■ Table 1.7.1

R&D personnel, by personnel groups and sectors of employment¹

Full-time equivalents					
Sector (OECD definition)	Year (ACTUAL)	Total	Of which,		
			Researchers	Technicians	Others
1. Business enterprise sector ²	1995	283,316	129,370	78,155	75,791
1. Business enterprise sector	2010	337,211	185,815	89,251	62,145
	2018	451,057	261,634	136,611	52,813
	2019	475,676	276,964	143,513	55,199
	2020	467,444	272,171	141,029	54,244
	2021	478,129	277,043	146,198	54,887
	2022	505,253	298,163	149,610	57,480
2. Government sector ^{3 4}	1005	75 140	27 224	20.200	17 444
	1995	75,148	37,324	20,380	17,444
	2010	90,531	51,783	12,565	26,182 29,994
	2018	109,487 112,593	57,183 59,221	22,310	31,097
	2019	112,593	60,988	22,472	
					31,235
	2021	119,268 120,907	63,701 64,460	22,786	32,781 34,035
	2022	120,507	07,700	22,712	34,033
3. Higher education sector ⁵	1995	100,674	64,434	13,636	22,604
	2010	120,981	90,398	11,395	19,188
	2018	147,160	114,868	11,492	20,801
	2019	147,316	114,512	10,990	21,814
	2020	151,692	117,638	11,387	22,668
	2021	156,543	120,901	10,853	24,789
	2022	159,261	123,388	10,966	24,907
4. Total	1995	459,138	231,128	112,171	115,839
	2010	548,723	327,996	113,211	107,515
	2018	707,704	433,685	170,413	103,608
	2019	735,584	450,697	176,777	108,110
	2020	733,831	450,796	174,888	108,147
	2021	753,940	461,645	179,838	112,457
	2022	785,420	486,011	182,988	116,422

- 1 Includes personnel (FTE) which can not be distributed to Länder.
- 2 In even-numbered years, the distribution to personnel groups is estimated, among other things, on the basis of the previous year. Rounding differences.
- 3 Government institutions and private non-profit organisations financed primarily by the government.
- 4 As of 2010: the definition between technicians and other personnel has been modified for methodical reasons. Limited comparability with previous years.
- 5 Figures for the higher education sector refer to full-time staff of private and state universities (ACTUAL), calculated in accordance with the procedure agreed on by the Standing Conference of Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK), the German Council of Science and Humanities, the Federal Ministry of Education and Research (BMBF) and the Federal Statistical Office.

Last update: August 5, 2024

Source: Special evaluation of the Federal Statistical Office and the Stifterverband Wissenschaftsstatistik

This work is licensed under a Data licence Germany attribution 2.0. https://www.govdata.de/dl-de/by-2-0