

# R & D personnel in the EU

**Denmark, Finland and Sweden have the highest number of R&D personnel out of total employment in the European Union**

## Statistics in focus

### SCIENCE AND TECHNOLOGY

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#### R&D Statistics

Author

**Simona FRANK**

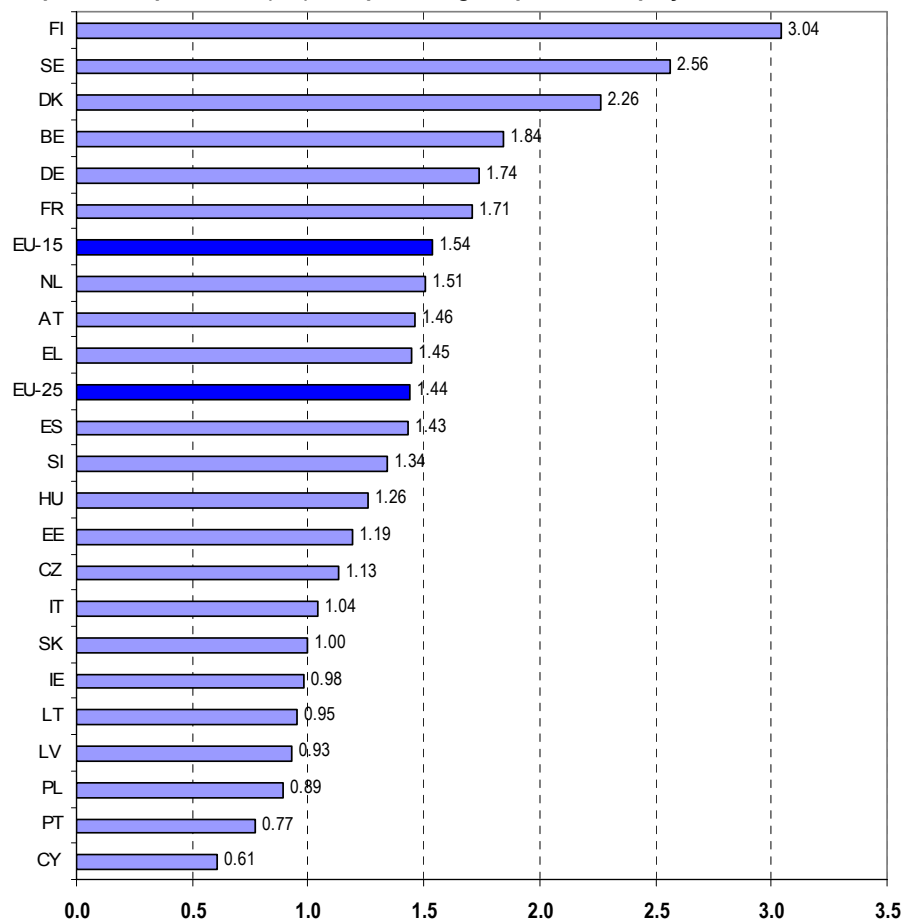
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Graph 1: R&D personnel (HC) as a percentage of persons employed in the EU-25 in 2002



SE, BE, DE, NL, PT: 2001. IE: 2000. IT, EL: 1999. AT: 1998. EU-15 and EU-25: Eurostat estimate. LU, MT, UK: n.a.

- More than 3 % of employed persons are active in R&D in Finland as are more than 2.5 and 2.25 % respectively of Sweden and Denmark's workforces
- At EU-15 level, the percentage of R&D personnel out of the Union's entire employed population has been growing at an annual average rate of 1.87 % between 1998 and 2002
- Portugal has the highest percentage of female researchers in the EU with almost 45 %, followed by Estonia, Latvia and Lithuania, with more than 30 %
- Except for smaller countries, above 40 % of Business Enterprise Sector researchers are employed in larger enterprise with more than 50 employees
- 'Natural sciences' and 'Engineering and technology' are the most important fields of science in which Government and Higher Education sector researchers are active



## Sweden and Finland have the highest number of employed people active in R&D

Sweden and Finland are the leading EU Member States in Research and Development, having R&D intensities (R&D expenditure as a percentage of GDP) among the highest in the world. They are followed by Denmark in the EU ranking of R&D intensity. Likewise, these three Nordic EU countries have the highest number of R&D personnel as a percentage of total employment in the European Union. More than 3 out of 100 employed people were active in R&D in Finland in 2002 and so was more than 2.5 % of Sweden's workforce in 2001 and more than 2.25 % of Denmark's in 2002. The European

Union's average percentage of R&D personnel among employed people is 1.44 %. This percentage is a little higher for the EU-15 Member States' Union only: 1.54 %. Denmark, Belgium (2001), Germany (2001), France, the Netherlands (2001), Austria (based on 1998 data) and Greece (1999) all had higher proportions of R&D personnel in their workforce than the EU average in 2002. Of the new Member States, Slovenia, Hungary, Estonia, and the Czech Republic have the highest percentages of R&D personnel among their employed population.

**Table 1: R&D personnel (HC) as a percentage of persons employed and as a percentage of labour force in the EU-25 Member States, EEA countries, Switzerland, Candidate Countries, China, Japan and the United States from 1998 to 2002**

	R&D personnel as a percentage of persons employed and annual average growth rate from 1998 to 2002*						R&D personnel as a percentage of labour force and annual average growth rate from 1998 to 2002*					
	1998	1999	2000	2001	2002	AAGR	1998	1999	2000	2001	2002	AAGR
EU-25	:	:	:	:	1.44 s	:	:	:	:	:	1.31 s	:
EU-15	1.43 s	1.45 s	1.48 s	1.50 s	1.54 s	1.87	1.29 s	1.31 s	1.36 s	1.39 s	1.42 s	2.43
BE	1.61 s	1.67 s	1.71 s	1.84 s	:	4.55	1.46 s	1.52 s	1.60 s	1.73 s	:	5.82
CZ	0.95	1.00	1.03	1.04	1.13	4.43	0.89	0.91	0.94	0.95	1.05	4.22
DK	:	2.02 r	2.05 e	2.20	2.26	3.81	:	1.92 r	1.96 e	2.11	2.16	4.00
DE	1.71 s	1.74 s	1.74 s	1.74 s	:	0.58	1.54 s	1.59 s	1.61 s	1.61 s	:	1.49
EE	1.08	1.13	1.15	1.18	1.19	2.45	0.98	1.00	1.00	1.04	1.08	2.46
EL	:	1.45	:	:	:	:	:	1.28	:	:	:	:
ES	:	1.23	:	1.32	1.43	5.15	:	1.04	:	1.18	1.27	6.89
FR	1.71	:	1.70	:	1.71	0.00	1.51	:	1.53	:	1.56	0.82
IE	1.02 s	1.01 s	0.98 s	:	:	:	0.94 s	0.95 s	0.94 s	:	:	:
IT	1.09	1.04	:	:	:	:	0.96	0.92	:	:	:	:
CY	:	0.54	0.55	0.56	0.61	4.15	:	:	0.53	0.54	0.59	5.51
LV	0.62	0.64	0.87	0.87	0.93	10.67	0.53	0.55	0.75	0.76	0.80	10.84
LT	1.05	1.03	1.03	1.09	0.95	-2.47	0.91	0.89	0.86	0.91	0.83	-2.27
HU	1.13	1.11	1.19	1.18	1.26	2.76	1.03	1.03	1.11	1.12	1.19	3.68
NL	1.52 s	1.60 s	1.57 s	1.51 s	:	-0.22	1.46 s	1.54 s	1.52 s	1.48 s	:	0.45
AT	1.46	:	:	:	:	:	1.38	:	:	:	:	:
PL	0.83	0.84	0.87	0.87	0.89	1.76	0.75	0.74	0.72	0.71	0.71	-1.36
PT	:	0.75 r	:	0.77	:	1.32	:	0.71 r	:	0.74	:	2.09
SI	1.32	1.38	1.37	1.35	1.34	0.38	1.22	1.28	1.27	1.27	1.26	0.81
SK	1.12	1.06	1.07	1.04	1.00	-2.79	0.99	0.89	0.86	0.84	0.81	-4.89
FI	2.79	2.87	2.91	2.90	3.04	2.17	2.42	2.53	2.58	2.61	2.72	2.96
SE	:	2.65	:	2.56	:	-1.71	:	2.45	:	2.43	:	-0.41
IS	2.64	2.75 r	2.97 e	3.32	3.19 f	4.84	2.55	2.70 r	2.92 e	3.26	3.09 f	4.92
NO	:	1.95	:	2.12	2.23	4.57	:	1.88	:	2.04	2.14	4.41
CH	:	:	1.77	:	:	:	:	:	1.72	:	:	:
BG	:	:	0.59	0.60	0.60	0.84	:	:	0.49	0.48	0.49	0.00
RO	0.51	0.44	0.34	0.35	0.39	-6.49	0.49	0.41	0.32	0.33	0.36	-7.42
TR	1.08 e	1.11 e	1.32 e	:	:	:	0.96	1.00	1.15 b	:	:	:
CN	1.07 e	1.15 e	1.28 b	1.31	1.40	4.58	1.06	1.14	1.27 b	1.30	1.39	4.62

\* from 1998 to 2002 when 2003 is not available or from 1998 to 2001 when 2002 is not available or 1999 to 2001 when neither 1998 nor 2002 are available. CN: 2000-2002. TR, CN: OECD data; FTE is being used instead of HC for the computation of the above ratios, hence the OECD's and Eurostat's data for these ratios are not directly comparable. CN: Underestimated or based on underestimated data. EU-15 and EU-25: Eurostat estimate. MT, LU, UK: n.a.

At EU-15 level, the percentage of R&D personnel out of the Union's entire employed population has been growing at an annual average rate of 1.87 % between 1998 and 2002. In these five years, Latvia registered the highest growth of R&D personnel as a share of its workforce (more than 10 %) in the enlarged EU. Spain saw this same ratio increase by more than 5 % on an annual basis, with Belgium, the Czech Republic, Denmark and Cyprus recording rises of between 3.8 % and 4.6 %. Iceland and Norway's R&D personnel as a percentage of employed people also experienced similar growth rates of more than 4.5 %. This ratio has been stagnating in the Netherlands and France however, while in Lithuania, the Slovak Republic and leading R&D Member State Sweden this ratio saw a decline in the five years to 2002. Candidate Country Romania underwent an even steeper decrease in its

R&D workforce over these years. In 2002, China's percentage of R&D personnel vs. its workforce was close to the average European level, at 1.40 %. Its ratio has been growing by 4.6 % annually between 2000 and 2002.

R&D personnel as a percentage of the labour force follows the trends in R&D personnel as a percentage of persons employed. The former differs from the latter in the fact that R&D personnel as a percentage of labour force takes into account the number of unemployed people (labour force or active population being the sum of the number of employed people as well as the unemployed). Hence, R&D personnel as a percentage of labour force is always smaller or equal to R&D personnel as a percentage of persons employed.

**Table 2: R&D personnel and researchers in headcounts and full-time equivalents in 2002 in the EU-25 Member States, EEA countries, Switzerland, Candidate Countries, China, Japan and the United States**

	in Headcounts, 2002						Annual average growth rate of R&D personnel 1999-2002		in Full-Time Equivalents, 2002						Annual average growth rate of R&D personnel 1999-2002	
	Researchers		of which female		R&D Personnel				of which female		Researchers		of which female			
	total number	number	%	total number	number	%	total	female	total number	number	%	total number	number	%	total	female
EU-25	1,669,095 s	:	:	2,754,259 s	:	:	3.1	:	1,159,506 s	:	:	2,026,793 s	:	:	2.9	:
EU-15	1,491,369 s	:	:	2,511,871 s	:	:	3.6	:	1,046,123 s	:	:	1,859,427 s	:	:	3.3	:
BE	:	:	:	74,446 s	:	:	5.9	:	32,856 p	:	:	57,110 p	:	:	4.9	:
CZ	30,635	9,024	29	53,695	19,451	36	4.5	1.2	14,974	3,917	26	26,032	8,484	33	2.6	:
DK	37,883	9,943	26	61,915	22,618	37	4.2	6.7	25,912 r	6,929	27	42,854	15,762	37	5.5	9.1
DE	:	:	:	636,857 s	:	:	0.6	:	265,812	:	:	480,004	:	:	0.0	:
EE	5,089	2,168	43	6,921	3,386	49	1.8	0.8	3,059	1,262	41	4,129	1,974	48	-3.1	-5.6
EL	:	:	:	57,108	:	:	:	:	14,828	:	:	26,382	:	:	:	:
ES	150,098	52,850	35	232,019	85,098	37	9.2	11.9	83,318	29,767	36	134,258	48,396	36	9.5	13.2
FR	231,816	64,253	28	409,167	131,661	32	:	:	186,420	:	:	343,618	:	:	2.6	:
IE	:	:	:	16,433 s	:	:	1.9	:	9,686 e	:	:	14,415	:	:	5.5	:
IT	100,171	:	:	215,155	:	:	:	:	71,242	:	:	164,023	:	:	4.8	:
CY	1,014	298	29	1,937	760	39	8.4	10.8	435	137	31	822	312	38	6.5	7.0
LV	6,101	3,159	52	9,153	5,008	55	13.6	15.8	3,451	1,835	53	5,294	2,928	55	7.2	9.8
LT	9,517	4,536	48	13,540	7,263	54	-4.0	:	6,326	2,989	47	9,531	5,101	54	-9.3	:
LU	:	:	:	:	:	:	:	:	1,646	:	:	3,663	:	:	:	:
HU	29,764	10,039	34	48,727	22,246	46	5.0	:	14,965	:	:	23,703	:	:	3.6	:
MT	:	:	:	79	10	13	75.6	:	:	:	:	79	10	13	75.6	0.0
NL	57,646 s	:	:	121,766 s	:	:	0.1	:	45,328	:	:	89,664	:	:	1.5	:
AT	31,404	5,901	19	52,956	15,058	28	:	:	18,715	2,627	14	31,308	6,936	22	:	:
PL	90,842	:	:	122,987	:	:	-0.8	:	56,725	:	:	76,214	:	:	-2.6	:
PT	31,146	13,572	44	39,163	:	:	3.1	:	18,745 e	:	:	24,591 p	:	:	5.7	:
SI	7,027	2,466	35	12,379	4,808	39	0.3	:	4,642	1,606	35	8,615	3,257	38	0.5	0.8
SK	15,385	6,086	40	21,025	9,099	43	-2.2	:	9,181	3,749	41	13,631	6,163	45	-2.8	-2.7
FI	50,215	15,025	30	73,121	24,360	33	3.0	3.7	38,632	:	:	55,044	:	:	2.8	:
SE	:	:	:	110,875	37,712	34	1.5	2.7	39,921	:	:	72,087	20,862	29	4.0	4.5
IS	3,243 r	1,126	35	4,970 f	:	:	6.1	:	1,869 r	:	:	2,919	1,141	39	10.5	15.8
NO	34,554	9,774	28	51,086	:	:	5.2	:	19,722	:	:	27,333	:	:	2.5	:
CH	33,245	7,064	21	68,495	17,586	26	:	:	:	:	:	52,284	:	:	:	:
BG	10,445	4,837	46	16,847	8,966	53	-3.0	-2.4	9,223	4,353	47	15,029	8,106	54	-2.2	-1.1
HR	11,136	4,641	42	16,515	8,146	49	:	:	8,572	3,651	43	12,960	6,481	50	:	:
RO	24,636	10,886	44	38,433	17,818	46	-7.2	-7.9	20,286	9,181	45	32,799	15,484	47	-9.4	-9.9
TR	71,288	25,407	36	79,958	27,138	34	:	:	23,995	8,211	34	28,964	9,137	32	:	:
CN	:	:	:	:	:	:	:	:	810,525	:	:	1,035,197	:	:	6.0	:
JP	791,224	88,674	11	:	:	:	:	:	646,547	:	:	857,300	:	:	-2.3	:

AT: 1998. EL: 1999. Researchers IS, NO: 2001. MT data only include BES and GOV sectors. CN: Underestimated or based on underestimated data.

Data in headcounts: BE, DE, NL, PT, SE, IS, NO: 2001 instead of 2002; AAGR 1999-2001, IE, MT, CH: 2000 instead of 2002; AAGR 1999-2000. PT: female headcounts: estimate. IT: 1999. Researchers: NL: 1999 data.

Data in full-time equivalents: NL, SE, IS: 2001 instead of 2002, AAGR 1999-2001, LU, MT, CH: 2000 instead of 2002; AAGR 1999-2000. FR: AAGR 2000-2002. FI Researchers: estimate using R&D Personnel by qualification (ISCED 6 and ISCED 5A classes); SE Researchers: 1999 data (FTE). CN: AAGR 2000-2002

In 2002, the European Union counted more than 1.6 million researchers, twice the number in Japan. In terms of total R&D personnel, the EU had more than 2.75 million. Big contributors to this high number are the larger Member States such as Germany and France, as well as Spain. Some European countries boast more female R&D personnel than male ones (such as Latvia and Lithuania and Candidate Country Bulgaria). The share of women employed in R&D is also very high in Estonia, Hungary and Candidate Countries Croatia and Romania (more than 46 %).

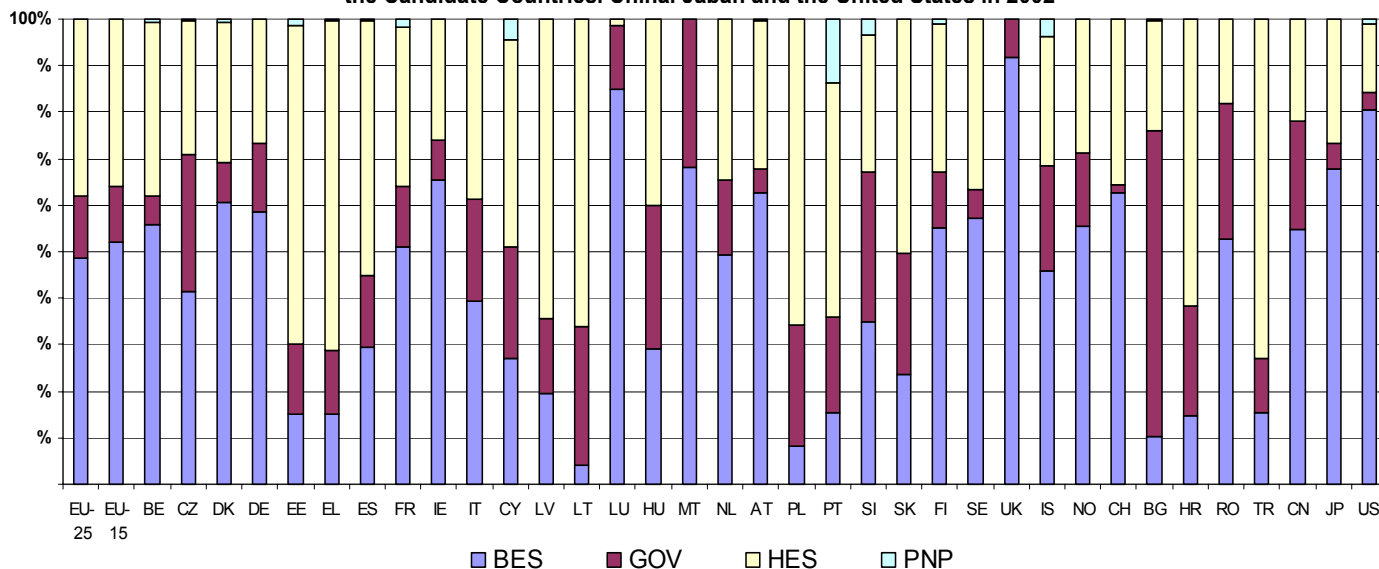
Full-time equivalents (FTE) are more accurate than headcounts (HC) in measuring the human resources devoted to R&D activities as they take account of the actual time spent on them in person-year. Hence, FTE data are automatically lower than HC ones. A lot of Member States have seen the number of FTEs devoted to R&D increase between 1999 and 2002. Spain, Malta and Latvia for instance are countries that saw the highest increases of R&D FTEs. At Union-level, R&D personnel in FTE registered an increase of 3 % in the three years to 2002. In Japan, the R&D personnel population has been dwindling in recent years, while China's leapt by 6 % a year.

### China, Japan and the US proportionally have more researchers devoted to the Business Enterprise Sector than the European Union

The breakdown of researchers by institutional sector shows a mixed picture across the European Union (see graph 2). While on average about 50 % of researchers' FTEs are concentrated in the Business Enterprise Sector (BES), in Estonia, Greece, Latvia, Lithuania, Poland, Portugal and Slovakia this sector's share of researchers is 25 % or less. The same situation occurs in the Candidate Countries Bulgaria and Croatia. In these countries, the bulk of researchers belong to the Higher Education Sector (HES), except for Bulgaria, where it is the

Government Sector that employs most researchers. Luxembourg, where the vast majority of R&D expenditure and financing is concentrated in the BES, has 85 % of its researchers allocated to this institutional sector, more than in the United States (80 %). Portugal is the country with the highest proportion of Private Non-Profit sector researchers. China, Japan and the US proportionally have more researchers devoted to their BES than the European Union.

Graph 2: Researchers by institutional sector (in FTE) in the EU-25, EEA countries, the Candidate Countries, China, Japan and the United States in 2002

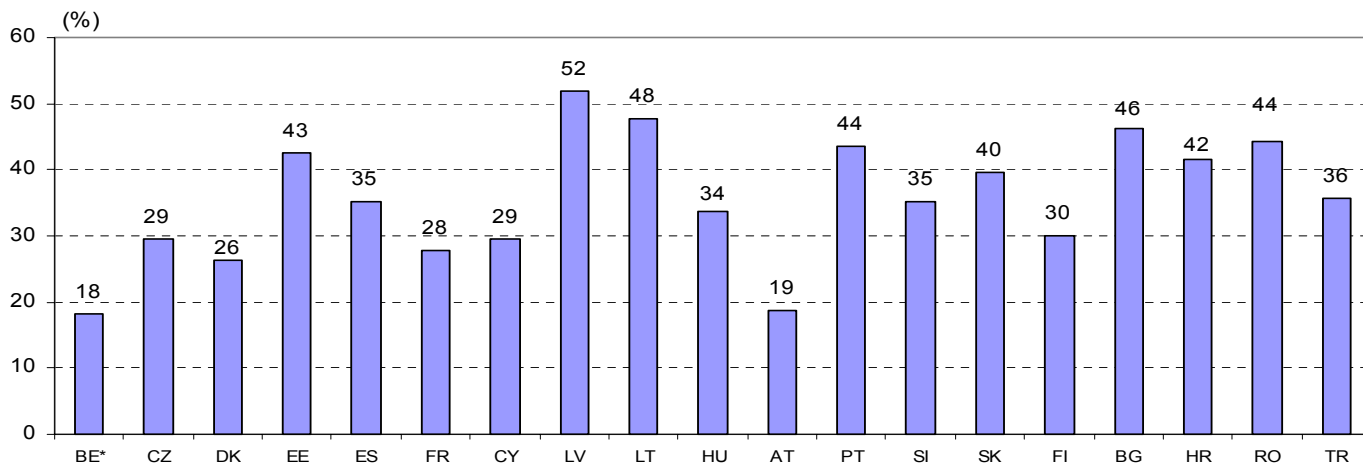


BE, NL, IS, NO: 2001. IE, IT, LU, CH: 2000. EL, SE, US: 1999. AT: 1998. MT, UK: breakdown only includes BES and GOV.

The share of females in total R&D personnel is generally higher than in its researchers' component. In this respect, new Member States, Candidate Countries and Portugal have the highest number of

female researchers in Europe (see graph 3). In the three Baltic Member States, more than 40 % of researchers were female in 2002. Portugal's share of female researchers was about 44 % in 2001.

**Graph 3: Percentage of female researchers (in HC) in selected EU-25 Member States and Candidate Countries - 2002**



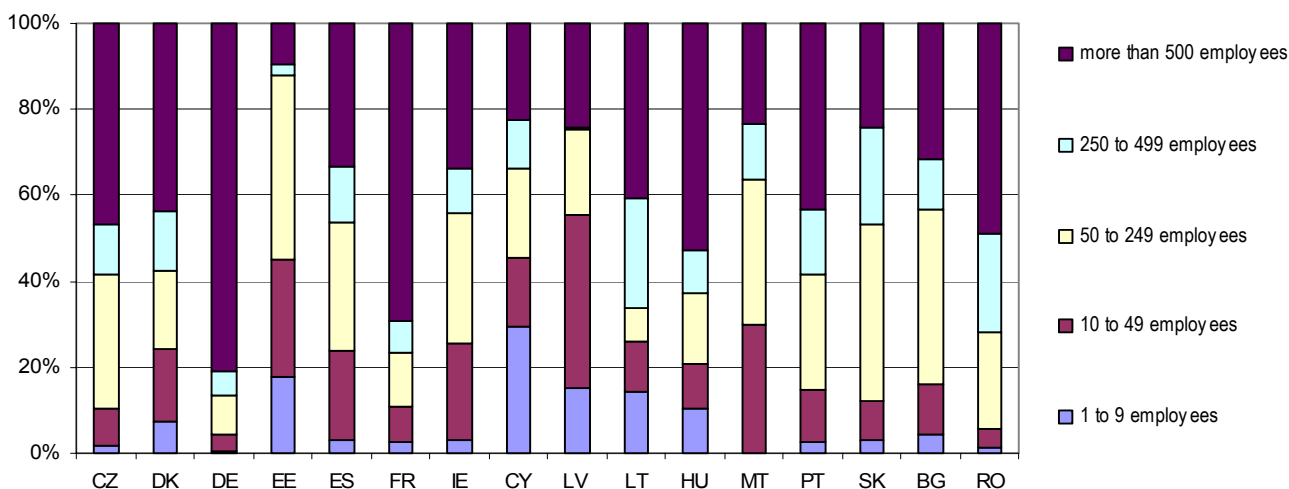
\*BE: BES only, provisional data. PT: 2001, estimate. AT: 1998. Other Member States: no data available.

### Large enterprises employ more researchers

In most countries, large enterprises of more than 250 employees account for more than 40 % of the resources in Business Enterprise Sector researchers. Only in smaller countries such as Estonia, Cyprus or Malta is this not the case. In Estonia and Cyprus, enterprises of 1 to 9 employees amounted for about 20 % and 30 % respectively of Business Enterprise Sector researchers. Latvia also, has quite a high share of researchers active in enterprises with up to

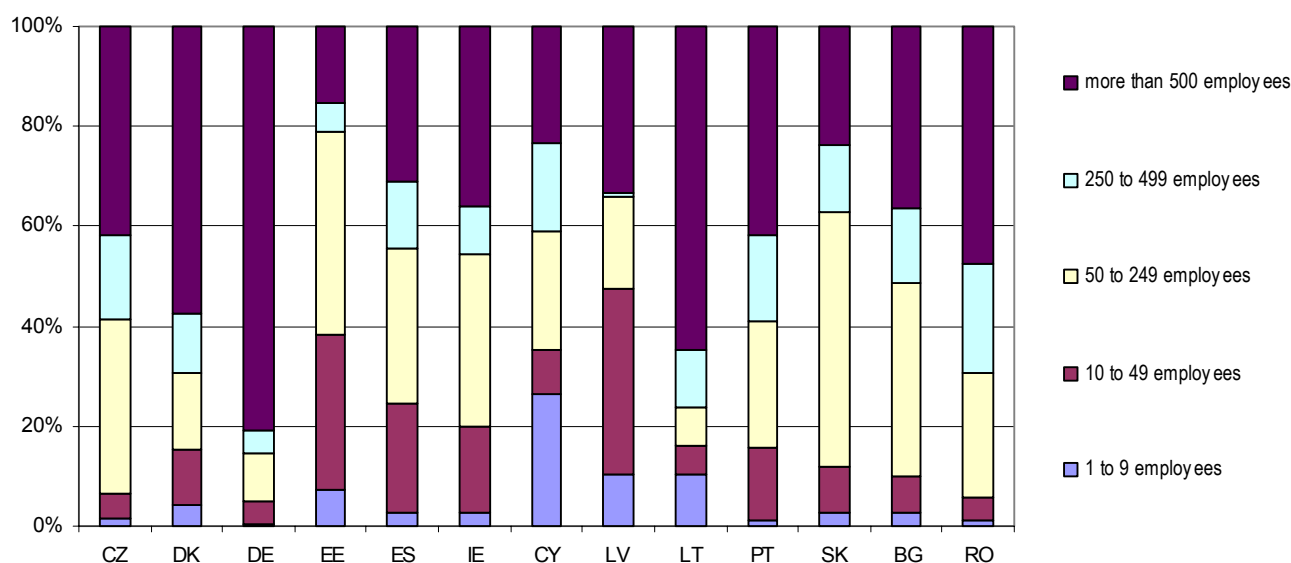
49 employees compared to larger countries. Looking these data for female researchers (see graph 5), the predominance of larger enterprises and their ability to attract a higher number of researchers is even more obvious for females, except in the Czech republic. These data need to be put into perspective using enterprise demography data and R&D expenditure to identify more conclusive patterns.

**Graph 4: Business Enterprise Sector researchers broken down by size class in selected EU-25 Member States and Candidate Countries - 2002**



EE: 0 size-class is included into 1-9. . DE, IE, PT: 2001. Other Member States and Candidate Countries: no data available.

**Graph 5: Business Enterprise Sector female researchers broken down by size class in selected EU-25 Member States and Candidate Countries - 2002**



EE: 0 size-class is included into 1-9. DE, IE, PT: 2001. PT: estimate. Other Member State and Candidate Countries: no data available.

Natural sciences are the single most important field of science in which Government and Higher Education researchers are active (see table 3). This is particularly the case in the Government Sector as, for instance, 47 % and 55 % respectively of Czech and Latvian government researchers are classified in the Natural Sciences. However, in Cyprus and Iceland it is Agricultural Sciences that account for most Government Sector researchers while in Malta and Norway, Social Sciences most government researchers. Poland stands out by employing more government researchers in Engineering and Technology than in any other field of science. This field of science is also very important in the Czech Republic, Germany, Iceland and Candidate Countries

Bulgaria and Romania, coming second after natural sciences. Engineering and technology is also more prominent in the Higher Education Sector (HES). In the Czech Republic, Slovenia, Slovakia, Sweden, Bulgaria, Croatia and Romania, it is the biggest field of science employing researchers in the HES. Natural sciences remain a significant field of science in Germany, Estonia, Spain, Ireland, Cyprus, Latvia, Portugal and Iceland, accounting for the majority of these countries' HES researchers. Interestingly, Humanities are the most important field of science for HES researchers in Hungary and Poland while in the Netherlands, 46 % of HES researchers' FTEs were spent in Social sciences and Humanities in 2000.

**Table 3: Percentage of researchers in the government and higher education sector by fields of science in 2002**

Government sector	CZ	DK	DE	EE	ES	IE	CY	LV	LT	HU	MT	NL	PL	PT	SI	SK	SE	IS	NO	BG	HR	RO
Natural sciences	47	27	45	25	42 e	:	31	55	44	39	18	:	30	26	44	42	:	20	21	45	36	41
Engineering and technology	19	17	29	8	10 e	:	7	6	19	8	9	:	36	15	9	13	:	26	13	16	1	24
Medical sciences	6	11	6	16	28 e	:	3	8	1	9	0	:	12	18	14	13	:	12	10	7	29	9
Agricultural sciences	10	24	6	9	14 e	:	34	14	11	13	0	:	13	23	6	9	:	31	18	14	6	3
Social sciences	5	12	:	4	4 e	:	15	15	7	12	73	:	3	14	26	22	:	7	32	4	16	14
Humanities	13	8	:	38	3 e	:	11	2	17	19	0	:	6	5	1	1	:	4	6	13	12	9
<b>Higher education sector</b>																						
Natural sciences	25	25	31	35	37	34	44	36	22	18	:	14	20	34	11	28	18	23	21	8	6	13
Engineering and technology	35	11	20	25	21	17	5	13	18	14	:	14	21	20	35	29	25	22	12	48	33	35
Medical sciences	10	26	14	5	13	7	:	7	17	14	:	23	15	7	7	17	24	17	26	10	24	24
Agricultural sciences	7	6	4	6	6	2	:	6	5	7	:	4	8	6	12	6	7	8	4	6	9	1
Social sciences	19	14	18	17	15	25	36	20	21	20	:	46 <sup>1</sup>	11	22	24	13	17	17	23	21	21	20
Humanities	5	19	12	12	8	16	16	17	16	27	:	:	24	9	11	7	9	12	13	6	7	6

IE, NL: 2000; LV, SE, IS, NO: 2001. SE: does not include about 11 % of total researchers that are not classified according to field of science. <sup>1</sup>NL: social sciences include humanities.

## ➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

### Research and experimental development — R&D

Research and experimental development — R&D — activities comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications.

### Institutional classifications

Internal expenditure and R&D personnel are broken down with reference to the four institutional sectors in which the R&D takes place.

#### □ The business enterprise sector — BES

With regard to R&D, the business enterprise sector includes: all firms, organizations and institutions whose primary activity is the market production of goods or services (other than higher education) for sale to the general public at an economically significant price and the private non-profit institutions mainly serving them — *Frascati Manual*, § 163.

#### □ The government sector — GOV

In the field of R&D, the government sector includes: all departments, offices and other bodies which furnish but normally do not sell to the community those common services, other than higher education, which cannot otherwise be conveniently and economically provided, and administer the state and the economic and social policy of the community (public enterprises are included in the business enterprise sector) as well as PNPs controlled and mainly financed by government — *Frascati Manual*, § 184.

#### □ The higher education sector — HES

This sector comprises: all universities, colleges of technology and other institutes of post-secondary education, whatever their source of finance or legal status. It also includes all research institutes, experimental stations and clinics operating under the direct control of or administered by or associated with higher education establishments — *Frascati Manual*, § 206.

#### □ The private non-profit sector — PNP

This sector covers: non-market, private non-profit institutions serving households (i.e. the general public) and private individuals or households — *Frascati Manual*, § 194.

### R&D indicators: R&D personnel

All persons employed directly on R&D should be counted, as well as those providing direct services such as R&D managers, administrators and clerical staff. Those providing indirect services, such as canteen and security staff, should be excluded — *Frascati Manual*, § 294-296.

#### □ Researchers

Researchers are professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, and in the management of the projects concerned — *Frascati Manual*, § 301

#### □ Full-time equivalent — FTE

One FTE may be thought of as one person-year. For

instance, a person who normally spends 40 % of his time on R&D and the rest of it on other work (e.g. lecturing, university administration, guidance) should be counted as only 0.4 FTE — *Frascati Manual*, section 5.3.3.

#### □ Personnel by number of individuals — HC

The number of individuals who are employed mainly or partly on R&D — *Frascati Manual*, section 5.3.2.

#### □ Labour force

The labour force is the active population. It is defined as the sum of employed and unemployed persons.

### Fields of science

The classification by fields of science is based on the nomenclature suggested by Unesco: *Recommendation concerning the International Standardisation of Statistics on Science and Technology* — see the *Frascati Manual* sections 4.4, 3.6.2 and 3.7.2.

### European aggregates

For R&D personnel, EU totals are calculated as the sum of the national data by sector. If data are missing, estimates are first made for the country in question, reference period, institutional sector or relevant R&D variable, as appropriate. This method is not identically applied to the calculation of R&D personnel in head count (HC). The estimates for R&D personnel in full-time equivalent (FTE) serve as a basis for the HC calculation. An FTE/HC ratio based on available FTE and HC personnel data at the national level is estimated for the EU aggregates, by institutional sector and by year. This ratio is then applied to the FTE data to calculate the EU totals in HC.

EU-15 aggregate: until 1999: excluding Luxembourg;

EU-25 aggregate: excluding Luxembourg (until 1999) and Malta (until 2002 for HES and TOTAL).

### Sources

United States, Japan and China: OECD, *Main Science and Technology indicators* – MSTI 2004/1.

### General abbreviations

p provisional value  
e estimated value  
s Eurostat estimate  
r revised value  
f forecast  
b break in series  
: not available

### Reference manual

*Standard method proposed for research and experimental development surveys* — *Frascati Manual*, OECD, 2002.

The data presented in this Statistics in Focus reflect the data availability in Eurostat's reference database as of December 2004.

## ***Further information:***

### ➤ **Databases**

[EUROSTAT Web site/Science and technology/Research and development/Statistics on research and development/R&D personnel](#)

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### **European Statistical Data Support:**

Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.

Their mission is to provide help and guidance to Internet users of European statistical data.

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This document has been produced in collaboration with Vincent VAN GOMPEL.

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