

R&D 2004

Research and Development

Survey on R&D spending and staffing in
PRIVATE COMPANIES



- Data protection** The information you provide will be kept strictly confidential. The survey findings will be published in such a way as to make it impossible for any conclusions to be drawn about your company.
- General instructions and contact info** The appendices provide detailed information and instructions to help you fill out the questionnaire. For questions, contact the SFSO: 032 / 713 63 48 (German) or 032 / 713 62 99 (French)
- Period surveyed** The data refer to the period from 1 January 2004 to 31 December 2004.
- Specific instructions** When filling out the questionnaire, please make sure that fields are left blank only when you are unable to answer them. Write "0" (zero) when the reply is "0". Leave estimated figures in parenthesis (...).
- Deadline** Please fill out and return the questionnaire by:
30 March 2005

Definition of Research and Development

Research and experimental development (R&D) 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 (see Appendix I for further explanations).

0 Questions about your company in Switzerland

Contact person Name of person in your company to contact for questions regarding this questionnaire:

Name _____ Dept. _____

E-mail _____ Tel. _____

R&D in 2004

Did your company carry out R&D activities on its own behalf or on behalf of third parties (intramural R&D) in 2004? Yes No

Did your company outsource R&D activities to third parties in Switzerland or abroad in 2004 (extramural R&D)? Yes No

Did your company, its workplaces and/or subsidiaries abroad conduct R&D activities on their own behalf or on behalf of third parties in 2004? Yes No

If you answered "no" to all three questions, your work is almost over. Please write any comments you would like to make in Section K and use the enclosed envelope to return the questionnaire to us. We appreciate your having taken part in this survey.

Company headquarters, workplaces and subsidiaries

Company headquarters:
 Country _____ Name of company _____

The information that you provide in this questionnaire should apply to your company as a whole (definition: see page 1 of Appendix I). If data refer to other domestic workplaces or subsidiaries involved in R&D, please indicate their names below:

Name of workplace or subsidiary	Address	Postcode	Location

If there are more than 6 names, please enclose a separate list.

A General questions about your company in Switzerland, 2004

Turnover in Switzerland in 2004	120	<input type="text"/>	(in CHF '000)
Total number of persons employed in Switzerland on 31 December 2004	109	<input type="text"/>	(number)

B Company intramural R&D expenditure in Switzerland, 2004

a. Labour costs of R&D personnel Wages, salaries, related costs and services for R&D personnel	(in CHF '000)	210	<input type="text"/>
b. Other current R&D costs covering materials, rental, leasing etc., without depreciation		220	<input type="text"/>
c. Capital expenditures for R&D Property and buildings, devices and equipment, software, etc., without depreciation		244	<input type="text"/>
Total Company intramural R&D expenditure in Switzerland, 2004		245	<input type="text"/>
R&D depreciation Please indicate only depreciation of R&D-related assets (property, buildings, devices and equipment)		230	<input type="text"/>

C Breakdown of intramural R&D expenditure in Switzerland by field of research, 2004

Intramural R&D expenditure in Switzerland for biotechnology and nanotechnology, 2004		
Proportion of intramural R&D expenditure in Switzerland for biotechnology, 2004 (% of the total indicated in position 245, Section B)	% estimate	500 <input type="text"/>
Proportion of intramural R&D expenditure in Switzerland for nanotechnology, 2004 (% of the total indicated in position 245, Section B)		510 <input type="text"/>

See Appendix III for detailed information about biotechnology and nanotechnology.

D Breakdown of intramural R&D expenditure in Switzerland by type of research, 2004

Breakdown of intramural R&D expenditure in Switzerland by type of research, 2004		
Intramural expenditure on basic research	% estimate	331 <input type="text"/>
Intramural expenditure on applied research		335 <input type="text"/>
Intramural expenditure on experimental development		340 <input type="text"/>
Total company intramural R&D expenditure in Switzerland, 2004 (100% = position 245, Section B)		<input type="text" value="=100%"/>

Your replies should be based on the definitions and examples provided on pages 2 and 3 of Appendix I.

E Breakdown of intramural R&D expenditure in Switzerland by R&D objectives, 2004

R&D objectives	% estimate	R&D objectives	% estimate
1. Exploration and exploitation of the Earth	361 <input type="text"/>	9. Electronics and related industries	369 <input type="text"/>
2. Infrastructure and general planning of land-use	362 <input type="text"/>	10. Chemical industry products	370 <input type="text"/>
3. Telecommunication systems	363 <input type="text"/>	11. Vehicle manufacturing	371 <input type="text"/>
4. Control of environmental pollution	364 <input type="text"/>	12. Social structures and relationships	372 <input type="text"/>
5. Protection and improvement of human health	365 <input type="text"/>	13. Exploration and exploitation of space	373 <input type="text"/>
6. Production, distribution, rational utilization of energy	366 <input type="text"/>	14. Non-oriented research	374 <input type="text"/>
7. Agricultural production and technology	367 <input type="text"/>	15. Defence	375 <input type="text"/>
8. Industrial production and technology	368 <input type="text"/>	16. Other civil research	376 <input type="text"/>
		Total (100% = position 245, Section B)	<input type="text" value="=100%"/>

See Appendix II for detailed information about R&D objectives.

F Company expenditure for extramural R&D, 2004

R&D contracts and research grants given to research units in Switzerland:		(in CHF '000)
other private companies in Switzerland (excl. your company's own domestic workplaces and subsidiaries)	250	<input type="text"/>
higher education (univ., univ. of applied sciences, federal institutes of tech. and related research facilities)	260	<input type="text"/>
government sector facilities (e.g. agricultural research centers)	265	<input type="text"/>
other recipients in Switzerland (e.g. joint research, private non-profit organisations)	275	<input type="text"/>
a. Total R&D contracts and research grants given to research units in Switzerland	291	<input type="text"/>
R&D contracts and research grants given to research units abroad:		(in CHF '000)
other private companies (excl. your company's own foreign workplaces and subsidiaries)	277	<input type="text"/>
other recipients abroad (e.g. joint research, private non-profit organisations)	278	<input type="text"/>
b. Total R&D contracts and research grants given to research units abroad:	276	<input type="text"/>
c. Acquisition of R&D expertise (patents and licences)	280	<input type="text"/>
Total company expenditure for extramural R&D, 2004 (Total = a+b+c)	290	<input type="text"/>

G Funding of company intramural R&D activities in Switzerland, 2004

Who provided funding for your company's intramural R&D activities in Switzerland in 2004?		(in CHF '000)
Self-funded intramural R&D (Including funds raised on financial markets)	415	<input type="text"/>
R&D contracts and research grants from:		
other private companies in Switzerland with no financial ties to your company	425	<input type="text"/>
government agencies (e.g. technology and innovation projects)	435	<input type="text"/>
higher education in Switzerland (univ., univ. of applied sciences, fed. inst. of tech. & fed. research facilities)	440	<input type="text"/>
other sources in Switzerland (e.g. non-profit organisations)	450	<input type="text"/>
funding from foreign sources (e.g. private companies, international organisations)	455	<input type="text"/>
Total funding of company intramural R&D activities in Switzerland, 2004 (Total = position 245, Section B)	405	<input type="text"/>

H Breakdown of R&D personnel in Switzerland according to educational background

Education (highest level reached)	a) Number of R&D employees	b) Number of female R&D employees	c) Number of foreign R&D employees	d) Total R&D personnel in full-time equivalence (FTE)
University-level education (exact sciences, natural sciences, engineering, medicine)	627			
University-level education: humanities, social sciences, law, economics)	628			
Total number of university-level graduates	640			
Vocational college (technical or business)	665			
Upper secondary (general education or basic vocational)	685			
Other, non-specified education or training	698			
Total R&D personnel in Switzerland	600			

See pages 3 and 4 of Appendix I for detailed information about R&D personnel.

I Breakdown of R&D personnel in Switzerland according to type of activity, 2004

Type of activity	a) Number of R&D employees	b) Number of female R&D employees	c) Number of foreign R&D employees	d) Total R&D personnel in full-time equivalence (FTE)
Researchers	715			
Technicians and equivalent staff	725			
Other support staff	735			
Total R&D personnel in Switzerland (Total = position 600, Section H)	705			

J Your company's foreign workplaces and subsidiaries

Does your company have foreign workplaces and/or subsidiaries?

- Yes Reply to the other questions in this Section
- No your work is almost over. Please write any comments you would like to make in Section K and use the enclosed envelope to return the questionnaire to us. We appreciate your having taken part in this survey.

General information about your company's foreign workplaces and subsidiaries, 2004

Total number of employees abroad on 31 December 2004 115 (Number)

Turnover generated abroad in 2004 125 (in CHF '000)

R&D expenditure made by your company's foreign workplaces and subsidiaries, 2004

Total R&D personnel abroad in 2004 204 (Number)

Total R&D expenditure made by your company's foreign workplaces and subsidiaries 205 (in CHF '000)

Distribution of total R&D expenditure abroad by (groups of) countries, 2004

EU member states (EU-15): Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal, Spain, Sweden and UK.

2045 % estimate

New EU member states: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

2055

USA

2065

Canada

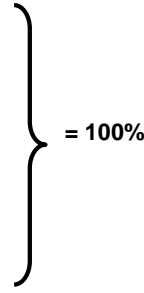
2075

Japan

2085

Other countries

2095



K Comments

Empty box for comments.

Thank you for having taken part in this survey!