

# QUALITY REPORT ON STRUCTURAL STATISTICS ON EARNINGS

**COUNTRY:** Slovak Republic

**STATISTICAL PRODUCT:** Structure of Earnings Survey (SES)

**REFERENCE PERIOD:** 2002

**PERIODICITY OF THE SES STATISTICS:** Annual

**ORGANIZATION RESPONSIBLE FOR THE SURVEY:** Statistical Office of the Slovak Republic (SO SR)

**CO-OPERATING ORGANIZATION:** Infostat Bratislava, Trexima Bratislava, Ltd.

**PERSONS WHO HAVE FILLED THE PRESENT REPORT:** Andrea MATTOVÁ

## PART A

**Structure of earnings survey: grossed up results: tabular analyses  
(1 EURO = 42, 694 SKK)**

**Table 1 Hourly gross earnings of full-time employees by bands and sex**

Band of hourly earnings	Men + women	Men	Women
	(%)	(%)	(%)
Under EUR 1	14,24	8,41	20,27
EUR 1 to under 1,25	13,19	10,21	16,26
EUR 1,25 to under 1,5	15,15	13,23	17,14
EUR 1,5 to under 1,75	13,66	13,26	14,08
EUR 1,75 to under 2	11,32	12,09	10,53
EUR 2 to under 2,25	7,44	9,11	5,72
EUR 2,25 to under 2,5	5,62	6,87	4,33
EUR 2,5 to under 2,75	4,05	5,56	2,49
EUR 2,75 to under 3	3,06	4,05	2,04
EUR 3 to under 3,25	2,38	3,21	1,52
EUR 3,25 to under 3,5	1,71	2,23	1,17
EUR 3,5 and over	8,18	11,79	4,46
<b>Total number of employees</b>	1 513 233	768 854	744 378
<b>Overall arithmetic mean (EUR)</b>	2,04	2,35	1,72
<b>Median value (EUR)</b>	1,63	1,85	1,44

**Table 2 Monthly gross earnings of full-time employees by bands and sex**

Band of monthly earnings	Men + women	Men	Women
	(%)	(%)	(%)
Under EUR 100	0,06	0,07	0,05
EUR 100 to under 150	6,93	4,54	9,40
EUR 150 to under 200	14,95	9,24	20,85
EUR 200 to under 250	16,01	13,77	18,32

EUR 250 to under 300	16,80	15,68	17,95
EUR 300 to under 350	12,77	14,05	11,45
EUR 350 to under 400	9,14	11,17	7,06
EUR 400 to under 450	5,83	7,59	4,02
EUR 450 to under 500	4,35	5,80	2,84
EUR 500 and over	13,16	18,10	8,06
<b>Total number of employees</b>	1 513 233	768 854	744 378
<b>Overall arithmetic mean (EUR)</b>	354	407	300
<b>Median value (EUR)</b>	284	322	253

**Table 3 Annual gross earnings of full-time employees by bands and sex**

Band of annual earnings	Men + women	Men	Women
	(%)	(%)	(%)
Under EUR 1 500	8,55	7,71	9,41
EUR 1 500 to under 2 000	6,16	4,80	7,56
EUR 2 000 to under 2 500	7,96	5,77	10,22
EUR 2 500 to under 3 000	9,55	7,36	11,81
EUR 3 000 to under 3 500	11,43	9,21	13,72
EUR 3 500 to under 4 000	11,74	10,39	13,14
EUR 4 000 to under 4 500	10,15	10,66	9,61
EUR 4 500 to under 5 000	7,66	8,61	6,68
EUR 5 000 to under 5 500	5,37	6,56	4,13
EUR 5 500 to under 6 000	3,91	4,86	2,92
EUR 6 000 to under 6 500	3,20	4,30	2,06
EUR 6 500 and over	14,33	19,75	8,73
<b>Total number of employees</b>	1 513 233	768 854	744 378
<b>Overall arithmetic mean (EUR)</b>	4580	5250	3889
<b>Median value (EUR)</b>	3 771	4 209	3 395

**Table 4 Annual holidays of full-time employees by bands and sex**

Band of annual holidays	Men + women	Men	Women
	(%)	(%)	(%)
< 10 days	19,86	18,13	21,64
10 – 19 days	18,12	19,35	16,84
20 – 24 days	22,45	23,46	21,40
25 – 29 days	25,12	24,13	26,15
30 – 34 days	8,41	9,09	7,71
≥ 35 days	6,04	5,84	6,25
<b>Total number of employees</b>	1 513 233	768 854	744 378
<b>Overall arithmetic mean (day)</b>	20,0	20,3	19,8
<b>Median value (day)</b>	22,0	22,0	22,0

**Table 5 Monthly hours worked of full-time employees by bands and sex**

Band of monthly hours worked	Men + women	Men	Women
	(%)	(%)	(%)
< 140 hours	3,84	3,70	3,99
140 – 149 hours	3,57	4,01	3,13
150 – 159 hours	6,07	7,20	4,90
160 – 169 hours	7,64	8,25	7,00
170 – 179 hours	33,84	31,23	36,53
180 – 189 hours	39,16	39,30	39,01
≥ 190 hours	5,88	6,30	5,44

<b>Total number of employees</b>	1 513 233	768 854	744 378
<b>Overall arithmetic mean (hour)</b>	174,6	174,5	174,8
<b>Median value (hour)</b>	175,5	176,0	174,8

**Table 6 Number of full-time employees by economic activity and sex**

NACE Rev. 1 section	Men + women	Men	Women
	(%)	(%)	(%)
C Mining and quarrying	1,03	1,74	0,29
D Manufacturing	28,60	33,43	23,60
E Electricity, gas and water supply	1,94	2,92	0,94
F Construction	5,23	8,85	1,49
G Wholesale and retail trade ...	12,80	13,12	12,47
H Hotels and restaurants	1,12	0,81	1,44
I Transport, storage and communication	18,62	17,53	19,75
J Financial intermediation	1,50	1,14	1,87
K Real estate, renting and business activities	6,03	6,45	5,61
L Public administration and defence ...	4,77	3,19	6,39
M Education	6,86	3,84	9,97
N Health and social work	7,76	3,07	12,61
O Other community activities ...	3,74	3,92	3,55
<b>Total number of employees</b>	<b>1 513 233</b>	<b>768 854</b>	<b>744 378</b>

**Table 7 Number of full-time employees by occupation and sex**

Occupation by ISCO-88 (COM)	Men + women	Men	Women
	(%)	(%)	(%)
MAJOR GROUP 1	6,54	8,08	4,95
MAJOR GROUP 2	12,64	10,96	14,37
MAJOR GROUP 3	23,65	17,87	29,63
MAJOR GROUP 4	11,29	4,95	17,83
MAJOR GROUP 5	6,92	4,42	9,50
MAJOR GROUP 6	0,11	0,10	0,13
MAJOR GROUP 7	17,17	26,66	7,37
MAJOR GROUP 8	14,84	21,49	7,97
MAJOR GROUP 9	6,84	5,47	8,26
<b>Total number of employees</b>	<b>1 513 233</b>	<b>768 854</b>	<b>744 378</b>

**Table 8 Number of full-time employees by education and sex**

Education by ISCED 97	Men + women	Men	Women
	(%)	(%)	(%)
ISCED 2	8,46	5,51	11,51
ISCED 3	68,17	69,75	66,55
ISCED 5B	4,33	4,33	4,32
ISCED 5A	18,31	19,29	17,29
ISCED 6	0,73	1,12	0,33
<b>Total number of employees</b>	<b>1 513 233</b>	<b>768 854</b>	<b>744 378</b>

**Table 9 Number of full-time employees by age and sex**

Age band	Men + women	Men	Women
	(%)	(%)	(%)
Up to 19 years	0,53	0,48	0,59
20 – 24 years	8,49	8,48	8,50
25 – 29 years	13,22	14,41	12,00
30 – 34 years	12,11	12,69	11,51
35 – 39 years	13,96	13,24	14,70
40 – 44 years	14,40	12,71	16,15
45 – 49 years	15,91	14,02	17,87
50 – 54 years	14,08	13,17	15,02
55 – 59 years	5,92	8,63	3,11
60 years and over	1,37	2,18	0,54
<b>Total number of employees</b>	<b>1 513 233</b>	<b>768 854</b>	<b>744 378</b>
<b>Overall arithmetic mean (year)</b>	<b>39,7</b>	<b>39,9</b>	<b>39,5</b>
<b>Median value (year)</b>	<b>40,0</b>	<b>40,0</b>	<b>40,0</b>

**Table 10 Number of full-time employees by length and sex**

Band of length of service	Men + women	Men	Women
	(%)	(%)	(%)
< 5 years	42,78	45,13	40,35
5 – 10 years	23,74	23,63	23,85
10 – 15 years	11,61	10,39	12,87
15 – 20 years	6,42	5,55	7,32
20 – 25 years	5,30	4,80	5,81
25 – 30 years	4,59	4,50	4,68
30 – 35 years	3,89	3,77	4,02
30 – 40 years	1,45	1,82	1,07
≥ 40 years	0,23	0,41	0,04
<b>Total number of employees</b>	<b>1 513 233</b>	<b>768 854</b>	<b>744 378</b>
<b>Overall arithmetic mean (year)</b>	<b>9,0</b>	<b>8,8</b>	<b>9,2</b>
<b>Median value (year)</b>	<b>6,0</b>	<b>5,0</b>	<b>6,0</b>

**Table 11 Hourly gross earnings of part-time employees by bands and sex**

Band of hourly earnings	Men + women	Men	Women
	(%)	(%)	(%)
Under EUR 1	48,42	37,13	51,11
EUR 1 to under 1,25	19,54	15,43	20,52
EUR 1,25 to under 1,5	12,35	13,84	11,99
EUR 1,5 to under 1,75	7,53	11,00	6,70
EUR 1,75 to under 2	5,30	7,27	4,84
EUR 2 to under 2,25	1,98	3,93	1,52
EUR 2,25 to under 2,5	1,35	3,40	0,87
EUR 2,5 to under 2,75	1,11	2,11	0,87
EUR 2,75 to under 3	0,75	1,23	0,64
EUR 3 to under 3,25	0,42	1,19	0,23
EUR 3,25 to under 3,5	0,26	0,82	0,12
EUR 3,5 and over	0,98	2,64	0,58

<b>Total number of employees</b>	104 461	20 083	84 378
<b>Overall arithmetic mean (EUR)</b>	1,22	1,47	1,16
<b>Median value (EUR)</b>	1,02	1,21	0,99

**Table 12 Monthly gross earnings of part-time employees by bands and sex**

Band of monthly earnings	Men + women	Men	Women
	(%)	(%)	(%)
Under EUR 100	29,52	35,34	28,14
EUR 100 to under 150	34,06	23,11	36,67
EUR 150 to under 200	19,48	16,27	20,24
EUR 200 to under 250	8,86	10,20	8,54
EUR 250 to under 300	4,27	6,16	3,82
EUR 300 to under 350	1,89	4,05	1,38
EUR 350 to under 400	0,65	1,44	0,47
EUR 400 to under 450	0,39	1,32	0,17
EUR 450 to under 500	0,38	0,85	0,27
EUR 500 and over	0,50	1,26	0,31
<b>Total number of employees</b>	104 461	20 083	84 378
<b>Overall arithmetic mean (EUR)</b>	146	162	142
<b>Median value (EUR)</b>	130	131	130

**Table 13 Annual gross earnings of part-time employees by bands and sex**

Band of annual earnings	Men + women	Men	Women
	(%)	(%)	(%)
Under EUR 1 500	42,32	51,69	40,09
EUR 1 500 to under 2 000	13,08	11,20	13,53
EUR 2 000 to under 2 500	12,29	9,16	13,03
EUR 2 500 to under 3 000	12,39	6,32	13,83
EUR 3 000 to under 3 500	9,10	6,66	9,68
EUR 3 500 to under 4 000	5,63	5,52	5,66
EUR 4 000 to under 4 500	2,88	3,78	2,67
EUR 4 500 to under 5 000	0,89	1,86	0,66
EUR 5 000 to under 5 500	0,32	0,79	0,21
EUR 5 500 to under 6 000	0,30	0,95	0,15
EUR 6 000 to under 6 500	0,19	0,51	0,11
EUR 6 500 and over	0,61	1,56	0,38
<b>Total number of employees</b>	104 461	20 083	84 378
<b>Overall arithmetic mean (EUR)</b>	1 954	1 935	1 958
<b>Median value (EUR)</b>	1784	1439	1851

**Table 14 Annual holidays of part-time employees by bands and sex**

Band of annual holidays	Men + women	Men	Women
	(%)	(%)	(%)
< 10 days	31,36	38,89	29,57
10 – 19 days	12,79	17,15	11,75
20 – 24 days	18,56	18,30	18,63
25 – 29 days	29,52	15,71	32,81
30 – 34 days	4,42	4,36	4,44
≥ 35 days	3,33	5,59	2,80
<b>Total number of employees</b>	104 461	20 083	84 378
<b>Overall arithmetic mean (day)</b>	17,1	15,5	17,5
<b>Median value (day)</b>	20,0	18,0	21,0

**Table 15 Monthly hours worked of part-time employees by bands and sex**

Band of monthly hours worked	Men + women	Men	Women
	(%)	(%)	(%)
< 140 hours	65,37	75,71	62,91
140 – 149 hours	14,53	6,42	16,46
150 – 159 hours	4,36	5,51	4,09
160 – 169 hours	11,72	6,18	13,04
170 – 179 hours	3,30	4,65	2,98
180 – 189 hours	0,55	0,97	0,45
≥ 190 hours	0,16	0,55	0,07
<b>Total number of employees</b>	<b>104 461</b>	<b>20 083</b>	<b>84 378</b>
<b>Overall arithmetic mean (hour)</b>	<b>121,8</b>	<b>111,7</b>	<b>124,2</b>
<b>Median value (hour)</b>	<b>126,5</b>	<b>97,8</b>	<b>128,8</b>

**Table 16 Number of part-time employees by economic activity and sex**

NACE Rev. 1 section	Men + women	Men	Women
	(%)	(%)	(%)
C Mining and quarrying	0,02	0,06	0,01
D Manufacturing	6,48	9,22	5,83
E Electricity, gas and water supply	0,28	0,68	0,18
F Construction	1,34	3,03	0,93
G Wholesale and retail trade ...	12,00	18,47	10,46
H Hotels and restaurants	0,23	1,05	0,03
I Transport, storage and communication	42,35	18,32	48,07
J Financial intermediation	0,22	0,72	0,10
K Real estate, renting and business activities	3,30	5,49	2,78
L Public administration and defence ...	10,46	10,09	10,54
M Education	16,57	25,00	14,56
N Health and social work	4,55	4,21	4,64
O Other community activities ...	2,21	3,66	1,86
<b>Total number of employees</b>	<b>104 461</b>	<b>20 083</b>	<b>84 378</b>

**Table 17 Number of part-time employees by occupation and sex**

Occupation by ISCO-88 (COM)	Men + women	Men	Women
	(%)	(%)	(%)
MAJOR GROUP 1	3,61	3,44	3,65
MAJOR GROUP 2	12,83	26,07	9,68
MAJOR GROUP 3	7,11	5,11	7,59
MAJOR GROUP 4	40,70	21,97	45,16
MAJOR GROUP 5	14,87	11,09	15,76
MAJOR GROUP 6	0,04	0,20	0,01
MAJOR GROUP 7	3,33	7,48	2,34
MAJOR GROUP 8	3,96	13,22	1,75
MAJOR GROUP 9	13,55	11,43	14,05
<b>Total number of employees</b>	<b>104 461</b>	<b>20 083</b>	<b>84 378</b>

**Table 18 Number of part-time employees by education and sex**

Education by ISCED 97	Men + women	Men	Women
	(%)	(%)	(%)
ISCED 2	19,58	12,28	21,32
ISCED 3	64,00	55,54	66,01
ISCED 5B	1,85	2,66	1,65
ISCED 5A	14,06	28,71	10,57
ISCED 6	0,51	0,80	0,44
<b>Total number of employees</b>	<b>104 461</b>	<b>20 083</b>	<b>84 378</b>

**Table 19 Number of part-time employees by age and sex**

Age band	Men + women	Men	Women
	(%)	(%)	(%)
Up to 19 years	1,02	1,38	0,93
20 – 24 years	5,76	8,66	5,07
25 – 29 years	9,68	8,45	9,97
30 – 34 years	11,12	8,54	11,73
35 – 39 years	13,78	7,34	15,31
40 – 44 years	13,82	8,27	15,15
45 – 49 years	17,11	20,73	16,25
50 – 54 years	13,92	12,61	14,23
55 – 59 years	7,24	11,45	6,24
60 years and over	6,55	12,58	5,12
<b>Total number of employees</b>	<b>104 461</b>	<b>20 083</b>	<b>84 378</b>
<b>Overall arithmetic mean (year)</b>	<b>42</b>	<b>44</b>	<b>42</b>
<b>Median value (year)</b>	<b>43</b>	<b>45</b>	<b>42</b>

**Table 20 Number of part-time employees by length and sex**

Band of length of service	Men + women	Men	Women
	(%)	(%)	(%)
< 5 years	52,40	62,35	50,03
5 – 10 years	16,79	15,46	17,10
10 – 15 years	14,02	10,00	14,98
15 – 20 years	6,43	2,89	7,27
20 – 25 years	4,08	1,65	4,66
25 – 30 years	2,44	1,94	2,56
30 – 35 years	2,36	3,12	2,18
30 – 40 years	1,19	1,81	1,04
≥ 40 years	0,29	0,78	0,17
<b>Total number of employees</b>	<b>104 461</b>	<b>20 083</b>	<b>84 378</b>
<b>Overall arithmetic mean (year)</b>	<b>7</b>	<b>6</b>	<b>8</b>
<b>Median value (year)</b>	<b>4</b>	<b>4</b>	<b>3</b>

## **PART B**

### **1. RELEVANCE**

During 2003 the Statistical Office of the Slovak Republic has been organizing the Structure of Earning Survey (SES) in the SR 2002. The SES is a continuous survey, with data processing and publication of the results being carried out every year. It followed after similar surveys which have been conducted for the years 1996 –2001. The survey was carried out within the Eurostat Phare project Statistics on earnings and labour costs.

Methodology of the SES, being developed on the basis of Eurostat's recommendations, is based on the Council Regulation (EC) N° 530/1999 concerning structural statistics on earnings and on labour costs, the Commission Regulation (EC) N° 1916/2000 concerning the definition and transmission of information on structure of earnings and the Commission Regulation (EC) N° 72/2002 concerning quality evaluation of structural statistics on earnings. The requirements of the Slovak government and its central bodies have been also taken into the consideration.

Since 2002, the SES has been joined with a quarterly statistical sample survey – Average earnings information system. This survey is carried out by the Ministry of Labour, Social Affairs and Family of the Slovak Republic in cooperation with the SO SR on the base of the Government regulation N° 43/1997 and is related to the realisation draft of the Labour Price Conception Project and to the Regulation N° 613/2002, which declares the Programme of the National Statistical Surveys for years 2003 - 2005.

#### **The SES outputs users:**

##### **Multinational organisations:**

EUROSTAT Directorate D: Social statistics, Unit D-1 Labour market , ILO, OECD, World Bank - to compare situation in earnings at the international level

##### **Official national level:**

Parliament, Government, Ministries (the Ministry of Finance, the Ministry of Labour, Social Affairs and Family of the Slovak Republic and other ministries), the Social insurance agency – to use these outputs for the evaluation of the state and development of society from macro and micro level. They realize the analyses and forecast of earnings development for a budgetary policy-making. The forecast of taxes, that is a direct input (budget revenues) for the state budget. Data classified by gender are used for implementation of the principle of equal treatment for men and women as regards access to employment, vocational training and working conditions.



<b>Statistical level:</b>	Statistical Office of the Slovak Republic, Infostat – Institute of informatics and statistics- to use the SES outputs for special earnings analyses.
<b>Social actors:</b>	Trade unions, Employer’s associations – to use the data for the control of keeping employee´s and employer´s rights and duties.
<b>Researches, students:</b>	Universities – to use the data for production of the study materials, the graduation theses, doctoral thesis and research purposes.
<b>Media:</b>	Press agencies, newspapers – to inform public about the earnings situation and development in the Slovak Republic.

## 2. ACCURACY

### 2.1.1.2. Variance

Coefficients of variation were calculated by the following formula:

$$V_k = \frac{\sqrt{\hat{D}(\bar{x})}}{\bar{x}} \cdot 100 = \frac{\sqrt{\sum_{n=1}^m \frac{N_n \cdot (N_n - n_n)}{N^2} \cdot \frac{s_n^2}{n_n}}}{\frac{1}{N} \cdot \sum_{n=1}^m \frac{N_n}{n_n} \cdot \sum_{i=1}^{n_n} x_{ni}} \cdot 100$$

where

$$s_n^2 = \frac{1}{n_n - 1} \cdot \sum_{i=1}^{n_n} (x_{ni} - \bar{x}_n)^2$$

$\hat{D}(\bar{x}) = \text{point estimate}$

$N_n$  - the number of units in the stratum n of the universe

$N = \sum_{n=1}^m N_n$  - the number of units in the universe total

$m$  - the number of stratum

$n_n$  - the number of units in stratum n of the sample

$\bar{x}$  - arithmetical mean

$x_{ni}$  - mean per individual unit

$\bar{x}_n$  - mean in stratum n

**Table 21 Coefficients of variation concerning total gross monthly earning and monthly hours for full-time employees broken down by NACE Rev. 1 section and by sex**

NACE Rev. 1 section	gross monthly earnings		monthly hours	
	men	women	men	women
C Mining and quarrying	0,56	1,75	0,10	0,23
D Manufacturing	0,19	0,17	0,02	0,02
E Electricity, gas and water supply	0,24	0,43	0,04	0,08
F Construction	0,55	1,16	0,06	0,15
G Wholesale and retail trade ...	1,39	1,39	0,09	0,07
H Hotels and restaurants	3,58	2,05	0,29	0,29
I Transport, storage and communication	0,32	0,44	0,03	0,04
J Financial intermediation	2,67	1,98	0,10	0,07
K Real estate, renting and business activities	1,32	1,01	0,08	0,10
L Public administration and defence ...	0,92	0,46	0,10	0,07
M Education	0,68	0,39	0,07	0,06
N Health and social work	0,51	0,17	0,05	0,03
O Other community activities ...	1,15	1,27	0,10	0,14

**Table 22 Coefficients of variation concerning total gross monthly earning and monthly hours for full-time employees broken down by occupation (ISCO-88) and by sex**

Occupation by ISCO-88 (COM)	gross monthly earnings		monthly hours	
	men	women	men	women
MAJOR GROUP 1	1,20	2,21	0,06	0,08
MAJOR GROUP 2	0,63	0,58	0,04	0,05
MAJOR GROUP 3	0,41	0,34	0,04	0,03
MAJOR GROUP 4	1,83	1,09	0,09	0,05
MAJOR GROUP 5	1,27	1,28	0,07	0,05
MAJOR GROUP 6	1,91	1,61	0,51	0,56
MAJOR GROUP 7	0,14	0,19	0,03	0,05
MAJOR GROUP 8	0,19	0,16	0,03	0,04
MAJOR GROUP 9	0,30	0,24	0,06	0,05

**Table 23 Coefficients of variation concerning total gross monthly earning and monthly hours for full-time employees broken down by age band and by sex**

Age band	gross monthly earnings		monthly hours	
	men	women	men	women
15 – 24 years	0,45	0,79	0,05	0,06
25 – 54 years	0,21	0,28	0,02	0,02
55 – 64 years	0,56	1,27	0,05	0,09
≥ 65 years	4,56	4,88	0,24	0,50

**Table 24 Coefficients of variation concerning total gross monthly earning and monthly hours for part-time employees broken down by NACE Rev. 1 section and by sex**

NACE Rev. 1 section	gross monthly earnings		monthly hours	
	men	women	men	women
C Mining and quarrying	-	9,93	-	7,77
D Manufacturing	4,32	1,41	1,22	0,60
E Electricity, gas and water supply	10,46	2,94	1,84	1,26
F Construction	13,77	5,95	2,51	2,47
G Wholesale and retail trade ...	1,37	1,08	0,51	0,27
H Hotels and restaurants	14,77	34,64	6,52	18,83
I Transport, storage and communication	2,87	0,58	1,21	0,32
J Financial intermediation	30,21	14,52	5,85	2,39
K Real estate, renting and business activities	5,84	3,40	2,36	1,20
L Public administration and defence ...	2,90	1,09	1,44	0,63
M Education	1,98	1,17	1,23	0,82
N Health and social work	3,74	1,29	1,78	0,65
O Other community activities ...	6,32	7,01	2,08	1,83

**Table 25 Coefficients of variation concerning total gross monthly earning and monthly hours for part-time employees broken down by occupation (ISCO-88) and by sex**

Occupation by ISCO-88 (COM)	gross monthly earnings		monthly hours	
	men	women	men	women
MAJOR GROUP 1	8,79	3,70	2,71	1,23
MAJOR GROUP 2	2,47	2,03	1,23	1,10
MAJOR GROUP 3	3,62	1,06	1,94	0,60
MAJOR GROUP 4	3,02	0,74	0,97	0,29
MAJOR GROUP 5	1,73	1,50	0,74	0,41
MAJOR GROUP 6	5,07	19,66	6,93	11,15
MAJOR GROUP 7	3,13	1,88	1,36	0,93
MAJOR GROUP 8	3,00	1,75	1,63	1,06
MAJOR GROUP 9	2,73	0,81	1,14	0,52

**Table 26 Coefficients of variation concerning total gross monthly earning and monthly hours for part-time employees broken down by age band and by sex**

Age band	gross monthly earnings		monthly hours	
	men	women	men	women
15 – 24 years	1,66	1,90	0,67	0,53
25 – 54 years	1,71	0,63	0,69	0,23
55 – 64 years	3,21	2,30	1,19	0,81
≥ 65 years	5,32	4,42	1,81	1,62

The coefficients of variation for full-time employees broken down by NACE Rev. 1, occupation, age groups and by sex (Tables 21,22,23) are low.

The coefficients of variation for part-time employees broken down by NACE Rev. 1, occupation, age groups and by sex (Tables 24,25,26) are higher than those related to full-time employees. The main reason of these high values is that employees in Slovakia highly prefer full-time job rather than part-time job. This fact influences the low share of employees working in part-time job in the sample.

### **2.1.2. Non – probability sampling**

Non – probability sampling was not used in the 2002 SES.

## **2.2 Non - sampling errors**

### **2.2.1. Coverage errors**

Population consisted of all legal subjects with one and more employees, that are registered in the Registers of organizations and establishments (i.e. local kind-of-activity units), kept by the Statistical Office of the Slovak Republic. The set covers profit and non-profit organizations in all economic branches of the Slovak Republic. As of the end of 2002 the sample frame comprised 56 672 legal statistical units.

The sample was created by using the statistical method of a random sampling within stratum with estimated number of inactive units. The sample consisted of 2500 statistical units. Units with more than 500 employees were fully included.

The coverage errors were caused by inaccurate data which were provided by the statistical units to the Registers of organizations and establishments. In some cases the questionnaires included different identification data (e.g. economic activity, size, region) on surveyed statistical units as compared to the Register. Some of them were not included as their changes had not been announced to the Register. Some data from sample units were not included also for the following reasons – liquidation, bankruptcy, units had not any employee, due to unknown address.

### **2.2.2. Measurement errors**

As we have had some experiences with the data collection since 1996, we consider nowadays the errors of measurement as negligible. During a stage of data collection for the 2002 SES, new variables were added according to the Regulation (EC) N° 1916/2000.

System of data collection in the 2002 SES depended on technical conditions of reporting units.

The data collection was undertaken by one of the ways, as follows.

- a) An automatic data export from employer's accounting software in a electronic format.
- b) An accountant fills in an electronic form of the questionnaire by hand. Data are saved into attached diskette in the Excel file.
- c) Data are collected through a questionnaire. Each of responding units receives by post a package with the sealed-letter containing basic information on the survey, the diskette for data recording with a manual, the questionnaire, the list of classifications and codes. This

system of data collection is negligible (in 2002 used this way only 160 small – size units from 2294 recorded units).

The inputs are divided into two files:

- A- inputs related to local kind -of- activity units
- B- inputs related to employees

The data collection errors occurred directly from bookkeeping software.

Sometimes a different number of employees was recorded in the file A (the total number of employees in the local kind -of- activity unit) in comparison with total number of employees in the file B. The data were requested repeatedly and corrected. The data were evaluated and revised on basis of Global Checks a Plausibility Checks, indicated in Eurostat's arrangements for the implementation of both, the Regulation (EC) N° 530/1999 and the Regulation (EC) N° 1916/2000.

#### **2.2.4 Non- response errors**

Sample in the year 2002 - **2 500 units**

Returned statistical questionnaires: **2 294**

Non response: **206**

Response rate: **91,76 %**

#### ***Response rate for the selected variables:***

Regulation Code	Variable	Response rate per cent
2.1	Sex	99,25
2.2	Age	99,86
2.3	Occupation	92,58
2.5	Highest completed level of education and training	88,57
2.6	Length of service in the enterprise	82,63
2.7	Full-time or part-time employees	99,25
2.8	Type of employment contract	93,82
3.1	Total gross earnings in the reference month	98,70
3.2	Total gross annual earnings in the reference year	98,22
3.2.1.	Number of weeks to which the gross annual earnings relate	99,70
3.5.1	Annual days of holiday leave	90,29
3.4	Number of hours paid during the representative month	99,20

Some assistance was offered, if necessary, by the processing organization in cooperation with the Statistical Office of the Slovak Republic, namely by visits of reporting units – directly in the office or by telephone. This support consisted particularly of consultations and

explanation concerning methodology, definitions of variables, compilation and recording of data. After gathering and recording of data the controls were undertaken, which were focused on quantity – filling every needed indicator as well as on quality – correctness of indicators. Problematic statistical questionnaires were operatively solved, suspicious and missing data were verified by phone. Therefore, the response rate for surveyed variables was high.

Data from 206 units were not included in the survey as they did not announce changes in their main activity to the register of the SO SR. Out of 206 units 30 were in liquidation, 27 units in bankruptcy, 43 units did not employ any employee, 88 diskettes (questionnaires) were returned blank due to unknown addressee and 18 units refused to provide the data.

### **2.2.5. Model assumption errors**

The collected data related to the calendar year. The selection of the representative month was ensured according to the Regulation (EC) N<sup>o</sup> 1916/2000's and data were provided for October 2002.

All the size groups of enterprises (incl. units with less than 10 employees) were covered.

Data submitted to the users in Slovakia cover all branches according to the national classification of economic activities OKEČ and they are classified at 1 and 2 digit level, which is compatible with NACE Rev 1. Data submitted to Eurostat were provided for sections C – 0.

All data were surveyed directly from the SES.

## **3. TIMELINESS AND PUNCTUALITY**

### **Phases and of data collection:**

- Preparation of the survey and realization of an electronic collection of the extended data- entry file - 9 December 2002.
- Selection and creation of the representative sample of the statistical units from the Register of organizations and establishments (i.e. local kind-of-activity units) – 12 December 2002.
- Elaboration and preparation of the methodological materials for the statistical units – 16 December 2002.
- Development of the informational system and preparation of new software in relation to the new structure of data –entry – from 16 November 2002 to 30 February 2003.
- Delivery of methodological materials and technical data media for selected statistical units - 23. December 2002.

- Consultations and provision of professional help for statistical units for preparation and the automated data collection. Realization of the collection and complex controls of data – entry accuracy and data integrity, which were collected from the statistical units. Evidence of delivered floppy diskettes and questionnaires, evidence of non - response – from 1 January to 28 February 2003.
- Analyze of received sample of the statistical units in terms of compliance with the representation, evaluation of the statistical characteristics by classification attributes – 15 March 2003.
- Follow-up, re-calling the absent statistical units and definitive end of the data collection – 30 April 2003.
- Consolidation and testing of accuracy and completeness of data – entry from the floppy diskettes or questionnaires into software Black- box II. and data processing for the sample – 30 June 2003.
- Preparation and realization of grossing – up procedures on Register of organizations and establishments in the Slovak Republic, data processing - 5 September 2003.
- Release of the publication –Structure of Earnings in Slovak Republic in 2002 (Slovak and English version) – November 2003
- Realization and submission of the micro-data to Eurostat - June 2004
- Elaboration of the Quality Report on the structural statistics on earnings according to the Commission Regulation (EC) N<sup>o</sup> 72/2002 – 23 December 2004

#### **4. ACCESSIBILITY AND CLARITY**

1. The annual publication (Slovak version) is provided to the National Council, all central bodies, trade unions and employer's associations, universities and research institutes. English version of publication was submitted to Eurostat, ILO, World Bank, OECD and other international institutions. Publications include metadata, data and graphs.
2. Micro-data in the electronic transmission format were sent to Eurostat this year.
3. The SES regional data with further economic and social indicators are available in the publication Regional Comparisons in the Slovak Republic.
4. Key information on annual national data were issued in two publications: Statistical Yearbook and Social trends in the Slovak Republic.
6. The SES data were used also for the ILO October inquiry.
7. On the basis of the SES data the structural indicator Gender Pay Gap has been calculated.

The Information Service Unit of the SO SR performs direct sales in the shop. Electronic form of publications is provided through the Electronic Information Service (ELIS). It is possible to send the order with requested publication titles by e-mail to the address [ELIS@infostat.sk](mailto:ELIS@infostat.sk) or through Internet [www.infostat.sk/elis](http://www.infostat.sk/elis).

The "Catalogue of publications" is on the Internet website of the Statistical Office of the SR [www.statistics.sk](http://www.statistics.sk)

## 5. COMPARABILITY

### 5.1 Geographical comparability

The 2002 SES is based on a sample of employees drawn from a stratified sample of statistical units. The Statistical Office of the Slovak Republic had to use a different statistical unit for the SES 2002 - the local kind-of-activity unit. The establishment of the register of local units is now in the stage of preparation. This register was not available at term necessary for sample creating. With the aim to ensure quality of the SES results it was better to continue in the present way with the local kind-of-activity units defined in the Regulation (EC) N° 696/93 on statistical units. The local units will be implemented in the 2006 SES.

Partial differences in the structure of earnings in the Slovak Republic in comparison with the European Union result from the specific character of the Slovak wage system (for example bonuses for being on call to work, premiums relate to profit sharing and payment in kind are not included into earnings). For this reason we have prepared two versions of outputs- the survey outputs corresponding mainly with demand of the Slovak users and the survey outputs based on the Eurostat's requirements comparable with Community statistics on the level and structure of earnings on the basis of list of variables published in the Regulation (EC) N° 1916/2000.

### 5.2. Comparability over time

Since 2002, the SES has been interconnected with the quarterly statistical sample survey – Average earnings information system. The enlarging of the number of the statistical units occurred during the creation of the sample in 2002. Scope of the sample has been enlarged from 2004 units in 2001 to 2500 units in 2002. The enlargement of the sample was realized for the provision of higher data representativeness, comparability and completeness on the territorial basis as the SES data are used also in the regional statistics.

Structure of earnings was adapted according to the Regulation (EC) N° 1916/2000. The survey SES was enlarged by variables, as follows:

- 1.5 Collective Pay Agreement
- 2.6 Length of services in the enterprise
- 2.7.1 % share of a full - timer's normal hours
- 2.8 Type of employment contract
- 3.0 Average gross hourly earnings
- 3.1 Total gross earnings in the reference month
  - 3.1.1 Earnings related to overtime
  - 3.1.2 Special payments for shift work
- 3.2.1 Number of weeks to which the gross annual earnings relate
- 3.4 Number of hours paid during the representative month
  - 3.4.1 Number of overtime hours paid in the representative month
- 3.5 Annual days of absence
  - 3.5.1 Annual days of holiday leave
    - 3.5.1.1 Normal annual holiday entitlement (E) *or* Days of leave actually taken (T)



3.5.2 Annual days of sick leave

3.5.3 Annual days of vocational training

## 6. COHERENCE

### 6.1. Coherence with the structure of employees in the Labour Force Survey for the same reference period (2002)

#### Definition of employees by LFS

**Employees** - persons aged 15 years and more who work at least one hour for a public or private employer and who receive compensation in the form of wages or salaries, including members of productive co-operatives, persons on community service and professionals in military service. Data on employed include persons not working in the reference year due to illness, holiday, maternity leave, study, weather conditions and strike or dispute, except persons on long-term unpaid leave from work and persons on parental leave.

#### Definition of employees by SES

**Employees** - all persons defined in the Regulation (EC) N° 1916/2000.

**The percentages of the employees SES out of the employees LFS :**

**Table 27 The distribution of full-time employees in the SES and LFS by sex, age and economic activity**

NACE Rev. 1 section	Age (number of years)								per cent
	15 - 24		25 - 54		55 - 64		65 or more		
	Men	Women	Men	Women	Men	Women	Men	Women	
C	12,27	-	75,56	141,98	57,86	-	5,20	-	
D	55,64	53,73	82,29	82,46	114,65	130,74	84,85	16,47	
E	49,91	55,12	57,17	98,56	92,19	220,34	35,56	-	
F	32,20	58,96	52,35	122,47	92,07	151,37	-	-	
G	86,16	71,73	120,72	65,69	243,75	144,13	242,58	-	
H	17,54	15,40	31,16	31,81	58,24	155,14	-	-	
I	208,57	680,57	137,35	320,46	137,04	373,68	120,45	-	
J	84,87	84,14	74,16	55,43	67,70	57,07	-	-	
K	49,13	49,40	98,23	153,44	303,92	244,96	286,28	113,45	
L	11,21	32,97	30,44	65,39	93,16	114,02	73,46	-	
M	62,16	48,77	84,52	58,68	87,32	94,00	586,96	227,11	
N	20,75	56,01	95,71	84,37	165,28	143,25	191,15	-	
O	50,01	45,16	88,01	88,45	106,82	127,70	-	-	
<b>Total number of employees</b>	<b>55,64</b>	<b>66,37</b>	<b>82,43</b>	<b>88,42</b>	<b>120,23</b>	<b>139,84</b>	<b>244,79</b>	<b>287,18</b>	

**Table 28 The distribution of full-time employees in the SES and LFS by sex, age and educational level**

per cent

Education by ISCED 97	Age (number of years)							
	15 - 24		25 - 54		55 - 64		65 or more	
	Men	Women	Men	Women	Men	Women	Men	Women
ISCED 2	70,98	220,52	98,93	144,50	116,20	145,74	244,07	361,59
ISCED 3	50,72	55,33	63,00	70,12	81,76	98,37	127,49	358,37
ISCED 5B	492,00	414,12	745,12	329,13	-	133,20	187,63	-
ISCED 5A	46,95	38,09	129,27	112,22	157,36	251,95	244,57	134,14
ISCED 6	-	-	907,58	124,12	313,32	72,04	-	-
Total number of employees	53,14	61,85	75,82	83,57	105,36	127,57	194,09	287,18

**Table 29 The distribution of full-time employees in the SES and LFS by sex, age and occupation**

per cent

Occupation by ISCO-88 (COM)	Age (number of years)							
	15 - 24		25 - 54		55 - 64		65 or more	
	Men	Women	Men	Women	Men	Women	Men	Women
MAJOR GROUP 1	21,97	54,16	131,36	145,99	209,56	173,04	148,80	-
MAJOR GROUP 2	78,66	77,58	134,57	86,45	136,30	158,69	-	124,48
MAJOR GROUP 3	120,74	97,08	90,24	96,13	113,97	111,03	74,43	77,40
MAJOR GROUP 4	97,04	104,05	91,86	139,73	125,92	364,08	-	-
MAJOR GROUP 5	26,46	24,08	40,82	40,55	93,63	76,28	-	-
MAJOR GROUP 6	4,00	3,62	8,13	8,42	16,07	7,67	-	-
MAJOR GROUP 7	46,42	69,30	74,27	94,05	89,28	138,10	109,17	-
MAJOR GROUP 8	62,02	39,62	71,93	87,05	96,94	200,67	170,43	-
MAJOR GROUP 9	25,33	42,10	39,80	63,56	60,87	110,73	132,72	400,42
Total number of employees	54,00	62,63	76,74	84,42	105,70	131,59	208,13	287,18

**Table 30 The distribution of part-time employees in the SES and LFS by sex, age and economic activity**

per cent

NACE Rev. 1 section	Age (number of years)							
	15 - 24		25 - 54		55 - 64		65 or more	
	Men	Women		Women	Men	Women	Men	Women
C	-	-	-	-	-	-	-	-
D	185,56	-	52,98	107,40	59,91	75,66	-	-
E	-	-	-	-	-	-	-	-
F	-	-	182,41	186,05	240,75	-	-	-
G	-	329,51	638,21	294,29	-	12,77	-	13,22
H	0,00	3,68	47,42	1,49	-	0,00	-	-
I	-	-	408,99	-	229,39	-	-	-
J	-	-	-	4,62	5,93	-	-	-
K	4,72	3,83	127,80	171,01	-	120,50	42,53	54,07

L	-	109,60	775,62	464,53	87,54	496,81	-	306,08
M	164,90	161,77	340,87	206,81	455,59	-	376,85	-
N	-	24,05	384,62	247,62	-	295,13	-	-
O	10,10	54,58	67,61	205,12	-	40,09	64,19	60,55
Total number of employees	131,22	202,92	226,30	360,48	194,21	222,24	125,37	215,34

**Table 31 The distribution of part-time employees in the SES and LFS by sex, age and educational level**

per cent

Education by ISCED 97	Age (number of years)							
	15 - 24		25 - 54		55 - 64		65 or more	
	Men	Women	Men	Women	Men	Women	Men	Women
ISCED 2	-	250,55	588,86	311,46	90,07	551,18	-	247,49
ISCED 3	103,02	169,34	132,36	301,83	93,55	141,41	39,46	99,74
ISCED 5B	-	-	-	-	-	-	-	-
ISCED 5A	-	-	594,58	-	-	194,61	284,43	-
ISCED 6	-	-	-	-	-	-	-	-
Total number of employees	131,14	202,92	198,44	337,66	152,49	222,30	125,25	215,34

**Table 32 The distribution of full-time employees in the SES and LFS by sex, age and occupation**

per cent

Occupation by ISCO-88 (COM)	Age (number of years)							
	15 - 24		25 - 54		55 - 64		65 or more	
	Men	Women	Men	Women	Men	Women	Men	Women
MAJOR GROUP 1	-	65,93	-	-	38,24	-	-	-
MAJOR GROUP 2	-	159,02	495,41	912,64	-	542,32	100,94	-
MAJOR GROUP 3	12,23	35,39	-	327,35	186,76	269,49	-	-
MAJOR GROUP 4	-	647,57	935,76	-	101,70	483,43	61,03	37,01
MAJOR GROUP 5	132,61	138,79	220,64	209,79	-	168,98	-	-
MAJOR GROUP 6	-	-	5,80	1,48	-	-	-	-
MAJOR GROUP 7	-	-	40,06	106,57	74,55	-	-	-
MAJOR GROUP 8	32,52	-	312,18	83,20	95,60	-	-	-
MAJOR GROUP 9	-	-	66,71	111,99	83,14	96,40	92,03	169,03
Total number of employees	131,14	202,92	198,44	337,63	152,55	222,30	125,25	215,34

*The different numbers of the employees were influenced by:*

- the different method of the survey's realization and the data grossing-up
- the different methodology (e.g. the SES does not cover the military service)

The problem with the calculation of the number and the filling of the number of the employees in the LFS was another very important reason of high and low values of ratio of the number of employees in SES as compared to the number in the LFS.

It was impossible to exclude the following groups of employees from the LFS data:

In the table by NACE Rev. 1 – the employees with occupations ISCO- 88 class 0.

In the table by education – the employees with occupations ISCO class 0 and the economic activity NACE Rev. 1 sections A and B.

In the table by ISCO-88 – the employees with the economic activity by NACE Rev.1 sections A and B.

The different numbers of employees working in the part time job between the LFS and the SES are influenced by the low number of employees working in this type of job in the Slovak Republic. It means that it is difficult to include these employees to the sample equally.

## **7. COMPLETENESS**

All mandatory variables required in the Regulation (EC) N° 1916/2000 and in the Regulation (EC) N° 72/2002 were provided.

List of optional variables in the Regulation (EC) N° 1916/2000 that are not available:

File A:

- 1.7 Principal market for the enterprise's products
- 1.8 Size of the group of enterprises
- 1.9 Country of residence controlling the group of enterprises

File B:

- 2.4 Management position/ supervisory position
- 2.9 Citizenship
- 2.10 Coverage by a government scheme designed to promote employment
- 2.11 Years of career break
- 3.2.2.2 Annual bonuses based on productivity
- 3.3 Compulsory social contributions and taxes paid by the employer
- 3.3.1 Compulsory social contributions
- 3.3.2 Taxes
- 3.5.2.1 Annual days of sick leave paid by the employer
- 3.5.2.2 Annual days of sick leave not paid by the employer
- 3.6 Annual estimation for payment in kind