■ Table 1.1.1 1/2

Gross domestic expenditure on R&D (GERD) of the Federal Republic of Germany, by performing sectors

Millions of €									
Performing sectors 12	1981	1991	2000	2010	2016	2017			
Business enterprise sector ³					·				
Financed by									
Business enterprise sector	10,945	22,845	32,333	43,183	56,386	62,214			
Government sector	2,260	2,640	2,448	2,096	2,088	2,181			
Private non-profit sector	30	76	71	40	167	88			
Abroad	159	685	748	1,610	4,185	4,305			
Total	13,394	26,246	35,600	46,929	62,826	68,787			
Government and private non-profit sector 4									
Financed by									
Business enterprise sector	35	71	151	927	1,431	1,363			
Government sector	2,601	5,214	6,444	8,805	10,459	11,161			
Private non-profit sector	49	120	137	124	165	257			
Abroad	27	53	141	498	665	703			
Total	2,712	5,457	6,873	10,354	12,721	13,484			
Higher education sector ⁵									
Financed by									
Business enterprise sector	59	433	986	1,763	2,299	2,307			
Government sector	3,255	5,713	7,169	10,360	13,720	14,254			
Private non-profit sector	-	-	-	-	-	-			
Abroad	-	-	198	609	608	721			
Total	3,313	6,145	8,352	12,731	16,627	17,282			
Gross domestic expenditure on R&D									
Financed by									
Business enterprise sector	11,039	23,348	33,470	45,873	60,116	65,884			
Government sector	8,116	13,567	16,061	21,260	26,267	27,596			
Private non-profit sector	78	196	208	164	332	344			
Abroad	186	738	1,086	2,716	5,458	5,729			
	19,420	37,848	50,825	70,014	92,174	99,554			
GERD as a percentage of GDP ⁶	2.43	2.38	2.39	2.68	2.88	2.99			

■ Table 1.1.1 2/2

Gross domestic expenditure on R&D (GERD) of the Federal Republic of Germany, by performing sectors

Millions of €									
Performing sectors 12	2018	2019	2020	2021	2022	2023			
Business enterprise sector ³									
Financed by									
Business enterprise sector	65,204	66,856	62,625	67,023	72,373	-			
Government sector	2,234	2,421	2,268	2,667	2,880	-			
Private non-profit sector	91	113	106	89	97	-			
Abroad	4,573	6,441	6,034	5,982	6,460	-			
Total	72,101	75,830	71,032	75,761	81,809	90,408			
Government and private non-profit sector 4									
Financed by									
Business enterprise sector	1,401	1,464	1,527	1,328	1,385	-			
Government sector	11,746	12,463	12,913	14,147	14,871	-			
Private non-profit sector	272	283	292	274	299	-			
Abroad	749	811	857	1,012	1,050	-			
Total	14,168	15,022	15,589	16,761	17,605	18,574			
Higher education sector ⁵									
Financed by									
Business enterprise sector	2,484	2,599	2,584	2,704	2,874	-			
Government sector	15,169	15,708	16,478	17,101	18,060	-			
Private non-profit sector	-	-	-	-	-	-			
Abroad	747	865	901	857	1,073	-			
Total	18,400	19,173	19,962	20,661	22,007	23,026			
Gross domestic expenditure on R&D									
Financed by									
Business enterprise sector	69,090	70,919	66,736	71,055	76,633	-			
Government sector	29,149	30,592	31,658	33,915	35,811	-			
Private non-profit sector	362	396	398	363	395	-			
Abroad	6,069	8,118	7,791	7,851	8,582	-			
	104,669	110,025	106,583	113,184	121,421	132,008			
GERD as a percentage of GDP ⁶	3.05	3.11	3.09	3.07	3.04	3.13			

- 1 Data from surveys of the relevant performing sectors. In 1981, the former Federal Republic of Germany; as of 1991, all of Germany. Due to revision of the calculation method, the data up to 1991 are only partly comparable with data from later publications.
- 2 Figures for even years are partly estimated.
- 3 Companies and institutions for co-operative research; intramural R&D expenditures (OECD concept) of business enterprises; in 1981, including non-apportionable government funding; as of 2000, government R&D funding for business enterprises pursuant to figures of funding institutions -- Federal Government and Länder. Until 2010 the funding source data of the Stifterverband Wissenschaftsstatistik, which have been obtained from R&D-performing reporting units, differ from this, since the performing reporting units are not always able to clearly identify the original funding source. As of 2023, reporting unit statistical enterprise.
- 4 Non-university research institutions (e.g., Max Planck Society, Fraunhofer Society). Government: federal, Länder and municipal (research) institutions; as of 1981, Federal Government institutions; as of 1991, Länder institutions with their R&D shares only. As of 2000, modified survey procedure and expanded reporting scope. Until 2010, including external expenditure on research and development.
- 5 As of 2016, changed calculation method.
- 6 Gross Domestic Product (GDP): August 2025. In 1981, results of the national accounts revision 2005 based on ESA 1995. As of 1991, results of the national accounts general revision 2024 based on ESA 2010.

Last update: August 28, 2025

This table also appears in the Federal Report on Research and Innovation as Table 1.

Source: Federal Statistical Office (special evaluation, GENESIS-Online database - 21821 Reports on research and development)

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