers among other documentation. Thus, indirectly, they are pushed to proceed carefully in selection of the staff.

5.2 Pre-service training of teachers and trainers

Teachers are prepared at universities in three forms:

- A special teacher training programme with a full coverage of methodology, pedagogy, and psychology within the programme.
- Graduation from any educational programme which is naturally linked with a subject taught at schools, completed in parallel with or after graduation from supplementary teacher training, usually lasting for two years, offered by the same university.
- A graduate from a higher education institution not originally planning to become a teacher can obtain a full qualification after completing supplementary teacher training offered by any authorised institution. It is usually the university they graduated from or a regional methodological centre or other higher education institution, e.g. a faculty of education.

With regard to the content of education, sticking to “abstract theory” is heavily criticised and more links to practice called for. Undoubtedly, at universities where teacher training is considered rather a complementary activity to academic education, subjects on psychology and pedagogy are less represented than at faculties of education specialised in teacher training. Nevertheless, even for teacher trainers, criticism about a lack of links to practice at schools is valid. With the gradual end to obligatory post-graduate studies of teacher-practitioners at universities, an important source of feedback and correction for university professors has been lost. With a decrease in funding and a brain drain from schools, the quality of practical training of student teachers suffers enormously. Experienced teachers, even if available, are not interested in co-operation with universities as mentors of student teachers.
In comparison with general subjects where methodologies and methods of instruction have been quite thoroughly elaborated, for VET teachers of vocational subjects, less training is offered directly aimed at concrete instruction. Instead they‘re usually subjected to “general didactics” training aiming at general teaching methods without close links to the content to be taught in future. Surely, vocational teachers are those who would stress an interest in very practical training within their initial training and would be interested in this kind of training within in-service training.

Teachers of general subjects are usually qualified for two subjects. In practice, however, with they have a preference for one of these. They might even teach subjects for which they are unqualified and still receive a full salary provided they are qualified for subjects representing at least 50% of their teaching load. This measure, valid for all qualified teachers, contributes to the steady increase of hours taught without requested qualification and is a consequence of the aforementioned decline in teacher status.
VET schools' teachers of vocational subjects are higher education institution graduates, typically engineers, who completed supplementary teacher training and, rarely, are graduates of teacher training programmes for vocational subjects, e.g. University of Economics teacher training programme for teaching economics. The following table presents the numbers of students within supplementary training at universities.

Table 66
Number of Students in Supplementary Training - as of 31 October 2000

	for HEI graduates	for secondary school graduates	for HEI students	Total
University faculties	216	609	131	956
Technical faculties	608	0	931	1539
Economic faculties	283	90	302	675
Agricultural faculties	0	0	0	0
Art faculties	15	0	199	214
Total SR	**1122**	**699**	**1563**	**3384**

Source: Institute of Information and Prognoses

Instructors are, minimally, graduates of secondary VET schools from relevant programmes and with three years of practice in their profession/craft. They are obligated to graduate from supplementary training organised by methodological centres or universities averaging from 200 lessons up to 300 lessons in two-year courses. Some of them make use of study at newly opened three-year bachelor studies. The formal qualification of instructors is adequate to legal requirements. However, the brain drain to the private sector and technological underdevelopment makes practical training at VET schools a weak point, as e.g. indicated by the school inspection annual report.
Examples of curricula for supplementary teacher training and trainer training are presented in the Annex I.

Employment opportunities at VET schools are relatively high. Directors of schools are constantly looking for new professionals able to refresh the atmosphere at schools, but fresh engineers graduating from HEI as well as experienced middle-aged professionals settled in business sector are not interested in entering the education sector due to low salaries.
The salaries of regional schools teachers are significantly below the national average (see Table 58 in chapter 3.4.3). Salaries of SSS teachers are slightly above average (with index 102.4 in 2000), but this still allows for living standards just below those of 1989. There are no exact data about educators in SVS, as they belong to the contributory organisations. However, their salaries can be slightly above that of SSS teachers. Nevertheless, teaching in SSS is considered more attractive than in SVS, if it is possible to speak about attractiveness of teaching under current terms.
Estimates of needs for educators at VET schools are shown in the following table.

Table 67
VET school educators needed (estimate based on data as of 27 April 2001)

Educators	Upper limit estimate	Lower limit estimate
General subject teachers	1 719	1 704
VET subject teachers	3 723	1 233
Teachers total	5 442	2 937
Trainers	526	436
Teachers and trainers total	5 968	3 373

Source: Institute of Information and Prognoses of Education

The upper limit estimate indicates how many teachers (full-timers or part-timers) would be needed to replace teachers in retirement age and teachers (qualified or non-qualified)subjects for which they are not qualified. The lower limit estimate is a formal indicator announcing the number of full-time equivalent teachers needed for covering lessons taught by non-qualified teachers. (The announced figures would be equal to the teacher needs under the condition of absolute mobility making teacher to cover his/her teaching load in more schools regardless of the distance between them).

The data on needs for educators broken down by specialisation are presented in Table XLVII in the Annex.
There are no data available describing the employment choices of university graduates with VET teaching qualifications.

5.3 In-service training of teachers and trainers

In-service training is stipulated in detail by Decree of MoE 42/1996 Coll. on in-service training of educational staff, in concert with the MoE Decree 41/1996 Coll. on professional and educational competence of educational staff.
Diverse types and forms of in-service training

- introduction of new teachers into practice,
- refresher work in-service training,
- specialised innovative studies for selected staff leading to achievement of the first qualification exam and followed by promotion,
- specialised qualification studies expanding the competence of qualified teachers to teach selected subjects and/or deal with children with special needs,
- training in leadership for future or newly appointed directors or deputy directors,

are commented on with regard to its background in Vantuch, J. et. al., 2001 in more detail.

Educators are not stimulated financially to participate in longer forms of training. According to the State School Inspection annual report, many educators view the costs of training as a serious constraint. Within the survey conducted by the state inspection, 86% of teachers stated they were not interested or had a negative attitude towards in-service training. This result needs an interpretation due to two main drivers intervening here. A lack of interest in training offered, and a lack of means for both the temporary substitution of to-be-trained educator in school and covering costs of quality training.

Schools are not used to link in-service training with school development plans and co-ordinate it with school-based activities. In-service training is very rarely school based unless special projects are conducted (e.g. international school partnerships).

The following table shows the data on the number of teachers participating in diverse forms of training.

Table 68
Teachers in training (as of 27 April 2001)

Training	Total	of which	
		SSS	SVS
Post-maturity study	132	7	6
Post-gradual study	334	66	20
Specialised study	604	63	46
Training in leadership	2 045	146	109
Extending study	1 060	109	89
Re-qualification study	141	21	16
Supplementary pedagogical study	784	186	183
Part-time study	3 252	210	120
Introduction of new teachers	352	37	30
Course	128	19	6
Refresher work training	1 959	212	176
Other	1 237	163	112
Total	12 028	1 239	923

Source: Institute of Information of Prognoses of Education

The statistics confirms the point of view of inspection. A short form of in-service training dominates (1,959 participants in refreshment training), besides part-time studies (3,252 participants) and training in leadership (2,045 participants) which are, in fact, obligatory (example of curricula for training in leadership is presented in the Annex I.). Participants look for qualification as teachers or leaders rather than for renewal impulses.

The quality of in-service training currently depends on the ability of methodologists from themethodological centres to attract quality lecturers for extremely low fees, and on fund-raising skills.

In brief, one could say that funding of in-service training is insufficient, highly dependent on the state budget and supply driven instead of demand driven. Traditionally, general subject teachers are better served than vocational subject educators. Any substantial improvement would require specialised experienced methodologists with broad knowledge of practice. These kinds of professionals are however rarely interested in public service, not to mention employment at in-service training institutions with very limited remuneration.

The best chance for VET educators to improve their competence are community projects with strong school partnerships and specific international co-operation projects, e.g. organised by MoE/SIOV or by other subjects promoting the networking of professionals.

6. Research on VET

Currently, VET-related research activities could be conducted at
- institutions of the Slovak Academy of Sciences (SAV),
- universities,
- sectoral research institutions, and

- private institutions (e.g. Social Policy Analysis Centre - SPACE, Institute for Public Affairs –IVO, Central European Institute of Economic and Social Reforms – INEKO and recently developing to very important player a Slovak Governance Institute – SGI)

Nevertheless, there are no strong research bodies focusing on VET. After dissolution of Czechoslovakia in 1992 the Research Institute of VET located in Prague had to be replaced by a similar institution in Slovakia. And analogously, the Research Institute of Labour, Social Affairs and Family (RILSAF) located in Bratislava had to be replaced by a similar newly created institution in Prague. As a consequence there is a deficit of institutionalised VET research in Slovakia compared to the Czech Republic. A newly created State Institute of Vocational Education and Training (SIOV) is profiled rather as a service organisation for the Ministry of Education than a research-focused institution. At SIOV research is just a complementary low-staffed activity. Furthermore, RILSAF, originally with a strong focus on research, gradually developed into a service organisation for the Ministry of Labour, Social Affairs and the Family due to the lack of means for research. At universities, the department of the so-called engineer pedagogy at Technical University in Bratislava and Technical University in Kosice are natural institutional leaders in research in this field. These departments provide for supplementary pedagogical training of students at technical universities (future engineers who might become teachers at VET schools. Thus, they're naturally interested in VET research matching their teaching profiles. At the university of Economics in Bratislava only HEI offering master studies for future VET teachers (however in economics only) the fundamentals for research in VET linked to economics exist. The Research Institute of National Economy at University of Economics, however, has closed its capacities for VET. Additionally, there are individuals scattered among diverse departments of education and departments of psychology at universities and university/research institutes or private organisations doing VET research individually driven or occasionally. An establishment of the institute of education within the Slovak Academy of Sciences focusing on research in education and replacing the Institute of Experimental Pedagogy of Slovak Academy of Sciences (with the department focusing on VET research) closed in early 1990s has been proposed by the Millennium project. This document preceded and inspired the National Programme of Upbringing and Education.

More detailed information on VET related research can be found in the CEDEFOP publication "Training and learning for competence: second report on vocational training research in Europe. Synthesis report" based on SNO data. A list of institutions at least partly tackling VET research is included in the Annex J.

VET related research is as a rule a bottom-up activity within
national grant schemes KEGA and VEGA, or
international research co-operation such as 5th framework programme, or
international networking based research funded from sources outside Slovakia.

KEGA (Cultural and Educational Agency) is aimed at rather pragmatic projects. VEGA is typical research focusing agency, however with very limited resources. A grant in the field of VET amounting to1,000EUR per year would be considered a success.
Fragmented demand driven research in VET is usually institutionalised within research bodies at institutions directly managed by respective Ministries
Both top-down and bottom-up driven research infrastructure is described in detail in the 2000 SNO VET report. MoE remained the central state administration body with a nation-wide responsibility towards R&D and for working up new R&D legislation. A new law based on the document "National R&D Policy to 2005" is expected to come into force in 2002.

The draft law, some ideas from which were presented in the 2000 SNO VET report, was subjected to criticism from the academic community. This community represented by Council of Higher Education insist on parallel discussion of three relevant draft-laws: Draft-law on R&D, Draft-law on Slovak Academy and Science and Draft-law on Higher education. It is assumed that reflections and discussions on all these drafts simultaneously could help clarify the new status and conditions of R&D in Slovakia.
Unfortunately, some of traditional weaknesses will not be resolved within proposed changes and the following obstacles exist:

- lack of means for funding both institutional research and grant schemes
- weak equipment of universities compared to research institutions within the Slovak Academy of Science and worse access to new technologies and updated information
- increasing risk of weakening the research-linked training within Ph.D. studies at universities widening the gap between experienced and new researchers

There is a risk that Slovak research will lag behind the neighbouring EU candidate countries, not to mention the European level. Slovak membership in the "Fifth Framework Programme of the EU for Research Technology and Demonstration Activities" has been labelled as "corresponding with the standard of neighbouring partner countries" within the SR report on progress in integration into the EU. Nevertheless, within the academic community, Slovak participation in this programme is considered insufficient and enrolment in 6th FP as needing promotion and financial stimulation from MoE. In the course of SR participation in the 5th FP, from 1 September 1999 to February 2001 there were 85 proposals adopted, coming from 62 entities in the SR.

7. International co-operation on IVET and CVT modernisation

7.1 Priorities

As part of the National Conference on VET in October 2001, lessons from international co-operations as well as future priorities of co-operation were discussed. The respective section agreed on conclusions and recommendations as follows:

- Develop and promote in the Slovak Republic its own mobility development policy, fully compatible with the EU. This will promote mobility on all levels aimed at strengthening the European dimension, creation of conditions for the full usage of EU citizen rights, free movement in the European social space, as well as permanent innovation of content and methods of VET quality and its internationalisation.
- Co-ordinate mobility development policy with VET policy, in particular employment policy and regional policy, with respect to higher quality level reflection in newly prepared and partially approved main strategies of upbringing and education.
- Develop permanent institutional mobility infrastructure aimed at management, professional, logistical and financial support of educational and entrepreneurial organisations developing, carrying out and evaluating mobility projects.
- Prepare mobility development strategies at participating institutions (universities, schools and other organisations) to serve as a base for the designing of projects. Provide for the recognition of training completed abroad as an integral part of the regular educational process.
- Make use of creative potential of teacher gained within international projects in developing of teaching and learning materials and educational programmes.

- Organise seminars, discussion groups in order to disseminate experience from international co-operation.
- Launch the educational server where teachers can find information from the field of education (up-to-date teaching methods, innovations), as well as information on projects outputs.
- In the meaning of decree on experimental verification, to approve teaching load relief to those working on projects.

Additional to the aforementioned issues one important remark from the 2000 SNO VET report should be highlighted here: "Concrete local changes should be prioritised ahead of support for global reform efforts". According to the SNO opinion, the most effective investment in international co-operation is investment in the partner school co-operation programmes because they

- address financial means directly to the place of change,
- mobilise human resources in schools and their collaboration with partners at the local level,
- establish innovative centres encouraging changes or at least programmes of changes in related areas, and
- enhance the operability of global reform intentions.

7.2 Selected VET relevant community projects

In 2000, Leonardo da Vinci contribution to the Slovak pilot and language projects represented 354 015 EUR, for mobility projects 829 864 EUR. The 2000 entry ticket represented 2,068000 EUR (including 24,000 EUR for administration).

In 2001, out of 26 Slovak Pilot projects three were approved and out of nine language projects submitted only one was approved. These four approved projects are listed in the following table.

Table 69
Leonardo da Vinci Projects with Slovak Contractors Approved in 2001

Project type	Project Number	Title	Contractor	Budget Total in Euro	Leonardo subsidy in Euro
Pilot	SK/01/B/P/ PP-142220	Modular distance learning for European mobility career counsellors	State Institute of Vocational Education Bratislava	396 399	289 609
Pilot	SK/01/B/P/ PP-142226	Regional development by distance learning of SME managers	University of Economics Bratislava	429 980	322 000
Pilot	SK/01/B/P/ PP-142243	Online distance learning module in European agrarian law	Slovak Agricultural University, Nitra	300 000	225 000
Language	SK/01/B/P/ LA-142248	Interactive Learning of Vocational German for Forestry Staff	Institute of education in Forestry and Water Management , Zvolen	240 000	180 000

Source: Leonardo da Vinci Office in Slovakia

Furthermore, worth mentioning are the following projects identified within the consultation process to the Memorandum on LLL as examples of good practice:

- EDUCRATOS, a project aimed at application of the system accrediting prior and experiential learning;

- Quality Standards for Adult Guidance in Education, a multiplication project aimed at implementation quality compatible with ISO 9000;
- Guide to the World of Occupations, aimed at creation of the national mutations of multimedia information-guidance software to help in the selection of occupation and career and improve the quality of guidance services at labour offices;
- Environment Friendly Agriculture, aimed at elaboration of digital study material.

Similarly, two from the last group of Tempus projects were selected and presented there as well.
The following table presents means offered for the SOCRATES programme from PHARE and the state budget.

Table 70
2000 –1998 PHARE and State Budget Expenditures for SOCRATES (in Euro)

Program SOCRATES	1998	1999	2000	2001*
PHARE contribution	750 000	750 000	1 456 700	989 200
SR State Budget contribution	750 000	750 000	674 300	1 408 800
Total	1 500 000	1 500 000	2 081 000	2 398 000

Source: Socrates Office in the SR
* allocation

Within the SOCRATES programme VET schools were involved predominantly in COMENIUS 1 and LINGUA E projects.

Within PHARE programme important projects addressing improvement of the situation of the Roma were successfully carried out.

1998 PHARE –SR 9813.04 pilot project successfully finished in December 2001. It was designed to contribute to the improvement of the situation of the Roma minority in the Spiš region, e.g. by improvement of the educational and cultural life. This entailed the reconstruction of kindergartens and community centres, where a place for development of culture and education on the basis of tolerance and co-existence of minority and majority groups of inhabitants is created.

1999 PHARE Minority Tolerance Programme – SR 9905.02 contained within subproject No.3 an important goal, achieving of which could be considered a precondition for vocational education and training of Roma. Upgrading the standard of teacher-training institutions and pilot minority schools providing conditions for practice of student teachers, elaboration of the modern teaching materials and techniques for learning the Slovak language as well as minority languages and establishment of the Roma education, information, documentation and advisory centre are among its goals.

Within 2000 PHARE project “Improvement of the situation of the Roma in the Slovak Republic” besides other goals facilitating the entry of young Roma people in the labour market should be addressed by reinforcing the professional capacity of trainers/counsellors active in the labour field. Integrated counselling, training and apprenticeship work opportunities for young unqualified Roma aged 15-18 years who left secondary school early, should be delivered offering a modular approach programme. Unemployed Roma between 18 and 26 years old are to have pilot training and transfer of professional experience at three incubators.
Furthermore, offering vocational training to children who left school without completing the compulsory 10-year period, strengthening the capacity of universities to support the university

education of teachers for schools with a high share of Roma students, teachers and assistants is tackled.

2001 PHARE project “Support to the Roma minority in the educational field” is aimed at the improvement of the educational standard of the Roma population. It focuses on community development and reintegration of children from disadvantaged environment from special to mainstream primary schools, further tackling the issue of the “preparatory classes” and of “an assistant teacher”.

8. Role of the Slovak National Observatory of VET

The network of National Observatories was created by the European Training Foundation in PHARE , TACIS and MEDA countries. The main objective of this network is to gather, analyse and disseminate targeted information on vocational education and training policies.
The office of Slovak National Observatory of VET (SNO), financed by the ETF and hosted by the State Institute of Vocational Education and Training (SIOV), has been operating since July 1998 with staff of two people supported by two part-time collaborants from SIOV.
VET (SNO) has specified its principal tasks as follows:

- Prepare regular qualitative and quantitative reports on developments in vocational education and training
- Create links between the different national vocational education and training initiatives
- Improve the information flow linking labour market needs and the supply of vocational training
- Identify vocational training policy options
- Contribute to the identification of areas for bilateral/multilateral co-operation
- Define priority areas for future actions in vocational education and training
- Establish links with Observatories in other countries to exchange knowledge and expertise on vocational education and training

During 1998-2001, SNO and the SNO network prepared the following outputs:

- National Report on Vocational Education and Training
- In-depth Study on Continuing Vocational Training
- Survey of Teacher/Trainer Training in Vocational Education and Training
- Employment and Labour Market in the Slovak Republic
- Role of Social Partners in Vocational Education and Training in the Slovak Republic
- Vocational Education and Training against Social Exclusion
- Key Indicators – annual surveys of statistical data
- Fact sheets – annual short presentation of VET status in Slovakia

and contributed by papers and organisational co-operation to a number of conferences and seminars related to VET and the labour market. In 2001 the SNO played an important role in organising the Process of Consultation on the Memorandum on Lifelong Learning, including preparation of the National Report for the Slovak Republic. The SNO significantly influenced the National Conference on VET in the Slovak Republic by proposing topics for the conference agenda and inviting ETF and Cedefop representatives as keynote speakers.
Initially, SNO core staff tended to the VET agenda, maintaining prime contacts with the Ministry of Education and its institutions. Gradually, the SNO stressed labour market and employment aspects of its agenda that developed close links to other stakeholders, including the Ministry of Labour, Social Affairs and the Family, Trade Unions, employers’ organisations

and NGOs. The SNO has developed personal contacts to Cedefop, DG Education and Culture, OECD and the World Bank.

SNO is dedicated to facilitating transmission of information on VET and the labour market between Slovakia and the EU, thuscontributing to the smooth integration of Slovakia into the EU. Along with the integration of the Slovak Republic into the EU, the initial role of SNO will be transformed. A special role could again be assigned to this unit depending on the status of VET reform, on VET key players' conceptualisation of the VET system as a whole, and on further co-operation of the Slovak Republic with Cedefop. As of 2002, SNO activities will be co-financed by Ministry of Education based on the agreement between ETF and MoE.

9. Conclusions: challenges and further needs

9.1 General Challenge

Earlier stated "Prolegomena of any further fundamental improvement" (Vantuch, J. et al., 2001) remain fully valid:
"Recognition of acceptance of a sort of **falsification criteria** is a condition sine qua non of any acceptable education policy programme and thus any further positive development of future educational reform(s).
Any education policy programme (and any measure proposed within it) must be formulated in a way enabling a decision about whether programme/measure objectives have been achieved or not. Otherwise, political leaders cannot be held accountable and will always make use of the opportunity to escape from their responsibility in the twilight of vague declarations and promises."

In fact, overall support "for education" still remained a declarative slogan of all political parties presenting positive rhetoric, which is however followed up only by weak actions. No doubt, there are many positive features visible within recent period: Important policy documents were finalised and new legislation is in progress. Nevertheless, the practice of reform steps is lagging behind the concepts. Bottom-up reform initiatives are insufficiently supported. Strengthening of the support of bottom-up innovations could be considered both as a sign of partnerships between decision-makers and educators in "ownership" of the reform and a signal of future changes and reform intentions.

Furthermore, slow transformation of economy hampers progress in other sectors as well as the education sector. Quite typically, the economy dominates all other sectors of society. The insufficiently productive economy results in forced cuts in public spending, which are however driven by fiscal threats rather than the logic of reforms.

A new model of financing of higher education and a new model of financing VET, still pending, is a crucial prerequisite of the reconstruction of education sector. Through clearly set political agendas, education must be given a chance in fair competition for both private and public financial means. We are still far from this. Thus, the following recommendation has remained valid

- As soon as possible, the entrepreneurial sphere must be engaged in direct transparent payment of VET. It is untenable to provide training of the workforce in terms of input into the business for free, in exchange for non-dedicated forced payments to the state budget.

- Any decentralisation in the education sector must be accompanied by fiscal decentralisation, complemented alone by central interventions fighting disparities within agreed programmes. Otherwise, any intended “modernisation of public administration” would lead to preserving the current model of claiming payments from other than one's own sources and to continuing risks of imbalance between the networks of schools and educational programmes, and thus to ineffective allocation of means.
- Segmented financing of VET following traditional segmentation IVET, CVT and unemployed re-training represent very serious obstacles to provision of client-centred education/training. Cohesion of measures supporting human resource development in various forms (e.g., also fighting unemployment by re-training) could be achieved, and the idea of lifelong learning would be turned from slogan to implemented practice, only if traditional administrative barriers inhibiting integral education service are overcome.

The lack of finances available for the education sector results in the clearly visible modernisation deficit of educational facilities and the decreasing status of educators (when measured by living standards). This is accompanied by a hidden process of erosion of some fundamental values, which might lead to the endangering of the still high status of education in the population.
It is important to stress the exceptional fragility of society in transition and a very likely outcome: Weak economy with underestimated and even uncontrolled transition costs endangers human resource development in the name of interim (but likely very high and reducible) transition costs. As a consequence, obstacles endangering future economic growth emerge. This vicious cycle remained unobserved by politicians due to their concentration on day-to-day issues and short-term policy cycles, on which they are politically more sensitive than on long-term consequences.

9.2 Challenges and future needs

Specific IVET- and CVT-related challenges and future needs were in detail addressed within chapters 3.4.7 and 3.5.9, respectively. Besides the aforementioned global challenge related to the general issue of mastering transition from a command driven to a market-driven economy there are three fundamental issues introduced by these three questions:

- Where is the balance between the needs of working out conceptual planning and policy documents and the urgency of actions implementing changes?

There is a need to move from theoretical to operational terms – to actually implement ideas rather than merely discuss them. Typical examples, yet curricular evergreens, include general recommendations for “encyclopaedism elimination”, “creativity promotion”, “knowledge in practice application” etc. The only likely working and the only eligible idea should be concrete good practice examples backed by rich casuistic.

- Where is the balance between the government scope of decision making and larger empowering of schools and other educational institutions?

School effectiveness and school improvement research and practice-supporting incentives, refinement of accreditation processes, detailed input and output analysis and sophisticated quality assurance should help accept and create conditions for the establishment of the **internal market** in provision of client-centred educational services within both IVET and CVT.

- Where is the balance between social engineering and preference of the “invisible hand” of the market?

It is necessary to distinguish between the importance of valuing personal intellectual enrichment and promoting employability. Offer freedom to intellectual enrichment and make one responsible for increasing his/her employability and promote this kind of behaviour by financial incentives. No VET system could be effective in securing high employability and replace a lack of motivation caused by de-motivating mechanisms in society, including de-motivating policies, and/or traditional policies parameterised with regard to the target group’s past behaviour instead of addressing and stimulating future behaviour.

Bibliography

1. Birks, Sinclair and Associates Ltd., Strategic Review of Vocational Education and Training – Czech and Slovak Republics, Prague, PHARE, Labour market Restructuring, 1993.
2. Concept of Further Training, as approved by the government on 3 July 2002; www.education.gov.sk
3. Education at a Glance. OECD Indicators 2002. OECD, Paris 2002.
4. Fragoulis, H. – Kerr, L.: Monographs on Candidate Countries. Vocational Education and Training and Employment Services in the Slovak Republic. ETF, 2002.
5. Joint Assessment of Employment Priorities in the Slovak Republic signed in Brussels on 26 November 2001.
6. Key Data on Education in Europe 2002. ECSC-EC-EAEC, Brussels, Luxembourg 2002.
7. Lubyová, M., Ochranková, D., Vantuch, J.: Employment and Labour Market in the Slovak Republic. Background Study on Employment and Labour Market in the Slovak Republic. Bratislava, October 1999.
8. Matulcíková, M., Srna, O., Brendzová, D.: Requirements on Qualification and Integrity of a Workforce and the Opportunities of Its Improvement. RINE UE Bratislava and the Slovak National Observatory of VET, Bratislava, April 2000.
9. Memorandum on Lifelong Learning. Process of Consultation on the Memorandum on Lifelong Learning. National Report for the Slovak Republic. www.europa.eu.int
10. Milénium, Národný program výchovy a vzdelávania v Slovenskej republike na najbližších 15 až 20 rokov – Millennium, the National Programme of Training and Education in the Slovak Republic for Forthcoming 15-20 Years. Ministerstvo školstva SR – Ministry of Education of SR, Bratislava.
11. Masson, J.-R.: Synthesis of the monographs exercise. Interim report. ETF, Turin, October 2002.
12. Národný akcný plán zamestnanosti na roky 2002 a 2003 - National Action Plan of Employment for 2002 and 2003. Ministerstvo práce, sociálnych vecí a rodiny SR – Ministry of Labour, Social Affairs and the Family of SR, Bratislava, April 2002.
13. Population and Housing Census (26 May 2001). Statistical Office of SR, www.statistics.sk
14. Report on the implementation of conclusions and priorities of the document of the „Joint Assessment of Employment Priorities in the SR, as adopted by the government on 5 June 2002.
15. Siet stredných škôl (gymnázií, odborných škôl, stredných odborných ucilíšt, združených škôl), ucilíšt a zoznam stredísk practického vyucovania v Slovenskej republike v školskom roku 2002/2003. Ministerstvo školstva SR. Bratislava, október 2001. (Network of secondary schools (grammar schools, secondary specialised schools, secondary vocational schools, integrated secondary schools), vocational schools, and a list of centres of practical training in the Slovak Republic in the academic year 2002/2003. Ministry of Education of SR. Bratislava, October 2001.)
16. Statistical Yearbooks of the Slovak Republic 1994, 2000, 2001, 2002.
17. Štatistické rocenky školstva SR. (Statistical Yearbooks of Education in SR). Institute of Information and Prognoses in Education, Bratislava 1997, 1998, 1999, 2000, 2001,2002
18. Štandard stredoškolského odborného vzdelávania a výchovy v Slovenskej republike. ŠIOV, Bratislava 2002. (Standard of Vocational Education and Training in the Slovak Republic. SIOV, Bratislava 2002.)
19. Vantuch, J. : Situation of VET Teachers and Trainers in Slovakia. Bratislava, SIOV/ETF 2002, ISBN 80-969021-1-3

20. Vantuch, J.: Does the vocational training and education in Slovakia need a reform? Joint project: Corporate governance-Education reform. Bratislava, INEKO 2001, p. 19-22.
21. Vantuch, J., Brendzová, D. : Place of Tertiary Professional and Vocational Education in the Higher Education System in the Slovak Republic. Seminar “The Place of Tertiary Professional and Vocational Education in the Higher Education System”, Prague, 24-26 September 1999, 8 pages.
22. Vantuch, J. et al.: Modernisation of Vocational Education and Training in Slovakia. Bratislava, SIOV/ETF 2001, ISBN 80-969021-0-5
23. Výberové zistovanie pracovných síl (1994-2001). Štatistický úrad SR, Bratislava, máj 2002. (Labour Force Survey (2004-2001). Statistical Office of SR, Bratislava, May 2002.)

Abbreviations

ACMS	Association of Cities and Municipalities of Slovakia
CEE	Central and Eastern European
CESA	Council of Economic and Social Agreement
CPT	Centre of practical training
CVT	Continuing vocational training
DLO	District Labour Office
EI	Educational institution
ESA	European System of Integrated Economic Accounts
ESF	European Social Fund
ETF	European Training Foundation
EU	European Union
EUR	European currency
GDP	Gross domestic product
GMVDS	Guild of Motor Vehicles Dealers and Services
HEI	Higher education institution
HTU	Higher territorial unit
IAP	Individual action plan
IMF	International Monetary Fund
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
ICT	Information communication technology
IVET	Initial Vocational Education and Training
JAP	Joint Assessment Paper
LFS	Labour Force Survey
MoE	Ministry of Education
MoLSAF	Ministry of Labour, Social Affairs and the Family
NAPE0203	National Action Plan of Employment for 2002-2003
NBS	National Bank of Slovakia
NEP	National Employment Plan
NIE	National Institute for Education
NLO	National Labour Office
NUTS	Nomenclature of Territorial Statistical Units
OECD	Organisation for Economic Co-operation and Development
PHARE	EU assistance programme for eligible Central and Eastern European countries (originally designed for Poland and Hungary, later extended)
PISA	Programme for International Student Assessment
RLO	Regional Labour Office
SKK	Slovak crown
SME	Small and medium-sized enterprise
SNO	Slovak National Observatory
SIAST	Saskatchewan Institute of Applied Science and Technology
SIOV	State Institute of Vocational Education and Training
SSS	Secondary specialised school
SVS	Secondary vocational school
SWOT	Strengths, weaknesses, opportunities, threats
VET	Vocational education and training

ANNEX A

Table I Average gross wage per sections (average wage= 100)

Sections	1991 x/	1994 x/	1998	1999	2000
	total				
Total	100	100	100	100	100
Agriculture, hunting and forestry, fishing	100	82	78	78	79
Industry	102	103	103	104	106
Mining and quarrying	118	117	110	112	117
Manufacturing	100	98	100	100	103
Electricity, gas and water supply	119	139	133	134	140
Construction	102	103	100	92	92
Trade and repair	90	91	107	107	111
Hotels and restaurants	84	82	75	76	77
Transport, storage and communication	102	105	106	108	109
Financial intermediation	140	187	193	186	194
Real estate and business activities	99	106	121	122	123
Public administration and defence	111	117	124	122	121
Education	94	82	82	78	79
Health care and welfare	105	86	91	85	82
Other services	98	89	85	88	72

Source: Statistical Office of the SR, LFS 2Q, tabled by SNO/ETF
Note:
x/ 1991 and 1994 data are availabe just for businesses with 25 and more employees

Table II Population

Years	Total (as at the end of the year, in thousands)	Urban population in % of total population	Population density per sq.km.
1990	5311	58.7	108
1994	5356	57.0	109.2
1998	5393	56.8	109.9
1999	5399	56.7	109.9
2000	5403	56.6	110.1

Source: Statistical Yearbooks of the SR 2001, 2000, 1995 (1994 population density data),
Statistical Yearbook of the CSFR (1990 population density data), tabled by SNO/ETF

Table III Natural increase per 1000 inhabitants

Years	Natural increase
1990	4.8
1994	2.8
1998	0.8
1999	0.7
2000	0.4

Source: Statistical Yearbooks of the SR 2001, 2000, 1999, 1994, tabled by SNO/ETF

Table IV Population by gender and age groups as at the end of the year

Age groups/Years	Total	Males	Females
TOTAL			
1990	5310711	2595913	2714798
1994	5356207	2608901	2747306
1999	5398657	2625126	2773531
2000	5402547	2626061	2776486
0-14			
1990	1330509	679503	651006
1994	1225988	626676	599312
1999	1069374	546980	522394
2000	1036425	530209	506216
15-19			
1990	440460	224240	216220
1994	476491	242784	233707
1999	447766	228762	219004
2000	443815	226573	217242
20-24			
1990	372497	189723	182774
1994	419816	213635	206181
1999	475444	241822	233622
2000	473084	241053	232031
25-34			
1990	814242	414878	399364
1994	762774	386359	376415
1999	787709	399129	388580
2000	803562	407248	396314
35-44			
1990	790828	397138	393690
1994	837522	421012	416510
1999	808589	407129	401460
2000	798582	402328	396254
45-54			
1990	526621	250796	275825
1994	591896	284797	307099
1999	724908	355020	369888
2000	753982	369880	384102
55-59			
1990	246303	113897	132406
1994	232623	106096	126527
1999	253976	116698	137278
2000	254568	116804	137764
60 +			
1990	789251	325738	463513
1994	809097	327542	481555
1999	830891	329586	501305
2000	838529	331966	506563

Source: Statistical Yearbooks of the SR 2001, 2000, 1999, 1994, tabled by SNO/ETF

Table V Working and non-working age population (in thousands)

Specification	1990	1994	1998	1999	2000
Total	5310	5356	5393	5399	5403
Pre-working age (0-14)	1329	1226	1102	1069	1036
Working age (M:15-59; F:15-54)	3059	3194	3332	3361	3390
Post-working age (M:60+; F:55+)	922	936	959	968	976
Population of non-working age per 100 persons of working age	74	69	62	61	59

Source: Statistical Yearbooks of the SR 2001, 2000, 1999, 1994, tabled by SNO/ETF

Table VI Population of 14 to 25 year olds in 2000

Years	Males	Females	Total
14 year olds	43042	41200	84242
15 year olds	44656	42872	87528
16 year olds	44913	43192	88105
17 year olds	45561	43399	88960
18 year olds	45802	43604	89406
19 year olds	45641	44175	89816
20 year olds	46725	44596	91321
21 year olds	48630	47354	95984
22 year olds	48507	47094	95601
23 year olds	48674	46539	95213
24 year olds	48517	46448	94965
25 year olds	47248	46130	93378
Total 14-25 year olds	557916	536603	1094519

Source: Statistical Office of the SR, tabled by SNO/ETF

Table VII Active population by age groups and educational attainment (in thousands)

Age groups	1994						1999						2000					
	Educational attainment by ISCED level						Educational attainment by ISCED level						Educational attainment by ISCED level					
	Total	5+	4	3g	3v	0-2	Total	5+	4	3g	3v	0-2	Total	5+	4	3g	3v	0-2
15-60+	2429.8	294.4	x/	100.5	1697.2	337.7	2556.3	263.2	x/	146.9	1881.7	264.6	2595.7	273.3	x/	139.2	1940.6	242.5
15-19	117.6	-	x/	6.1	93.7	17.8	105.7	0.1	x/	9.0	82.3	14.2	88.1	0.2	x/	7.0	73.7	7.2
20-24	285.5	10.9	x/	13.0	248.1	13.5	331.5	10.7	x/	27.4	277.7	15.7	336.6	13.3	x/	25.6	283.8	13.8
25-34	657.3	93.9	x/	27.4	480.1	55.9	665.1	79.8	x/	38.0	511.3	36.0	677.5	75.8	x/	34.9	534.9	31.9
35-44	767.5	103.5	x/	30.7	511.3	122.0	741.8	77.8	x/	29.6	551.9	82.5	748.1	85.9	x/	35.8	553.1	73.3
45-54	481.8	61.5	x/	20.4	297.5	102.4	590.0	72.6	x/	36.4	387.8	93.2	623.9	75.0	x/	30.5	419.9	98.4
55-59	91.3	15.7	x/	2.3	55.7	17.6	98.6	14.5	x/	4.8	59.8	19.6	101.7	16.0	x/	3.9	66.8	15.0
60+	28.9	8.9	x/	0.7	10.8	8.4	23.6	7.7	x/	1.5	10.8	3.6	19.8	7.2	x/	1.4	8.4	2.8

Source: Statistical Office of the SR, LFS 2Q, tabled by SNO/ETF
Notes:
x/ Data on ISCED 4 level are included within ISCED 3v level.
g – general, v – vocational

Table VIII Activity rate by age groups and educational attainment (as % of the given group in total)

Age groups	1994						1999						2000					
	Educational attainment by ISCED level						Educational attainment by ISCED level						Educational attainment by ISCED level					
	Total	5+	4	3g	3v	0-2	Total	5+	4	3g	3v	0-2	Total	5+	4	3g	3v	0-2
15-60+	59.5	86.7	x/	49.9	78.4	24.6	59.6	83.5	x/	54.2	77.8	20.6	60.0	83.0	x/	53.2	77.8	19.5
15-19	24.8	-	x/	29.2	84.4	5.2	23.2	100.0	x/	32.6	82.7	4.3	19.7	100.0	x/	29.1	81.3	2.2
20-24	71.2	90.8	x/	24.5	79.4	58.5	70.1	86.1	x/	33.0	80.2	50.8	70.8	81.6	x/	30.1	81.6	53.1
25-34	85.7	93.4	x/	74.2	87.0	71.8	85.8	93.5	x/	80.2	87.2	64.9	86.0	90.0	x/	78.3	87.8	64.3
35-44	92.2	96.7	x/	91.9	93.9	82.7	91.0	94.2	x/	93.7	93.2	76.1	92.5	96.5	x/	93.8	94.0	79.1
45-54	84.2	97.8	x/	85.0	89.1	67.6	84.3	97.8	x/	84.5	87.1	67.9	86.1	96.8	x/	86.4	88.1	72.8
55-59	39.4	80.0	x/	28.0	50.9	18.7	39.7	76.8	x/	43.8	46.7	21.5	40.0	69.6	x/	35.9	49.0	17.9
60+	3.6	23.9	x/	2.9	5.4	1.6	2.9	18.5	x/	5.6	4.9	0.7	2.4	18.4	x/	6.1	3.4	0.5

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF
Notes:
x/ Data on ISCED 4 level are included within ISCED 3v level.
g – general, v – vocational

Table IX Activity rate by gender and age groups (as % to given group in total)

Age groups	1994			1999			2000		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
15-60+	59.5	69.0	50.8	59.6	68.1	51.7	60.0	68.3	52.3
15-19	24.8	25.5	24.2	23.2	23.4	22.9	19.7	19.4	19.9
20-24	71.2	82.4	59.7	70.1	79.3	60.6	70.8	79.0	62.3
25-34	85.7	96.6	74.5	85.8	95.4	76.1	86.0	95.0	76.8
35-44	92.2	95.9	88.5	91.0	94.7	87.3	92.5	95.9	89.1
45-54	84.2	91.6	77.4	84.3	89.1	79.7	86.1	90.9	81.4
55-59	39.4	68.3	15.1	39.7	65.0	18.1	40.0	65.5	18.4
60+	3.6	6.7	1.4	2.9	5.2	1.3	2.4	4.4	1.1

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF

Table X Employed persons by ownership sector (in thousands)

Specification	1994	1995	1996	1997	1998	1999	2000
Total	2104.3	2138.1	2217.5	2207.1	2201.4	2128.4	2083.5
Public sector	1404.6	1308.4	1278.8	1193.0	1106.5	1055.2	1014.4
Private sector	699.7	829.7	938.7	1014.0	1094.9	1073.2	1069.0

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF

Table XI Employed by sections of economy (in thousands)

Specification	1994	1995	1996	1997	1998	1999	2000
Total	2104.3	2138.1	2217.5	2207.1	2201.4	2128.4	2083.5
Agriculture, hunting and forestry	216.2	197.9	197.2	205.7	178.9	153.8	144.2
Fishing	0.5	0.1	0.4	0.1	0.3	0.5	0.2
Industry x/	829.1	827.2	864.8	863.9	868.3	818.0	775.9
Mining and quarrying	35.7	28.7	32.2	45.5	35.3	29.7	24.9
Manufacturing	554.9	573.2	594.9	561.9	577.2	546.1	538.1
Electricity, gas and water supply	46.9	44.9	53.7	55.0	52.5	50.5	46.5
Construction	191.6	180.4	184.0	201.5	203.3	191.8	166.5
Trade and repair	200.9	222.5	223.2	253.3	265.4	263.3	259.5
Hotels and restaurants	51.7	56.7	64.6	60.3	60.6	65.2	63.1
Transport, storage and communication	162.1	163.3	170.8	157.6	174.7	165.1	171.5
Financial intermediation	26.8	30.4	32.4	28.0	37.2	37.1	36.9
Real estate and business activities	83.7	95.8	88.0	72.5	74.6	78.0	85.5
Public administration and defence	127.8	136.3	156.3	161.1	155.5	150.2	160.3
Education	185.6	170.1	176.4	169.0	166.7	166.4	162.4
Health care and welfare	141.2	144.4	145.5	148.5	143.5	155.8	146.4
Other services	78.6	93.3	98.1	86.9	75.9	74.9	77.4

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF

Note:

x/ Industry = Mining and quarrying + Manufacturing + Electricity, gas and water supply + Construction

Table XII Employment structure by sections of economy

Sections of economy	1994	1995	1996	1997	1998	1999	2000
Total employment= 100							
Agriculture, hunting and forestry	10.28	9.25	8.89	9.32	8.12	7.23	6.92
Fishing	0.03	0.00	0.02	0.01	0.01	0.02	0.01
Industry x/	39.40	38.69	39.00	39.14	39.44	38.43	37.24
Mining and quarrying	1.70	1.34	1.45	2.06	1.60	1.39	1.2
Manufacturing	26.37	26.81	26.83	25.46	26.22	25.66	25.83
Electricity, gas and water supply	2.23	2.10	2.42	2.49	2.38	2.37	2.23
Construction	9.10	8.44	8.30	9.13	9.24	9.01	7.99
Trade and repair	9.55	10.41	10.06	11.48	12.06	12.37	12.46
Hotels and restaurants	2.46	2.65	2.91	2.73	2.76	3.06	3.03
Transport, storage and communication	7.70	7.64	7.70	7.14	7.93	7.76	8.23
Financial intermediation	1.27	1.42	1.46	1.27	1.69	1.75	1.77
Real estate and business activities	3.98	4.48	3.97	3.28	3.39	3.67	4.1
Public administration and defence	6.07	6.38	7.05	7.30	7.06	7.06	7.69
Education	8.82	7.95	7.95	7.66	7.57	7.82	7.79
Health care and welfare	6.71	6.76	6.56	6.73	6.52	7.32	7.03
Other services	3.73	4.36	4.42	3.94	3.45	3.52	3.71
Share of female employment in total employment for a given sector							
Agriculture, hunting and forestry	30.27	30.49	32.00	32.79	31.01	29.83	28.63
Fishing	-	-	-	-	100.00	66.78	100.00
Industry	48.23	47.04	46.86	47.44	46.20	46.39	45.38
Mining and quarrying	20.23	13.67	15.22	16.66	14.67	11.86	10.97
Manufacturing	41.53	41.89	41.48	41.15	41.02	40.67	40.84
Electricity, gas and water supply	19.49	18.47	16.39	19.90	14.08	17.69	16.39
Construction	10.89	9.60	9.96	8.35	8.52	9.79	8.45
Trade and repair	55.19	58.08	58.51	57.82	57.40	61.13	58.76
Hotels and restaurants	64.20	64.09	54.67	65.27	67.38	63.42	62.20
Transport, storage and communication	31.02	32.00	31.55	30.44	30.59	28.94	31.10
Financial intermediation	79.45	69.48	69.84	71.91	74.89	73.43	65.06
Real estate and business activities	46.34	41.69	35.50	43.42	40.15	38.99	40.04
Public administration and defence	45.26	40.82	46.31	46.62	49.07	45.19	50.88
Education	74.03	77.35	77.32	79.88	80.76	78.44	77.62
Health care and welfare	81.01	79.43	79.63	79.70	79.50	81.03	81.91
Other services	43.16	41.71	47.01	49.76	50.12	49.89	53.82

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF

Note:

x/ Industry = Mining and quarrying + Manufacturing + Electricity, gas and water supply + Construction

Table XIII Employed by educational attainment and gender (in thousands)

Specification	1994			1998			1999			2000		
	Total	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**
Total	2104.3	1173.2	931.1	2201.4	1211.6	989.8	2128.4	1159.1	969.3	2083.5	1125.4	958.1
ISCED 5+	282.6	169.4	113.2	264.5	148.0	116.6	250.5	137.7	112.8	257.9	138.1	119.8
ISCED 4	x/	x/	x/	x/	x/	x/	x/	x/	x/	x/	x/	x/
ISCED 3v	1490.7	871.8	618.8	1594.9	925.5	669.5	1579.9	902.1	677.8	1568.1	889.7	678.3
ISCED 3g	87.5	33.0	54.5	129.2	45.0	84.2	123.8	46.3	77.4	113.3	41.7	71.6
ISCED 0-2	243.5	99.0	144.5	212.8	93.2	119.6	174.2	73.0	101.2	144.2	55.8	88.3

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF
Notes:
x/ Data on ISCED 4 level are included within ISCED 3v level.
v - vocational, g - general
m – males, f – females

Table XIV Unemployment by LFS (ILO definition)

Specification	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000 x/**
unemployed (in thousands)	n.a.	n.a.	n.a.	325.5	326.6	278.7	286.2	305.5	403.8	484.2
unemployment rate (in %)	n.a.	n.a.	n.a.	13.4	13.3	11.2	11.4	12.1	15.8	18.9

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF
Notes:
x/ Until 1999 LFS quarters were shifted one month ahead calendar quarters (i.e. 2Q 1994-1999 = March, April, May). Since 2000 LFS quarters has been shifted in concord with calendar quarters (i.e. 2Q 2000 = April, May, June).
n.a. – data not available

Table XV Registered unemployment

Specification	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
unemployed (in thousands)	106.3	301.7	304.7	365.5	362.5	331.3	341.7	367.2	465.3	534.3
unemployment rate (in %)	4.16	12.04	11.95	14.36	14.26	12.9	13.14	14.09	16.53	18.9

Source: Statistical Office of SR, 2Q, tabled by SNO/ETF
Note:
2Q registered unemployment data were calculated in concord with respective LSF quarters presented in Table XIV.

Table XVI Unemployment rate by age groups (%)

Sex	**Total**		**15-19**		**20-24**		**25-29**		**30-34**		**35-44**		**45-54**		**55-60**		**60+**	
	1995	**2000**	**1995**	**2000**	**1995**	**2000**	**1995**	**2000**	**1995**	**2000**	**1995**	**2000**	**1995**	**2000**	**1995**	**2000**	**1995**	**2000**
Total	13.3	18.9	41.5	57.5	18.2	29.2	16.7	19.2	12.3	18.4	11.1	15.4	7.5	13.4	6.3	13.8	8.6	8.2
Males	12.8	19.1	46.6	54.1	20.1	32.4	13.1	18.4	10.7	15.6	10.4	15.7	7.9	14.5	5.5	15.6	7.0	6.0
Females	13.8	18.6	35.8	60.8	15.6	25.1	21.5	20.3	14.2	21.6	11.8	15.0	7.0	12.3	9.7	8.3	12.4	14.1

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF

Table XVII Share of unemployed in total population for the same level of educational attainment

Sex	1994						1999						2000					
	Educational attainment by ISCED level						Educational attainment by ISCED level						Educational attainment by ISCED level					
	Total	**5+**	**4**	**3v**	**3g**	**0-2**	**Total**	**5+**	**4**	**3v**	**3g**	**0-2**	**Total**	**5+**	**4**	**3v**	**3g**	**0-2**
Total	100.0	3.6	x/	63.5	4.0	28.9	100.0	2.7	x/	69.7	5.3	22.3	100.0	2.9	x/	72.1	5.1	19.9
Males	100.0	3.2	x/	66.0	2.8	28.0	100.0	2.6	x/	73.5	2.4	21.5	100.0	3.3	x/	73.8	3.5	19.5
Females	100.0	4.0	x/	60.4	5.4	30.1	100.0	2.8	x/	65.2	8.7	23.3	100.0	2.5	x/	70.1	7.1	20.4

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF
Notes:
x/ Data on ISCED 4 level are included within ISCED 3v level.
v - vocational, g - general

Table XVIII Unemployed by duration of unemployment by age groups as of 2Q 2000 (in thousands)

Age groups	**Total**	**Duration of unemployed**				
		3 months and less	**4-6 months**	**7-12 months**	**13-24 months**	**25 months and more**
15-60+	490.7	55.4	63.3	100.3	113.4	150.7
15-19	50.6	8.9	4.8	21.0	10.7	4.4
20-24	98.4	14.0	14.6	18.6	26.1	22.4
25-29	67.0	8.3	8.8	14.0	15.5	19.8
30-34	60.3	5.0	7.7	9.4	13.1	24.6
35-44	115.1	11.1	13.0	22.2	26.5	40.6
45-54	83.7	6.6	12.8	11.9	18.3	32.6
55-59	14.0	1.2	1.5	2.9	2.7	5.6
60+	1.6	0.2	0.2	0.2	0.5	0.6

Source: Statistical Office of SR, LFS 2Q 2000, tabled by SNO/ETF

Table XIX (ETF Key Indicators Table 20) Unemployment rate of graduates

Educational attainment	**1994**		**1998**		**1999**		**2000**	
	After completion of the school		**After completion of the school**		**After completion of the school**		**After completion of the school**	
	1 year	**2-3 years**	**1 year**	**2-3 years**	**1 year**	**2-3 years**	**1 year**	**2-3 years**
ISCED 5+	0.8	0.1	0.2	0.2	0.8	0.1	1.2	-
ISCED 4	x/	x/	x/	x/	x/	x/	x/	x/
ISCED 3 vocational	1.2	0.6	0.8	0.8	1.4	0.9	1.6	1.3
ISCED 3 general	3.1	0.5	1.6	1.1	3.0	1.7	3.6	2.2
ISCED 0-2	1.9	1.4	1.4	3.1	1.4	2.4	0.6	3.3

Source: Statistical Office of SR, LFS 2Q, tabled by SNO/ETF
Notes:
x/ Data on ISCED 4 level are included within ISCED 3 vocational level.

Table XX Structure of school system by type of schools

School year	Schools by ISCED level														
	0-2			3 general			3 vocational			4			5+		
	T	P	NP	T	P	NP	T	P	NP	T	P	NP	T	P	NP
Number of schools															
90/91	6163	6161	2	134	132	2	539	539	0	x/			13	13	0
94/95	6218	6118	100	184	151	33	769	725	44	x/			14	14	x/
98/99	6080	5959	121	207	157	50	778	728	50	x/			18	18	x/
99/00	6139	6016	123	212	159	53	796	743	53	x/			21	21	x/
Number of students															
90/91	959221	958454	767	56027	55865	162	261250	261250	0	4891	4891	0	65050	65050	0
94/95	878351	850440	27911	65036	59746	5290	273121	266110	7011	4794	4180	614	82415	82384	31
98/99	858214	827496	30718	61665	52831	8834	240520	231140	9380	5110	4104	1006	122886	122744	142
99/00	882413	850206	32207	56092	46957	9135	206555	198194	8361	5767	4871	896	135914	135627	287
Number of graduates															
90/91	xx/			12516	12516	0	78525	78525	0	2072	2072	0	11117	11117	0
94/95	xx/			15063	14147	916	65711	64080	1631	2223	2029	194	12451	12451	0
98/99	xx/			15648	13803	1845	75090	72392	2698	2195	1808	387	21320	21288	32
99/00	xx/			16223	14039	2184	70293	67539	2754	2117	1641	476	22699	22608	91

Source: Institute of Information and Prognoses of Education, tabled by SNO/ETF

Notes:

x/ Number of schools is not included since the 4A and 5B programmes are organised within secondary specialised schools

xx/ Number of basic school (ISCED 0-2) graduates is not statistically monitored

the school year 1999/00 includes also schools under the Ministry of Interior of SR and Ministry of Defence of SR

T – Total, P – Public, NP – Non-public

Table XXI Schools by school governing authority

Specifications	1990/91			1994/95			1998/99			1999/00		
	SCH	ST	G	SCH	ST	G	SCH	ST	G	SCH	ST	G
Primary and lower-secondary - ISCED 1-2												
State administration	2674	741516	x/	2712	675157	x/	2620	658798	x/	2663	686954	x/
Other	2	767	x/	89	27510	x/	99	30023	x/	101	31468	x/
Upper-secondary general - ISCED 3												
State administration	132	55865	12516	151	59746	14147	157	52831	13803	159	46957	14039
Other	2	162	0	33	5290	916	50	8834	1845	53	9135	2184
Upper-secondary vocational - ISCED 3												
State administration	539	261250	78525	725	266110	64080	728	231140	72392	743	198194	67194
Other	0	0	0	44	7011	1631	50	9380	2698	53	8361	2754
Post-secondary non-university- ISCED 4												
State administration	xx/	4891	2072	xx/	4180	2029	xx/	4104	1808	xx/	4871	1641
Other	0	0	0	xx/	614	194	xx/	1006	387	xx/	896	476
Higher- ISCED 5+												
State administration	13	65050	11117	14	82384	12451	18	122744	21288	21	135627	22608
Other	0	0	0	xx/	31	0	xx/	142	32	xx/	287	91

Source: Institute of Information and Prognoses of Education, tabled by SNO/ETF

Notes:

x/ Number of basic school (ISCED 0-2) graduates is not statistically monitored

xx/ 4A and 5B programmes are organised within secondary specialised schools

SCH – Schools, ST – Students, G - Graduates

Table XXII Selected educational indicators in 1999/2000

Specifications	Schools	Students	Teachers (full-time employed)	Teacher/student ratio
Total	7198	1279568	91671	7.16
ISCED 0-2	6169	882413	62595	7.09
ISCED 3 general	212	56092	4087	7.28
ISCED 3 vocational	796	206555	14566	7.05
ISCED 4	x/	5767	499	8.65
ISCED 5+	21	128741	9924	7.71

Source: Institute of Information and Prognoses of Education, tabled by SNO/ETF
Note:
x/ Programme 4 is organised within secondary specialised schools. Number of schools and teachers is included in ISCED 3 vocational.

Table XXIII Obligatory education of foreign languages in 1999/2000

Foreign languages	Students total	in % of school students by ISCED level				
		0-2	3 general	3 vocational	4	5+ x/
English	410376	62.59	12.76	23.98	0.67	
French	24413	40.66	27.26	31.52	0.56	
Spanish	2049	15.86	64.18	19.96	0	
German	380507	57.53	11.52	30.46	0.49	
Russian	42965	68.41	3.56	27.90	0.13	
Italian	1262	2.54	44.61	52.06	0.79	
Others xx/	59392	79.56	5.75	14.61	0.08	

Source: Institute of Information and Prognoses of Education, tabled by SNO/ETF
Notes:
Included are just full-time students who are learning foreign language as an obligatory subject.
x/ The number of students learning foreign language at Higher Education Institutions is not statistically monitored.
xx/ Included are students learning Slovak language as an obligatory subject at schools with the other language of instruction than the Slovak (Hungarian, Ukrainian, German language of instruction), i.e. schools for national minorities for whom the Slovak language is not a mother tongue.

Table XXIV Public expenditures on education in 2000 (in thousands SKK)

Specifications	Total	of which by ISCED level									
		0-2		3 general		3vocational		4		5+	
		N	%	N	%	N	%	N	%	N	%
Total	37002756	15824184	42.77	1324853	3.58	7036848	19.02	xx/	xx/	5675670	15.34
Of which:											
Investment	1772164	486246	27.44	107403	6.06	276169	15.58	xx/	xx/	690070	38.94
Wages	14987346	7403491	49.4	750791	5.01	3043629	20.31	xx/	xx/	1877950	12.53
Social facilities x/	3013780	xx/	xx/	xx/	xx/	xx/	xx/	xx/	xx/	672598	22.32

Source: Institute of Information and Prognoses of Education, tabled by SNO/ETF
Notes:
x/ grants to students, accommodation, means, etc.
xx/ data are not statistically monitored
Total includes total expenses from the state budget (including supportive activities and social sphere) inclusive expenses on health, police and military schools.
ISCED 0-2 includes state and municipal pre-primary school facilities, basic schools, total special schools (without classification according to ISCED) and total church-affiliated schools (without classification according to ISCED)
ISCED 3 general includes state grammar schools
ISCED 3 vocational includes secondary specialised schools (inclusive expenses on health, police and military schools), sport schools, secondary art schools, secondary vocational schools, total private schools (without classification according to ISCED), school agricultural and forestry enterprices.
ISCED 4 is included within ISCED 3
ISCED 5+ includes universities, theological faculties, foreign students care, foreign information, school agricultural and forestry enterprices
wages includes data taken from payroll lists; wages of all educators inclusive health, police and military schools
total social facilities includes expenses at state schools on school catering, dormitories, accommodation and catering facitilies for universities, scholarship; with regard to individual ISCED levels (except 5+), as well as church-affiliated and private schools data are not available since they are registered within total expenses.

Table XXV Drop-outs from education 1999/2000

Specifications	General education			Secondary VET with maturita exam			Secondary VET with qualification			Total secondary VET		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Number of drop outs from for a given year	318	505	823	2999	2083	5082	1602	1169	2771	4601	3252	7853
Drop-out rates in a given year (%)	1.33	1.57	1.47	4.30	2.63	3.41	4.39	5.57	4.82	4.33	3.24	3.80

Source: Institute of Information and Prognoses of Education, tabled by SNO/ETF
Notes:
M – Males, F - Females

Table XXVI Enrolment in education/training at ISCED level 3 1999/2000

General Education			Secondary VET with maturita exam			Secondary VET with qualification			Total Secondary VET			Total secondary Education		
M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
23856	32236	56092	69810	79282	149092	36482	20981	57463	106292	100263	206555	130148	132499	262647

Source: Institute of Information and Prognoses of Education, tabled by SNO/ETF
Notes:
M – Males, F - Females

Table XXVII Kindergarten: 1989 – 2000Basic indices

Year	Schools	Classes	Children	Teachers	Children/Classes
1989	4052	9390	241458	18729	25.7
1990	4025	9296	216336	18620	23.3
1991	3759	8651	188821	17306	21.8
1992	3642	8604	188502	17218	21.9
1993	3482	7962	183972	15834	23.1
1994	3343	7387	174436	14639	23.6
1995	3322	7445	161697	14933	21.7
1996	3332	7664	168154	15382	21.9
1997	3330	7781	169300	15780	21,8
1998	3327	7885	167504	15935	21.2
1999	3310	7821	161818	15807	20.7
2000	3263	7576	154232	15229	20.4

Source: Institute of Information and Prognoses of Education

Table XXVIII Basic Schools: 1989 - 2001Basic indices

Year	Schools	Classes	Pupils	Teachers	Pupils/Teachers	Pupils/Classes
1989	2302	27559	724919	36242	20.0	26.3
1990	2358	28390	721687	37244	19.4	25.4
1991	2415	28942	716416	37812	18.9	24.8
1992	2472	29207	704119	39867	17.7	24.1
1993	2483	28518	690189	38874	17.8	24.2
1994	2481	28224	675813	38813	17.4	23.9
1995	2485	28285	661082	39224	16.9	23.4
1996	2493	28059	644902	39213	16.4	23.0
1997	2482	28432	645941	39530	16.3	22.7
1998	2484	28918	647877	40482	16.0	22.4
1999	2471	29773	671706	43466	15.5	22.6
2000	2447	2993	650966	42174	15.4	22.4

Source: Institute of Information and Prognoses of Education

Table XXIX Grammar schools: 1989 – 2001Basic Indices

Year	Schools	Classes	Pupils	Graduates	Teachers	Pupils/Teachers	Pupils/Classes
1989	128	1638	51531	10463	4228	12.2	31.5
1990	132	1720	55336	11422	4280	12.9	32.2
1991	147	1861	59172	12419	4768	12.4	31.8
1992	166	2014	63522	12996	5378	11.8	31.5
1993	176	2169	68006	13720	5549	12.3	31.4
1994	184	2306	72072	15279	5929	12.2	31.3
1995	190	2445	76380	15051	6515	11.7	31.2
1996	196	2538	79376	16216	6766	11.7	31.3
1997	198	2583	80116	15988	7016	11.4	31.0
1998	205	2646	80669	15772	7153	11.3	30.5
1999	209	2609	76662	15421	7165	10.7	29.4
2000	212	2741	80615	15754	7260	10.5	29.4

Source: Institute of Information and Prognoses of Education
Note:
All data without part time studies
Teachers- internal and external together; external teachers calculated as persons, not as full-time equivalents

Table XXX Secondary Specialised Schools: 1989 –2001 Basic Indices

Year	Schools	Classes	Pupils	Graduates	Teachers	Pupils/Teachers	Pupils/Classes
1989	181	2677	80545	18747	7941	10.1	30.1
1990	184	2820	87149	18296	8337	10.5	30.9
1991	276	3076	95195	19888	8997	10.6	30.9
1992	317	3382	103793	20726	10849	9.6	30.7
1993	342	3642	111664	21662	11889	9.4	30.7
1994	361	3824	117145	24583	12357	9.5	30.6
1995	364	3905	119853	27014	13478	8.9	30.7
1996	367	3979	121933	28928	13689	8.9	30.6
1997	365	3879	116681	29615	13970	8.4	30.1
1998	376	3839	111191	30081	14067	7.9	29.0
1999	379	3632	99070	30242	13253	7.5	27.3
2000	374	3699	99079	31120	13117	7.6	26.8

Source: Institute of Information and Prognoses of Education
Notes:
Since 2000 including SSS of the Ministry of Interior and the Ministry of Defence
All data without part time studies
Teachers- internal and external together; external teachers calculated as persons, not as full-time equivalents

Table XXXI Secondary Vocational Schools and Vocational Schools: 1989 –2001 Basic Indices

Year	Schools	Classes	Pupils	Graduates	Teachers, Directors and Vice-directors	Teachers	Pupils/ Teachers, Directors and Vice-directors	Pupils/ Teachers	Pupils/ Classes
1989	311	5953	155240	42898	8756	7426	17.7	20.9	26.1
1990	311	5960	149981	45105	8623	7302	17.4	20.5	25.2
1991	317	5851	143282	50338	8374	7130	17.1	20.1	24.5
1992	344	5704	139408	44567	8315	7119	16.8	19.6	24.4
1993	344	5450	138465	57538	8037	6876	17.2	20.1	25.4
1994	358	5338	138173	41729	8121	7009	17.0	19.7	25.9
1995	357	5375	139688	42043	8342	7256	16.7	19.3	26.0
1996	355	5268	135696	44290	8487	7458	16.0	18.2	25.8
1997	346	4998	126798	44136	8377	7362	15.1	17.2	25.4
1998	349	4776	117507	42275	8225	7231	14.3	16.3	24.6
1999	361	4374	102522	40588	7892	6916	13.0	14.8	23.4
2000	368	4491	105838	36073	7383	6715	14.3	15.8	23.6

Source: Institute of Information and Prognoses of Education
Note:
All data without part time studies
Teachers- internal and external together; external teachers calculated as persons, not as full-time equivalents

Table XXXII Private and church-affiliated regional schools in 2000/2001

Schools	Church-affiliated	Private
Basic schools	94	3
Grammar schools	38	17
Secondary specialised schools	11	28
Secondary vocational schools	5	10

Source: Institute of Information and Prognoses of Education

Table XXXIII Study programmes at SVS and SSS in the school year 1999/2000

Area of study	Specialisations and subspecialisations		
	SVS	SSS	Total
Physics and mathematics	-	1	1
Mining and mining geology	4	12	16
Metallurgy	9	15	24
Engineering and other metal-processing	2	24	26
Engineering and other metal-processing (SVS)	98	-	98
Electrotechnics	57	46	103
Technical chemistry of silicate chemistry	37	10	47
Technical chemistry (w/o silicate chemistry)	45	24	69
Food-processing	30	20	50
Textile and clothing	37	17	54
Processing of hides, plastics, rubber and shoes production	27	4	31
Wood-processing and musical instruments production	30	8	38
pulp, paper processing and printing	18	2	20
Building, geological survey and cartography	41	31	72
Transport, post and telecommunication	28	35	63
Special technical specialisations	-	18	18
Agriculture and forestry	1	68	69
Veterinary sciences	-	3	3
Agriculture and forestry (SVS)	42	-	42
Economic sciences	-	1	1
Economics and organization, retail and services	10	36	46
Economics and organization, retail and services (SVS)	57	-	57
Legal sciences	-	4	4
Library and information sciences	-	8	8
Pedagogical sciences	-	2	2
Pedagogics	-	8	8
Arts, applied arts and folk crafts	-	85	85
Arts, applied arts and folk crafts (SVS)	49	-	49
Total	622	482	1104

Source: State Institute for Vocational Education and Training

Table XXXIV Innovated study programmes at SVS and SSS

School year	SVS		SVS total	SSS	Total
	training branches	study branches			
1994/95	1	3	4	6	10
1995/96	4	2	6	12	18
1996/97	0	0	0	15	15
1997/98	5	6	11	14	25
1998/99	4	21	25	14	39
1999/2000	5	4	9	10	19
2000/2001	1	-	1	-	1
Total	20	36	56	71	127

Source: State Institute of Vocational Education and Training

Table XXXV Newly implemented study programmes at SVS

School year	SVS				Total		
	Training branches		Study branches				
	officially implemented	experimentally implemented	officially implemented	experimentally implemented	officially implemented	experimentally implemented	Total
1994/95	2	3	3	1	5	4	9
1995/96	0	5	2	2	2	7	9
1996/97	2	1	1	4	3	5	8
1997/98	2	3	2	8	4	11	15
1998/99	4	9	4	5	8	14	22
1999/2000	1	2	4	0	5	2	7
2000/2001	-	1	-	1	-	2	2
Total	11	24	16	21	27	45	72

Source: State Institute of Vocational Education and Training

Table XXXVI Newly implemented study programmes at SSS

School year	SSS		Total
	officially implemented	experimentally imlemented	
1994/95	10	1	11
1995/96	8	4	12
1996/97	7	0	7
1997/98	9	3	12
1998/99	6	21	27
1999/2000	11	3	14
2000/2001	-	-	-
Total	51	32	83

Source: State Institute of Vocational Education and Training

Table XXXVII Secondary Specialised Schools – ISCED 3A and 3C programmes, newly enrolled by branches

Branch	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Mining and mining geology	154	129	62	44	34	31	32	26	0	10	0	14
Metallurgy	139	201	186	98	86	100	102	100	97	104	67	131
Metal engineering and metal-processing	2706	2757	2559	1643	1293	1285	1356	1354	1083	927	485	1278
Electrotechnics	2178	2482	2653	2367	2308	2264	2133	2243	1703	1509	1066	2360
Technical chemistry of silicate chemistry	80	83	83	62	0	21	0	24	23	20	0	0
Technical chemistry (w/o silicate chemistry)	684	711	824	543	418	334	288	277	226	265	73	320
Food-processing	312	375	465	468	437	433	377	371	261	204	125	381
Textile and clothing	504	634	665	721	801	625	666	552	464	370	107	404
Processing of hides, plastics and musical instruments production	157	104	139	111	61	51	29	28	27	18	11	14
Wood-processing and musical instruments production	246	292	336	337	314	242	226	226	185	115	89	210
Printing, paper and film processing	38	37	34	34	31	31	61	62	55	56	32	48
Building, geological survey and cartography	1720	1815	1687	1364	1360	1332	1169	1083	1002	918	670	1405
Transport, post and telecommunication	773	844	1039	977	952	1159	1253	1276	1027	976	787	1364
Special technical branches	0	0	28	2117	3506	3714	3727	3778	2427	2153	1764	2958
Agriculture and forestry	2682	2946	2713	2492	2491	2316	2265	2201	1562	1743	963	2149
Veterinary sciences	105	170	136	132	131	158	129	152	121	113	41	149
Healthcare	3046	3628	3504	2717	1996	1759	1709	1840	1597	1912	1618	2263
Healthcare	0	0	79	214	143	0	0	0	0	0	0	0
Economics and organisation, retail and services	4399	5611	8635	11074	11120	11303	11455	12014	9169	8561	6169	10947
Legal sciences	0	0	0	24	0	24	0	0	0	0	0	0
Library and information sciences	118	143	136	100	160	138	137	68	68	57	66	97
Pedagogics	571	774	1059	1127	971	849	862	992	812	732	515	989
Arts, applied arts and folk crafts	380	449	481	534	584	726	834	832	870	830	757	1080
Total	20992	24185	27503	29300	29197	28895	28810	29499	22779	21593	15405	28561

Source: Institute of Information and Prognoses of Education

Table XXXVIII Secondary Vocational Schools – ISCED 3A programmes, newly enrolled by branches

Branch	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Metallurgy	20	10	0	0	0	25	47	37	8	34
Metal engineering and metal-processing	2060	2155	1945	1375	1171	1322	1364	990	510	1157
Electrotechnics	2246	2551	2804	2632	2596	2621	1880	1616	1187	2205
Technical chemistry (w/o silicate chemistry)	407	445	514	499	378	517	323	269	126	335
Food-processing	31	108	22	28	20	94	54	59	0	63
Textile and clothing	214	409	470	771	832	671	498	406	221	581
Processing of hides, plastics and musical instruments production	42	18	48	76	58	56	40	36	0	36
Wood-processing and musical instruments production	101	178	146	179	201	213	195	161	59	247
Printing, paper and film processing	12	12	35	60	42	75	25	78	18	86
Building, geological survey and cartography	155	314	375	417	420	367	291	235	191	398
Transport, post and telecommunication	166	238	328	423	521	459	406	327	487	872
Agriculture and forestry	740	1117	1102	1146	949	1093	1058	798	373	860
Economics and organisation, retail and services	959	2130	2303	2444	2480	2358	1979	1666	1229	2512
Arts, applied arts and folk crafts	152	220	247	359	320	392	275	269	112	364
Total	7305	9905	10339	10409	9988	10263	8435	6947	4521	9750

Source: Institute of Information and Prognoses of Education

Table XXXIX Secondary Vocational Schools – ISCED 3C+2C programmes, newly enrolled by branches

Branch	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Metallurgy	18	0	0	0	0	0	0	0	0	0
Metal engineering and metal-processing	0	0	0	0	0	286	284	158	189	288
Metal engineering and metal-processing	10292	8438	7815	7324	7037	6113	5349	4753	2749	4891
Electrotechnics	2896	2837	2859	2973	2821	2538	1980	1733	1010	2127
Technical chemistry of silicate chemistry	180	172	109	111	77	64	126	96	62	98
Technical chemistry (w/o silicate chemistry)	580	434	412	368	354	298	259	228	109	168
Food-processing	1122	1723	1674	1622	1775	1722	1353	1233	888	1567
Textile and clothing	4362	4318	4220	4308	4111	3410	2472	1985	1153	1878
Processing of hides, plastics and musical instruments production	608	455	344	301	337	221	218	151	58	93
Wood-processing and musical instruments production	2461	2424	2709	2771	2629	2284	1885	1584	1021	1855
Printing, paper and film processing	141	151	158	149	136	145	129	89	63	140
Building, geological survey and cartography	3890	4020	3923	3448	2838	2778	2384	2406	1529	2636
Transport, post and telecommunication	245	193	171	157	173	186	78	104	79	152
Agriculture and forestry	3166	2648	2279	1941	1817	1514	1302	1395	810	1388
Healthcare	47	4	0	0	0	0	0	0	0	0
Economics and organisation, retail and services	0	0	0	0	0	62	53	53	27	53
Economics and organisation, retail and services	7328	7849	8306	7796	7422	7257	5291	4609	4115	6960
Arts, applied arts and folk crafts	13	74	116	227	316	294	256	226	177	281
Total	37349	35740	35095	33496	31843	29172	23419	20803	14039	24575

Source: Institute of Information and Prognoses of Education

Table XL Secondary Specialised Schools - ISCED 4 programmes, newly enrolled by branches

Branch	1998	1999	2000
Mining and mining geology	46	54	46
Metallurgy	0	0	0
Metal-processing	62	65	20
Electrotechnics	31	66	62
Technical chemistry of silicate chemistry	0	0	0
Technical chemistry (w/o silicate chemistry)	0	0	0
Food-processing	30	24	18
Textile and clothing	61	15	17
Processing of hides, plastics and musical instruments production	0	0	0
Wood-processing and musical instruments production	0	25	25
Printing, paper and film processing	0	0	0
Building, geological survey and cartography	70	63	59
Transport, post and telecommunication	40	97	32
Special technical branches	262	242	146
Agriculture and forestry	122	115	136
Veterinary sciences	0	0	0
Healthcare	92	94	67
Healthcare	0	0	0
Economic sciences	209	249	218
Economics and organisation, retail and services	888	1279	1066
Legal sciences	239	290	356
Library and information sciences	61	63	53
Pedagogical sciences	30	10	19
Pedagogics	93	129	103
Arts, applied arts and folk crafts	0	0	7
Total	2336	2880	2450

Source: Institute of Information and Prognoses of Education

Table XLI Secondary Specialised Schools - ISCED 5B programmes, newly enrolled by branches

Branch	1998	1999	2000
Mining and mining geology	0	0	0
Metallurgy	0	17	20
Metal-processing	87	111	77
Electrotechnics	53	79	60
Technical chemistry of silicate chemistry	0	0	0
Technical chemistry (w/o silicate chemistry)	0	0	0
Food-processing	52	73	58
Textile and clothing	17	23	0
Processing of hides, plastics and musical instruments production	0	0	0
Wood-processing and musical instruments production	0	0	0
Printing, paper and film processing	0	0	0
Building, geological survey and cartography	0	0	0
Transport, post and telecommunication	0	0	0
Special technical branches	0	0	0
Agriculture and forestry	138	139	140
Veterinary sciences	0	0	0
Healthcare	647	658	727
Healthcare	0	0	0
Economic sciences	0	0	0
Economics and organisation, retail and services	259	241	234
Legal sciences	35	68	33
Library and information sciences	0	0	0
Pedagogical sciences	18	25	53
Pedagogics	0	0	0
Arts, applied arts and folk crafts	44	18	68
Total	1350	1452	1470

Source: Institute of Information and Prognoses of Education

Table XLII Number of Educational Institutions offering CVT/LLL in 2000 by legal form

Legal form	Number of EI	%
Employer – natural person	57	19.32
Public-trade association	0	0
Ltd.	35	11.86
Foundation	1	0.34
Non-investment fund	1	0.34
Non-profit organisation	2	0.68
Joint-stock company	11	3.73
Co-operative association	1	0.34
State company	2	0.68
National Bank of Slovakia	0	0
Bank – state institution	0	0
Budgetary	85	28.81
Contributory	69	23.39
Fund	0	0
Public – legal institution	1	0.34
Foreign person	0	0
Association	9	3.05
Political party	0	0
Church organisations	1	0.34
Organisational Units	9	3.05
Professional chambers	0	0
Interesting organisations of legal entities	5	1.69
Municipality	0	0
Region/District	0	0
International organisations and associations	0	0
Not included – data missing	6	2.03
Total	295	100

Source: Institute of Information and Prognosis of Education

Table XLIII 1997-2001 Educational Institution by legal form (in %)

Legal form of EI	1997	1998	1999	2000	2001
Employer – natural person	16.92	20.47	20.07	19.32	35.32
Public-trade association	0.62	0.34	0	0	0.24
Ltd.	12.92		10.88	11.86	9.07
Foundation	0.31	0.34	0.34	0.34	0.24
Non-investment fund				0.34	0
Non-profit organisation				0.68	3.34
Joint-stock company	5.23	6.71	4.08	3.73	2.86
Co-operative association	0.62	0.34	1.02	0.34	0.24
State company	0.31	0	0.34	0.68	0.24
Budgetary	18.46	20.13	34.35	28.81	20.53
Contributory	31.69	27.18	21.43	23.39	21.00
Fund	0	0	0.34	0	0
Public – legal institution	4.31	1.68	0.00	0.34	0.24
Foreign person	0	0	0	0	0.24
Association	4.00	5.03	3.74	3.05	3.58
Political party	0	0	0	0	0
Church organisations	0	0	0.34	0.34	0.48
Organisational Units				3.05	0.24
Professional chambers	0	0	0	0	0
Interesting organisations of legal entities	1.54	2.01	1.02	1.69	1.19
Municipality	0	0	0	0	0.24
Region/District	0	0	0	0	0
International organisations and associations	0.31	0.34	0.34	0	0.24
Not included – data missing	2.77	58.03	1.70	2.03	0.48
Total	100	100	100	100	100

Source: Institute of Information and Prognoses of Education

Table XLIV Educational institutions by type of networking (in %)

EI Network	1997	1998	1999	2000	2001
Independent EI local activity	30.15	28.19	26.87	22.71	29.36
Independent EI regional/state activity	42.46	49.66	47.65	57.97	51.55
Network of EI in regions	7.08	6.38	5.44	4.41	3.58
Network of EI in each district	3.69	2.68	3.06	2.03	1.43
Other	16.62	13.09	6.80	7.80	9.55
Not included - data missing			10.20	5.08	4.53
Total	100	100	100	100	100

Source: Institute of Information and Prognoses of Education

Table XLV Financing Labour Market Policy - Public Employment Services (in thousands of SKK)

Indicator	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total Revenues							8614270	9028295	8855976	10811981
Total Expenditures							8817590	8978337	9116210	9211101
Basic Fund (BF)										
Revenues BF							8614270	9028295	8841178	10372475
Expenditures BF	3456101	5523670	2966154	3605869	6120853	7353506	7088593	7773826	7766302	7752873
of that: passive labour market policy	2933596	1710877	1858938	1709667	2181452	3063132	3989901	5484686	7292270	6182429
active labour market policy	522505	3812793	1107216	1896202	3939401	4290374	3098692	2289140	474032	1570444
of that: retraining	62464	292051	117429	108223	164167	200803	257563	166955	73489	62059
Ratio retraining/ALMP	11.95	7.66	10.61	5.71	4.17	4.68	8.31	7.29	15.50	3.95
Ratio ALMP/expenditures BF	15.12	69.03	37.33	52.59	64.36	58.34	43.71	29.45	6.10	20.26
Administrative Fund (AF)										
Raising AF							1715809	1204515	1349908	1508438
Expenditures AF				462607	658356	944503	1715109	1204511	1339964	1443644
of that: non-investment costs				432929	585865	700912	1172661	1102714	1170376	1296889
investment costs				29678	72491	243591	542448	101797	169588	146755
investment into Info Technology (IT)							131164	24672	103520	49726
Ratio IT investment/ total investment							24.18	24.24	61.04	33.88
Guarantive Fund (GF) x/										
Raising GF	-	-	-	-	-	-	-	-	-	433484
Expenditures GF	-	-	-	-	-	-	-	-	-	14584
Reserve Fund (RF) as of 31 December							480980	700980	981780	1334580

Source: National Labour Office

Note:

x/ Guarantive fund established as of 1 May 2000

Table XLVI Qualification of VET subject teachers (as of 27 April 2001)

Branch	Total	Of which		
		With qualification	Without qualification	% without
Mining and mining geology	29	25	4	13.8
Security services	166	160	6	3.6
Transport, post and telecommunication	696	633	63	9.1
Economic sciences	63	55	8	12.7
Economics and organisation, retail and services	2716	2378	338	12.4
Economics and organisation, retail and services (SVS)	2457	1987	470	19.1
Electrotechnics	3059	2784	275	9.0
Metallurgy	92	86	6	6.5
Non-state security services	3	3	0	0.0
Pedagogical sciences	28	22	6	21.4
Agriculture and forestry	810	717	93	11.5
Agriculture and forestry (SVS)	879	797	82	9.3
Pulp, paper processing and printing	97	79	18	18.6
Food-processing	932	852	80	8.6
Legal sciences	121	115	6	5.0
Diverse, not specified branches	222	189	33	14.9
Library and information sciences	8	8	0	0.0
Wood-processing and musical instruments production	732	633	99	13.5
Processing of hides, plastics, rubber and shoes production	48	43	5	10.4
Building, geological survey and cartography	1312	1164	148	11.3
Engineering and other metal-processing	784	717	67	8.5
Engineering and other metal-processing (SVS)	2032	1875	157	7.7
Special technical specialisations	786	718	68	8.7
Technical chemistry (w/o silicate chemistry)	268	261	7	2.6
Technical chemistry of silicate chemistry	56	44	12	21.4
Textile and clothing	1062	915	147	13.8
Pedagogy	450	404	46	10.2
Arts, applied arts and folk crafts	250	200	50	20.0
Arts, applied arts and folk crafts (SVS)	1858	1453	405	21,8
Veterinary sciences	46	42	4	8.7
Secondary military branches	76	70	6	7.9
Health	749	604	145	19.4
Total	22887	20033	2854	12.5

Source: Institute of Information and Prognoses of Education

Table XLVII VET school teachers needed by specialisation (estimation based on data as of 27 April 2001)

Branch	Upper limit estimation	Lower limit estimation
Mining and mining geology	7	1.0
Security services	44	11.0
Transport, post and telecommunication	99	24.2
Economic sciences	11	3.3
Economics and organisation, retail and services	561	212.4
Economics and organisation, retail and services (SVS)	595	151.6
Electrotechnics	333	105.1
Metallurgy	8	1.4
Diverse, not specified branches (SSS)	14	7.5
Diverse, not specified branch (SVS)	31	11.3
Vocational practice (SSS)	88	37.0
Practical training (SVS)	526	436.0
Pedagogical sciences	4	0.3
Agriculture and forestry	145	51.1
Agriculture and forestry (SVS)	127	26.4
Pulp, paper processing and printing	22	7.9
Food-processing	166	55.0
Legal sciences	15	2.6
Wood-processing and musical instruments production	132	42.6
Processing of hides, plastics, rubber and shoes production	6	1.5
Building, geological survey and cartography	207	86.2
Engineering and other metal-processing	93	29.3
Engineering and other metal-processing (SVS)	243	60.7
Special technical specialisations	149	37.4
Technical chemistry (w/o silicate chemistry)	36	7.3
Technical chemistry of silicate chemistry	10	2.5
Textile and clothing	161	44.1
Pedagogy	72	31.7
Arts, applied arts and folk crafts	106	54.5
Arts, applied arts and folk crafts (SVS)	71	23.6
Veterinary sciences	11	3.2
Secondary military branches	5	1.7
Health	151	97.6
Teachers	3723	1233
Trainers	526	436
Total	4249	1669

Source: Institute of Information and Prognoses of Education

Note:

The upper limit estimation indicates how many teachers (full-timers or part-timers) would be needed to replace teachers in retirement age and teachers (qualified or not qualified) teaching subjects for which they are not qualified). The lower limit estimation is a formal indicator announcing the number of full-time equivalent teachers needed for covering lessons taught by teachers without qualification.

Annex B

The SWOT analysis of human resources has revealed the following findings (Part 2.3 of the National Development Plan)

Strong Points

- Sectoral changes in employment disclosing a tendency typical of the developed EU countries: gradually, the share of industrial sectors and agriculture decreases while the share of services in the overall employed population goes up
- A high rate of the population's economic activity (both male and female)
- Growth of employment in the private sector and service sector
- A relatively high share of labour force with secondary education
- Existence of the National Labour Office as the main representative of public employment services and organiser of re-training for registered unemployed
- Full coverage of Slovakia by public employment services
- A sufficient number of public and private re-training facilities

Weak Points

- Economy incapable of creating a sufficient number of effective jobs, underlined by obvious regional disparities
- A high number of unemployed per single vacancy and apparent regional differences
- The labour force educational structure shows an irregular distribution of the various educational levels in the Slovak Republic: there is a dominant share of the labour force with an apprenticeship certificate (34.8 %) and full secondary vocational education (31.2 %). The share of the polar educational levels – basic and university – was 7.2 % and 10.8 %, respectively.
- Lack of suitable jobs for the registered unemployed with a lower level of education or lacking education
- A low level of using re-training as a decisive instrument of working re-integration, its insufficiently specific nature and efficiency
- A low share of expenditures on active labour market policy in the total expenditures earmarked for the labour market policy (in 1999 it was only SKK 474 million, representing 6.1 % of total funds)
- A high share of the labour force with lower secondary education (trained)
- An inappropriate share of the labour force with university education
- Low territorial mobility of the labour force
- A low share of part-timers
- A low level of non-standard flexible employment formats
- Little collaboration among the school-based system, state administration in the education sector, public employment services, and employers aiming at adaptation of the content and scope of education to the job requirements.

Opportunities

- Increasing the share of the active labour market policy to improve the employability of the registered unemployed
- Active labour market policy programmes focusing on job creation, support to maintenance and operation of jobs, support to employment of special population groups, re-training, support to employers of populations with restricted labour capacity, disabled in the long run, to mitigate fluctuations in the demand and supply in the labour market

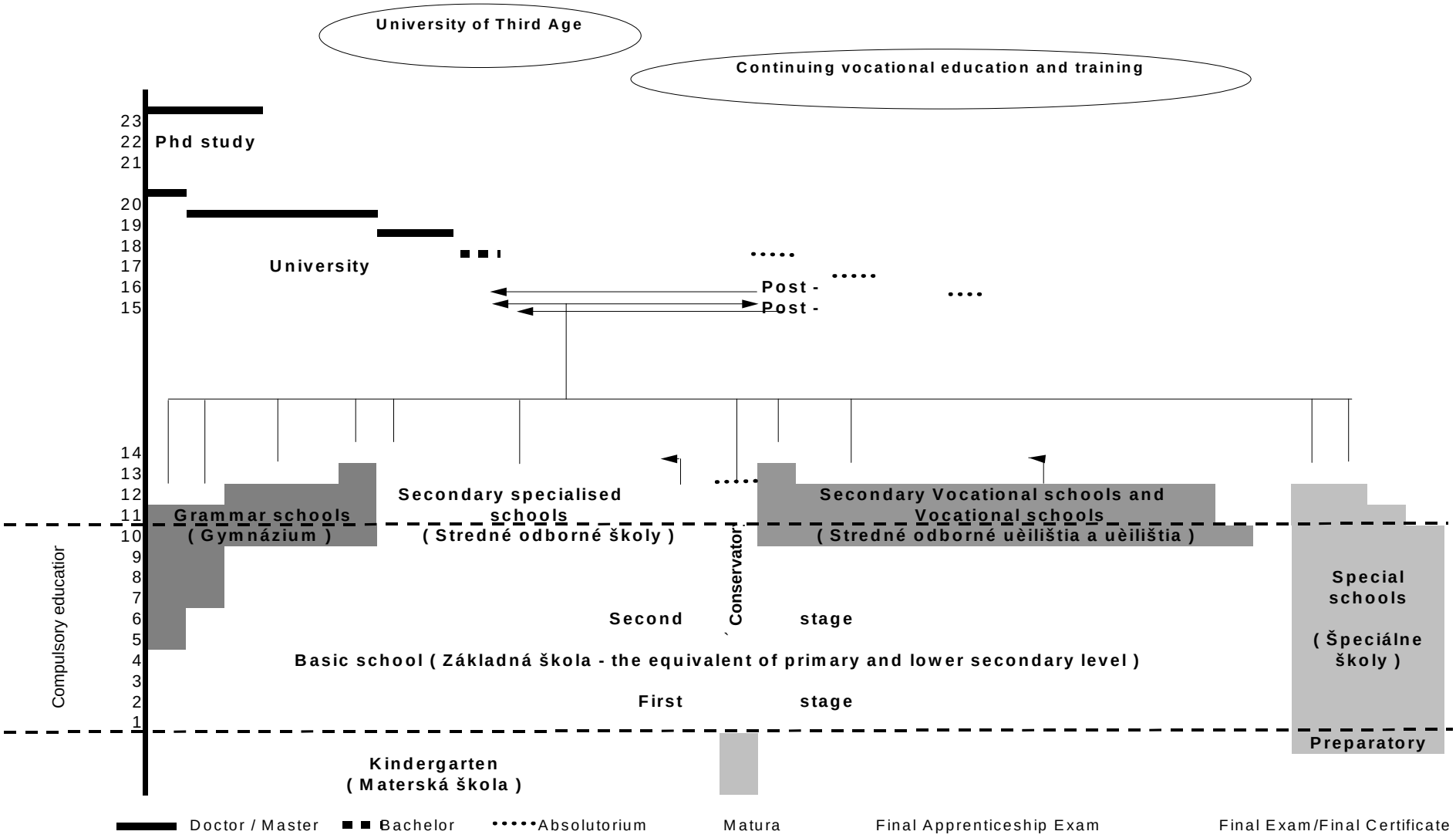
- Active exploitation of bilateral inter-governmental agreements on mutual employment of citizens between the Slovak Republic and the Federative Republic of Germany, the Hungarian Republic, the Polish Republic, the Russian Federation, Ukraine and the Czech Republic. The most significant destination of those migrating for work is the Czech Republic
- Co-operation and co-ordination of all relevant partners in the field of human resource development
- Establishing a funding system for continuing training
- A higher intensity of collaboration of the school-based system, state administration in the field of education system, public employment services, and employers aimed at adapting the content and scope of education/training to job requirements
- Extending the modular system of continuing training
- Reinforcement of the place and role of re-training in mitigating and removing the disparities between the labour market demand and supply
- Integrating the unemployed into various formats of continuing training
- Enhancing the accountability of employers for the development of professionalism, labour force qualification and its adaptability to changes in engineering and technology
- Participation in EU programmes aimed at unemployment prevention and elimination, creation of jobs and accommodation of the qualification structure of registered unemployed to the qualification requirements of jobs.

Threats

- Growth of unemployment and deepening of internal labour market problems
- Deepening of regional disparities and higher occurrence of unemployment in regions with a history without problems
- Further increases in marginalisation, edging of an ever-higher number of disadvantaged groups from the labour market, deepening of social exclusion, deepening of social instability
- Deepening of structural disparities between labour demand and supply in the regions.

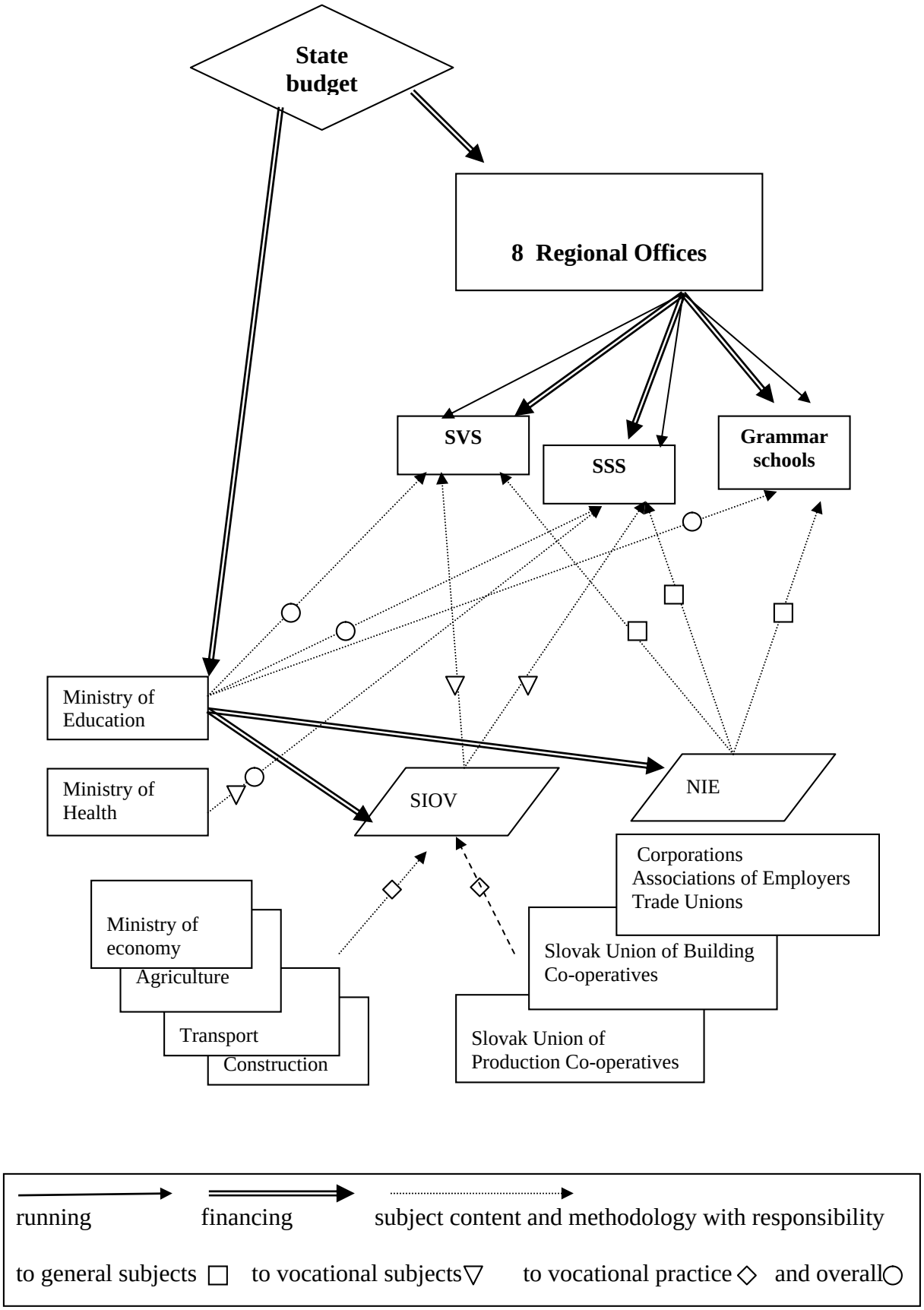
Annex C

Slovak Education System



Annex D **Slovak Formal VET System Competence Scheme**

(without military, policy, church affiliated and private subjects)



Annex E

The National Programme of Upbringing and Education in the Slovak Republic for next 15 to 20 Years

The National Programme is composed of eight parts,

- Current status of education in Slovakia
- Starting points and principles of change
- Final targets of upbringing and Education
- Detailed changes for achieving of targets of respective segments of the lifelong learning system
- Detailed changes in crucial areas (referring expressively to curriculum and comprising former chapters 5-8 of CDE related to management, teacher status, quality assurance, international dimension)
- 12 pillars of the National Programme
- Strategy of reform changes
- Implementation plan of the National Programme

The following crucial points are to be highlighted:

- It is proposed to increase the share of enrolment into general education, i.e. in the grammar schools, inferring criticism of currently higher share of students within VET (i.e. in Slovakia - SSS and SVS) in comparison with all EU countries. Together with the slogan ”the best VET is a good general education” trend towards “stressing of general education within upper secondary schools” is proposed. The share of respective age cohorts in upper secondary general education stream should amount up to 30% (originally it was up to 40% of the population). Within both VET streams (SSS and SVS), study programmes leading to “maturita” certificate should dominate; shorter than four-year courses leading to Certificate of apprenticeships should be offered on request of enterprises and traders within schools maintained by enterprises or even within a dual system.

- Curricular reform should be boost entailing national curriculum and new textbooks based on national standards being implemented that provide schools with deeper pedagogical autonomy, fixing 60% of curricula and leaving 40% on adjustment according to the individual secondary school policies, local particularities and regional labour market needs (respective share for primary schools is 70%-30%).

- Establishment of the National Curriculum Committee and the Institute for Curriculum, Standards, Accreditation, Certification in VET were also proposed among other proposals on establishment of new institutions. This proposal seems to be in contradiction with a current trend and government measures proposing to reduce the amount of state-operated institutions and to abolish or transform many institutions operated by several ministries. The importance of strengthening of quality assurance within VET is, however, correctly recognised. Nevertheless, further discussion for identification of appropriate concept and measures will be necessary. Slovakia still relies on the traditional concept of the state inspection and has a shortage of institutions and experts with experience in educational output measurement. The lack of quality assessment and assurance still remains the weakest point of the Slovak education system despite the comparably high quality of educational output as e.g. proved by TIMSS and TIMSS-R.

- Currently still missing tertiary higher professional education with ISCED 5B is explicitly mentioned within the new scheme of the formal education system.

Within the 12 pillars of the National Programme two are of crucial importance for VET and LLL – pillar 9 “Information technologies” and pillar 11 “Vocational education and lifelong learning”.
No. 9 stresses the output of the project Infovek. It’s aimed at connecting all schools to the Internet, re-training of all teachers in ICT and adjusting the educational standard for all graduates of secondary school programmes finishing with maturity certificate (full secondary education ISCED 3A). The objective is to provide all graduates with skills, which enable them to make use of Internet resources.

The 11th pillar is presented here in its full wording:
“The National Programme emphasises and drafts lifelong education as an inevitable subsystem of education which is due to respond promptly to labour market and world globalisation needs. In order to ensure enhancement of the quality of vocational education and training, which constitutes a condition for increasing competitiveness of Slovak producers and providers of services in integrated Europe, and in order to strengthen skills of young people to assert themselves in the labour market, it is necessary to link systemically initial vocational education and continuing training and lifelong learning. The National Programme puts stress on importance of retraining and involvement of social partners in designing regional educational policy. Without a new model of financing of vocational education and lifelong learning it is not possible to establish natural economic relations in financing and quality management. The Slovak Republic must respond to this requirement and declare publicly a decision to elaborate by 2002 a new model of multi-source financing of vocational and lifelong education. This model must be linked to the tax reform enabling allocation of funds on vocational and lifelong education by individuals and legal entities.”

Annex F

Conclusions and recommendations of the
National Conference on Vocational Education and Training in the Slovak Republic, Bratislava, 11-12 October 2001

Key messages of conclusions and recommendations on:
New place of vocational education and training (VET) within lifelong learning, general need of heading towards knowledge-based society and economy, support of investment in human resources, support of innovations in VET, new basic skills for all, new approach to guidance and counselling, need to react to new labour market stimuli, new definitions of working skills, new occupational profiles, new information and communication technologies, new social skills, and personal, communication and organisational skills.

Conclusions and recommendations of the conference for VET Management

1. With regard to the transition of rights and obligations within vocational education and training it is inevitable to address

- links between state administration and local and regional government representatives, and
- provision of education and continuing training of specialists and managers.

2. Specify in legislation employers' rights and obligations in

- realisation of practical instruction/practical training,
- determining the structure and development of study and training branches,
- determining the content of VET,
- laying down knowledge standards, and
- assessment and certification (content, form and recognition of output examinations).

3. Specify in legislation rights and obligations of central administration bodies with regard to

- content of VET,
- structure of study and training branches, and
- education and continuing training of vocational subjects teachers and instructors.

4. Consider operation and rights and obligations of advisory body under preparation for the field of VET on the national level, consider its operation on the horizontal level not just on the level of advisory body of the Slovak Ministry of Education.

5. Define clearly the place of higher professional schools within the Slovak educational system.

6. With regard to the creation of conditions for the new type of financing and management of schools

- unify the school management modes (remove current division into contributory and budgetary organisations),
- facilitate the solving of the proposal of the new mode of schools as non-profit organisations in legislation, and
- to establish the VET development and support fund.

Conclusions and recommendations of the conference for VET quality

1. Draft the concept of VET quality making use of foreign experience, in particular ISO 9000 norm as a complex quality management – TQM.

2. Develop the system of VET quality indicators interlinked with international indicators, and harmonise the statistical reporting with international norms.

3. Continuously monitor VET development trends in foreign countries, in particular in EU member states.

4. Continuously work on VET standards and occupational standards with active involvement of social partners.

5. Provide for the vertical and horizontal permeability of the VET system, its links to non-formal and informal learning and create the functional system of lifelong learning.

6. Clearly define classification of levels of education

- confront the classification with foreign models in order to avoid discrepancies in translation to foreign languages,
- reconsider the level of education indicated as „higher secondary vocational education“ which represents the same education level as „full secondary vocational education“, although they could be characterised by different ISCED levels (ISCED 3, ISCED 4),
- approve the level of education defined as „basic vocational education“ also to school leavers of two-year training branches at vocational schools and secondary vocational schools,
- resolve the determination of education level to basic art school leavers, and
- understand the level of education obtained at experimental higher professional school as the tertiary education level (ISCED 5B).

7. Improve and co-ordinate pre-service and in-service training of VET teachers in particular with regard to self-assessment quality management issues and institutional internal and external assessment.

8. Promote innovations in education, above all in making use of information and communication technology.

9. Improve students’ and VET teachers‘ language competency via strengthening of foreign language instruction in VET, strengthening of professional communication in foreign languages, and support of creation of specialised professional teaching and learning texts.

Conclusions and recommendations of the conference for social dialogue in VET

1. Promote the social dialogue at central, sectoral, regional and enterprise levels as a basic precondition of VET functioning and effectiveness.

2. Establish the efficient system of economic and taxation stimulation for financial involvement of employers and entrepreneurs in VET.

3. Update the document of the Ministry of Education of 1996 „The Concept of Co-operation between Educational System and Labour Market Institutions“.

4. Harmonise training and study branches characteristics and school leavers profiles with the standardised classification of occupations. Develop the system for carrying out the efficient occupation analysis.

Conclusions and recommendations of the conference for International co-operation in VET

1. Develop and promote in the Slovak Republic its own mobility development policy fully compatible with the EU, to promote mobility on all levels aimed at strengthening European dimension, creation of conditions for the full usage of EU citizen rights, free movement in the European social space, as well as permanent innovation of content and methods of VET quality and its internationalisation.

2. Co-ordinate mobility development policy with VET policy, in particular employment policy and regional policy, with respect to higher quality level reflection in newly prepared and partially approved main strategies of upbringing and education.

3. Develop permanent institutional mobility infrastructure aimed at management, professional, logistical and financial support of educational and entrepreneurial organisations developing, carrying out and evaluating mobility projects.

4. Prepare mobility development strategies at participating institutions (universities, schools and other organisations) which would serve as a base for designing of projects. Provide for the recognition of training completed abroad as integral part of regular educational process.

5. Make use of creative potential of teacher gained within international projects in developing of teaching and learning materials and educational programmes.

6. Organise seminars, discussion groups in order to disseminate experience from international co-operation.

7. Launch the educational server where teachers could find information from the field of education (up-to-date teaching methods, innovations), as well as information on projects outputs.

8. In the meaning of decree on experimental verification to approve teaching load relieves to those working on projects.

Annex G

VET Relevant Strategic Goals
Reform of schooling and education system

- transformation of VET guaranteeing required graduate profiles, their social adaptability and working mobility,
- achievement level, quality and range in provision of VET comparable and compatible with EU based on national and internationally comparable occupational and educational standards worked out in co-operation with social partners,
- harmonise certificates of VET with EU practice and engage employer associations and professional associations in the process of certification,
- modify the VET policy focus from reflection on current well described features towards prediction of impacts of future changes; develop monitoring VET and enhance research and development in the field of VET,
- support transition from industry based VET to knowledge society based VET, strengthen ICT implementation into VET, improve access to lifelong learning
- re-profile VET with the focus on a more general professional profile of graduates with enrolment into VET after 15 years of age and specialisation after 16 years of age with the intention to set and stipulate achievement at the following levels of VET: basic vocational, secondary vocational, full secondary vocational, higher vocational (which means, however, non-tertiary education),
- promote free choice of educational paths at integrated secondary schools feeding all levels of VET and a wide range of educational programmes,
- strengthen links between VET and the register of occupations, and partnership between VET institutions and representatives of employees, establish a strong network of governmental, non-governmental and public legal institutions providing for the infrastructure of VET,
- enhance flexibility and permeability of VET systems and bridge currently isolated initial and continuing VET,
- support current trends towards an increase in autonomy of VET institutions and decentralisation of decision making competencies with a main priority to improve the quality of educational services and the quality of outputs linked to occupational requirements as identified by employees,
- clarify terminology and elaborate a transparent, stable set of terms, definitions and explanations used within VET,
- support a transparent and socially oriented system of financing VET, enabling achievement of VET qualification for free, effectively linked to institutions of the labour market and social partners,
- achieve an agreement on future development of VET among key VET players; establish an inter-sectoral tripartite body with efficient links to the public for monitoring and managing crucial issues within VET

Annex H

List of specific legal regulations with regard to CVT in specific fields and professions

In the field of public administration:
- Order of the Government SR No. 157/1997 on Special Qualification Requirements for Performing Certain Activities in County Authorities and District Authorities

In the field of health care:
- Decree of the Ministry of Health SR No. 79/1981 Coll. on Health Care Staff and Other Specialised Staff in Health Care

In the field of education:
- Decree of the Ministry of Education SR No. 41/1996 Coll. on Professional and Educational Competence of Educational Staff
- Decree of the Ministry of Education SR No. 42/1996 Coll. on In-service Training of Educational Staff

In the field of the environment:
- Order of the Government SR No. 72/1996 Coll., modifying and amending the Order of the Government SR No. 163/1992 Coll. by which the Qualifications for the Execution of Offices in State Administration Environment Authorities Requiring Professional Qualification are Laid Down.

In the field of fire protection:
- Act No. 126/1985 Coll. on Fire Protection (Article 51)
- Decree of the Ministry of Interior SR No. 82/1996 Coll. by which Certain Provisions of the Act of the Slovak National Council on Fire Protection in the Field of Prevention Are Executed
- Decree of the Ministry of Interior SR No. 83/1996 Coll. by which Certain Provisions of the Act of the Slovak National Council on Fire Protection Relating to Fire Protection Crews Are Executed
- Decree of the Ministry of Interior SR No. 66/1995 Coll. on Secondary Schools of Fire Protection, as amended by the Decree of the Ministry of Interior SR No. 108/1999 Coll.

In the field of civil protection:
- Act No. 42/1994 Coll. on Civil Protection of the Population, as amended

In the field of the power sector:
- Decree of the Ministry of Economy SR No. 366/1998 Coll., by which the Details of Qualification Requirements, Teaching and the Scope of Testing the Professional Qualification, Establishing and Activities of Examination Commissions and Professional Qualification Certificates for Doing Business in Power Sectors Are Regulated

In the field of veterinary care:
- Act No. 337/1998 Coll. on Veterinary Care and on the Modification and Amendment of Certain Other Acts

In the field of forest management:
- Act No. 100/1977 Coll. on Management in Forests and State Administration in Forest Management, as amended

Annex I
Complementary pedagogical study for teachers

Subject	Number of lessons per week	Credits
	Lecture – Seminar	

Parallel study
1st year
Obligatory subjects - winter semester

Pedagogy I	2-000000 C	30
Psychology I	2-000000 E	30

Obligatory subjects - summer semester

Pedagogy II	1.2-0.800000 E	30
Psychology II	1.2-0.800000 E	30
Didactics of Technical Subjects I	2-000000 C	30

Optional subjects - winter semester

School Youth Biology	1.3-000000 E	20
History of Engineering	1.3-000000 E	20

2nd year
Obligatory subjects - winter semester

Didactics of Technical Subjects II	2-000000 E	30

Obligatory subjects - summer semester

Seminar on Pedagogical Practice	0-1.300000C	20
Pedagogical Practice	0-2.600000 MC	40

Optional subjects - winter semester

Adult Education	1.3-000000 E	20
Mental Hygiene	1.3-000000 E	20
Basics of Legal Education	1.3-000000 E	20
Didactic Techniques	1.3-000000 E	20

Part time study
1st year
Obligatory subjects - winter semester

Pedagogy I	2-000000 C	30
Psychology I	2-000000 C	30
Biology of school adolescents	3-000000 E	20

Summer semester

Pedagogy II	2-000000 E	30
Psychology II	2-000000 E	30
Didactics of technical subjects	2-000000 C	30

2nd year
Obligatory subjects - winter semester

Didactics of technical subjects	2-000000 E	30
Seminar on Pedagogical Practice	0-1.300000 C	20
Mental Hygiene	1.3-000000 E	20
Didactic Techniques	1.3-000000 E	20
Pedagogical Practice	0-2.600000 MC	40

Source: Department of Engineering Pedagogy and Psychology, Slovak Technical University Bratislava
Note: C – credit, E – exam, MC – marked credit
Instruction in organised in blocks of 14 weeks in the winter semester and 14 weeks in the summer semester.
At the end of the study students are required to elaborate a final work.
Subjects of final exam: 1. Pedagogy, 2. Psychology, 3. Didactics of VET Subjects

Complementary pedagogical study for trainers*

Subject	1st year (lessons)	2nd year (lessons)	Lessons total
Pedagogy	31	19	50
Psychology	36	19	55
Ecology and Hygiene of Workplace	-	6	6
Social Ethics	12	-	12
Drug Addiction Prevention	-	14	14
Methodology of Instruction	-	10	10
Didactic techniques	10	-	10
Didactics of Vocational Training	12	18	30
Pedagogical Practice -passive	15	-	15
Pedagogical Practice - active	-	8	8
Total	116	94	210

Source: Methodological Centre Bratislava
Note:
At the end of the study students are required to elaborate a final work of 25 to 30 pages which is subject of defending within the final exam. Admission to the final exam supervised by 5-member commission appointed by the Ministry of Education is conditioned by practical presentation (1 lesson) of pedagogical skills in school.
*in the form of Specialising qualification study

Training in leadership

Topics	Lessons
Philosophy and strategy of humanisation of school and education, new trends in pedagogics	30
Basis of management	40
School management, legislation, economy	45
Pedagogical and psychological aspects of education	55
Methodology of pedagogical research	30
Total	200

Source: Methodological Centre Bratislava
Note:
At the end of the study participants are required to elaborate a final work. The study is accomplished by the defence of final work and a final discussion.