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Expenditure on science, research and development by the Federal Ministry of Education and Research (BMBF), by funding areas and funding priorities¹

		Millions of €			
Funding area Funding priority		ACTUAL			
		2020		2021	
		Total	Of which, R&D	Total	Of which, R&D
A	Health research and health industry	3,278.2	3,278.2	2,743.9	2,743.9
AA	Health research and health industry	3,278.2	3,278.2	2,743.9	2,743.9
AB	Radiation protection	0.0	0.0	0.0	0.0
B	Bioeconomy	306.1	306.1	294.8	294.8
C	Civil security research	105.1	105.1	78.2	78.2
D	Nutrition, agriculture and consumer protection	52.6	52.6	62.8	62.8
DA	Nutrition	4.2	4.2	5.4	5.4
DB	Sustainable agricultural economy and rural areas	45.4	45.4	53.1	53.1
DC	Health and economic consumer protection	3.1	3.1	4.3	4.3
E	Energy research and energy technologies	881.3	562.1	971.8	648.6
EA	Efficient energy conversion	224.3	224.3	224.2	224.2
EB	Renewable energy	226.8	226.8	305.6	305.6
EC	Nuclear safety and waste management	57.6	57.6	64.1	64.1
ED	Decommissioning of nuclear facilities	334.7	15.5	338.0	14.8
EF	Fusion research	37.9	37.9	39.8	39.8
F	Climate, environment, sustainability	1,175.4	1,175.4	1,247.5	1,247.5
FA	Climate, climate protection; global change	244.5	244.5	258.4	258.4
FB	Coast, marine and polar research, geosciences	456.0	456.0	499.6	499.6
FC	Environmental and sustainability research	254.9	254.9	256.4	256.4
FD	Ecology, nature conservation, sustainable use	220.1	220.1	233.1	233.1
G	Information and communication technologies	963.8	841.8	972.1	908.8
GA	Software systems; knowledge technologies	293.3	293.3	313.1	313.1
GB	Communication technologies and services	188.2	188.2	235.5	235.5
GC	Electronic, electronic systems	394.4	287.3	329.3	281.5
GD	Microsystems technology	52.3	52.3	51.2	51.2
GE	Multimedia, development of convergent information and communication technology	35.6	20.7	43.0	27.6
H	Vehicle and traffic technologies including maritime technologies	36.8	36.8	36.4	36.4
HA	Vehicle and traffic technologies	31.2	31.2	29.9	29.9
HB	Maritime technologies	5.7	5.7	6.5	6.5
I	Aerospace	126.0	126.0	123.6	123.6
IB	National space research and space technology	126.0	126.0	123.6	123.6
J	Research and development to improve working conditions and in the service sector	81.6	81.6	88.3	88.3
JA	Research to improve working conditions	51.9	51.9	60.6	60.6
JB	Research in the service sector	29.7	29.7	27.7	27.7
K	Nanotechnologies and materials technologies	721.0	721.0	754.6	754.6
KA	Nanotechnologies	293.6	293.6	302.7	302.7
KB	Materials technologies	427.4	427.4	451.9	451.9
L	Optical technologies	214.3	214.3	333.9	333.9
M	Production technologies	280.4	280.4	283.5	283.5
N	Regional planning and urban development; construction research	32.1	32.1	36.3	36.3
NA	Regional planning, urban development, housing	2.5	2.5	2.3	2.3
NB	Construction research	29.5	29.5	34.0	34.0

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		Millions of €			
Funding area Funding priority		ACTUAL			
		2020		2021	
		Total	Of which, R&D	Total	Of which, R&D
O	Innovations in education	782.3	475.3	823.5	456.5
OA	Educational reporting, international assessments	241.1	126.7	271.6	138.1
OB	Educational research	502.4	309.8	519.8	286.2
OC	New media in the education	38.8	38.8	32.1	32.1
P	Humanities; economics and social sciences	1,021.8	1,021.8	1,092.6	1,092.6
PA	Humanities research	578.3	578.3	543.3	543.3
PB	Social scientific research	209.1	209.1	234.6	234.6
PC	Economic and finance scientific research	67.4	67.4	61.6	61.6
PD	Infrastructures	167.0	167.0	253.1	253.1
Q	Innovation funding for SMEs	104.8	104.8	99.1	99.1
QB	Technology support for SMEs	8.5	8.5	8.5	8.5
QC	Technology transfer and innovation consulting	96.3	96.3	90.6	90.6
R	Innovation-relevant underlying conditions and other cross-cutting activities	873.9	731.7	944.0	789.1
RA	Technology Assessment	2.5	2.5	2.6	2.6
RB	Structural cross-cutting activities	416.2	325.8	396.2	299.0
RC	Demographical change	82.3	82.3	82.7	82.7
RD	Sports promotion and sports research	0.7	0.7	0.5	0.5
RE	Others	372.3	320.5	462.0	404.2
T	Funding organisations, restructuring of the research field in acceding areas; construction of universities and primarily university-specific special programmes	2,677.0	717.2	2,743.6	811.6
TA	Basic funding of research institutions	0.0	0.0	0.0	0.0
TB	Others	2,677.0	717.2	2,743.6	811.6
U	Large-scale equipment for basic research	1,408.0	1,408.0	1,530.6	1,530.6
Z	Global reduced expenditure; budget reserve³	-	-	-	-
Total expenditure		15,122.7	12,272.5	15,261.2	12,420.6

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Expenditure on science, research and development by the Federal Ministry of Education and Research (BMBF), by funding areas and funding priorities¹

Millions of €					
Funding area Funding priority		ACTUAL		TARGET ²	
		2022		2023	
		Total	Of which, R&D	Total	Of which, R&D
A	Health research and health industry	2,904.7	2,897.6	2,781.7	2,778.4
AA	Health research and health industry	2,904.7	2,897.6	2,781.7	2,778.4
AB	Radiation protection	0.0	0.0	0.0	0.0
B	Bioeconomy	307.9	307.9	243.9	243.9
C	Civil security research	78.7	78.7	83.5	83.5
D	Nutrition, agriculture and consumer protection	68.3	68.3	69.9	69.9
DA	Nutrition	5.5	5.5	5.6	5.6
DB	Sustainable agricultural economy and rural areas	58.5	58.5	59.9	59.9
DC	Health and economic consumer protection	4.3	4.3	4.4	4.4
E	Energy research and energy technologies	1,022.4	677.2	1,018.3	655.1
EA	Efficient energy conversion	221.8	221.8	411.7	411.7
EB	Renewable energy	337.3	337.3	153.2	153.2
EC	Nuclear safety and waste management	65.8	65.8	44.9	44.9
ED	Decommissioning of nuclear facilities	356.5	11.3	374.4	11.2
EF	Fusion research	41.1	41.1	34.1	34.1
F	Climate, environment, sustainability	1,336.6	1,336.6	1,357.8	1,357.8
FA	Climate, climate protection; global change	286.2	286.2	255.2	255.2
FB	Coast, marine and polar research, geosciences	525.1	525.1	587.0	587.0
FC	Environmental and sustainability research	278.9	278.9	336.7	336.7
FD	Ecology, nature conservation, sustainable use	246.4	246.4	178.8	178.8
G	Information and communication technologies	1,176.4	1,052.5	1,438.1	1,304.8
GA	Software systems; knowledge technologies	355.9	355.9	461.3	461.3
GB	Communication technologies and services	323.4	323.4	451.6	451.6
GC	Electronic, electronic systems	404.5	296.3	428.4	311.8
GD	Microsystems technology	49.9	49.9	52.0	52.0
GE	Multimedia, development of convergent information and communication technology	42.7	27.0	44.8	28.0
H	Vehicle and traffic technologies including maritime technologies	38.5	38.5	39.5	39.5
HA	Vehicle and traffic technologies	31.6	31.6	32.4	32.4
HB	Maritime technologies	6.9	6.9	7.1	7.1
I	Aerospace	138.7	138.7	142.3	142.3
IB	National space research and space technology	138.7	138.7	142.3	142.3
J	Research and development to improve working conditions and in the service sector	85.4	85.4	146.2	146.2
JA	Research to improve working conditions	62.0	62.0	137.1	137.1
JB	Research in the service sector	23.4	23.4	9.1	9.1
K	Nanotechnologies and materials technologies	836.8	836.8	797.7	797.7
KA	Nanotechnologies	306.6	306.6	416.1	416.1
KB	Materials technologies	530.2	530.2	381.7	381.7
L	Optical technologies	379.2	379.2	383.6	383.6
M	Production technologies	295.3	295.3	229.7	229.7
N	Regional planning and urban development; construction research	38.4	38.4	39.3	39.3
NA	Regional planning, urban development, housing	2.1	2.1	2.2	2.2
NB	Construction research	36.2	36.2	37.1	37.1

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Expenditure on science, research and development by the Federal Ministry of Education and Research (BMBF), by funding areas and funding priorities¹

Millions of €					
Funding area Funding priority		ACTUAL		TARGET ²	
		2022		2023	
		Total	Of which, R&D	Total	Of which, R&D
O	Innovations in education	821.9	470.1	868.7	514.6
OA	Educational reporting, international assessments	372.3	160.2	390.5	181.7
OB	Educational research	429.5	289.8	448.4	303.2
OC	New media in the education	20.1	20.1	29.7	29.7
P	Humanities; economics and social sciences	1,030.0	1,030.0	1,090.6	1,090.6
PA	Humanities research	571.7	571.7	663.1	663.1
PB	Social scientific research	248.0	248.0	211.8	211.8
PC	Economic and finance scientific research	58.1	58.1	55.0	55.0
PD	Infrastructures	152.3	152.3	160.8	160.8
Q	Innovation funding for SMEs	240.5	240.5	346.7	346.7
QB	Technology support for SMEs	9.0	9.0	9.2	9.2
QC	Technology transfer and innovation consulting	231.5	231.5	337.4	337.4
R	Innovation-relevant underlying conditions and other cross-cutting activities	935.6	770.8	1,180.1	1,011.2
RA	Technology Assessment	2.7	2.7	5.1	5.1
RB	Structural cross-cutting activities	465.3	361.7	718.4	607.8
RC	Demographical change	85.2	85.2	80.4	80.4
RD	Sports promotion and sports research	0.2	0.2	0.2	0.2
RE	Others	382.2	321.0	376.0	317.7
T	Funding organisations, restructuring of the research field in acceding areas; construction of universities and primarily university-specific special programmes	2,889.0	930.8	3,014.3	952.6
TA	Basic funding of research institutions	0.0	0.0	0.0	0.0
TB	Others	2,889.0	930.8	3,014.3	952.6
U	Large-scale equipment for basic research	1,584.3	1,584.3	1,658.7	1,658.7
Z	Global reduced expenditure; budget reserve³	-	-	-484.0	-484.0
Total expenditure		16,208.6	13,257.6	16,446.6	13,362.0

1 According to the Federal Government's planning system 2009. Expenditure was implemented in accordance with the Federal Government's planning system 2009. Expenditure of non-university research organisations are distributed among funding areas and funding priorities. Discrepancies with regard to earlier publications are due to subsequent changes of assignments to funding areas and funding priorities or rather due to subsequent changes in the allocation to R&D. Possible rounding differences.

2 Distribution among funding areas and funding priorities partly estimated or extrapolated.

3 ACTUAL figures are needed to break down the BMBF's total expenditure reduction by funding areas and funding priorities.

Last update: November 14, 2023

This table also appears in the Federal Report on Research and Innovation as Table 6.

Source: Special evaluation of the Federal Ministry of Education and Research

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<https://www.govdata.de/dl-de/by-2-0>