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GOVERNMENT BUDGET ALLOCATIONS FOR R&D, 2023 – 2024

The share of government budget allocations for R&D in GDP in 2023 amounted to 0.68%

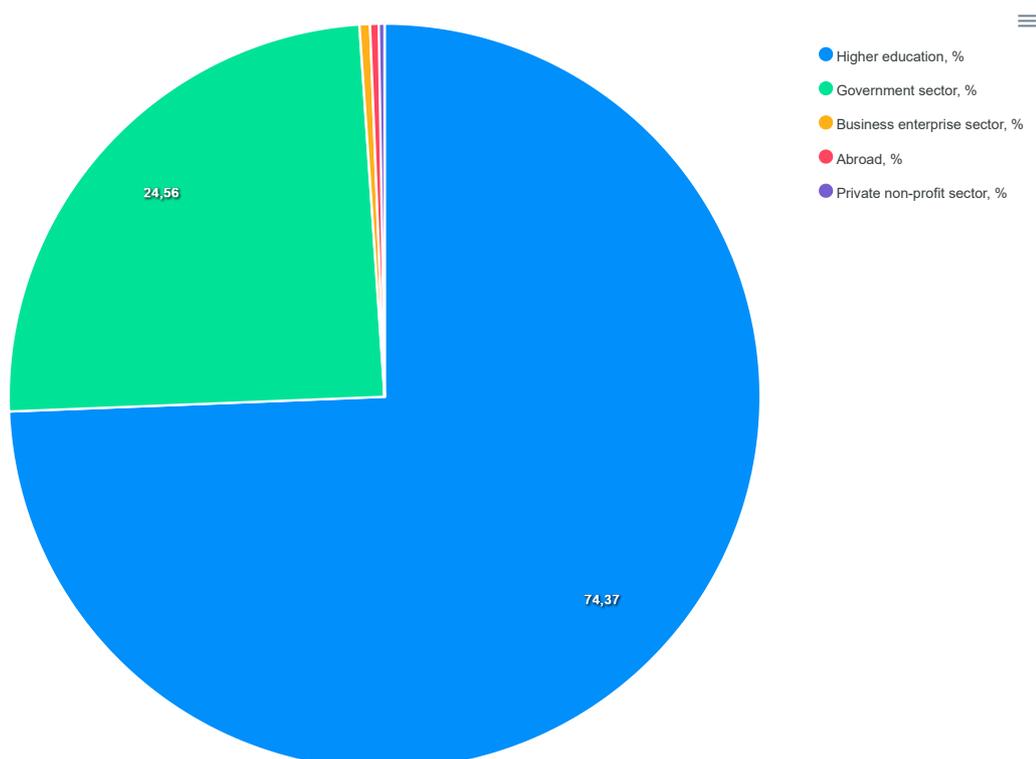
In 2023, in the Republic of Croatia, **533 million euro** of the government budget funds were spent on R&D activity.

The biggest share of the government budget funds for R&D in 2023 was allocated for the higher education sector (**74.37%**). The government sector followed with **24.56%**, while the lowest share was allocated for abroad (**0.37%**) and the private non-profit sector (**0.25%**).

Regarding the socio-economic objectives, the highest amount (58.07%) of the government budget allocations for R&D in 2023 was spent on the objective General advancement of knowledge: R&D financed from general university funds (GUF). The objective General advancement of knowledge: R&D financed from sources other than GUF followed with 29.74%, while the smallest amount was spent on the objective Exploration and exploitation of space (0.01%).

The planned government budget allocations for R&D in 2024 (according to the adopted government budget for 2024) amounted to 531 million euro, of which over half of funds (59.08%) were intended for the objective General advancement of knowledge: R&D financed from general university funds (GUF).

G-1 SHARE OF GOVERNMENT BUDGET ALLOCATIONS FOR R&D, BY SECTORS (ACTUAL PAYMENTS), 2023



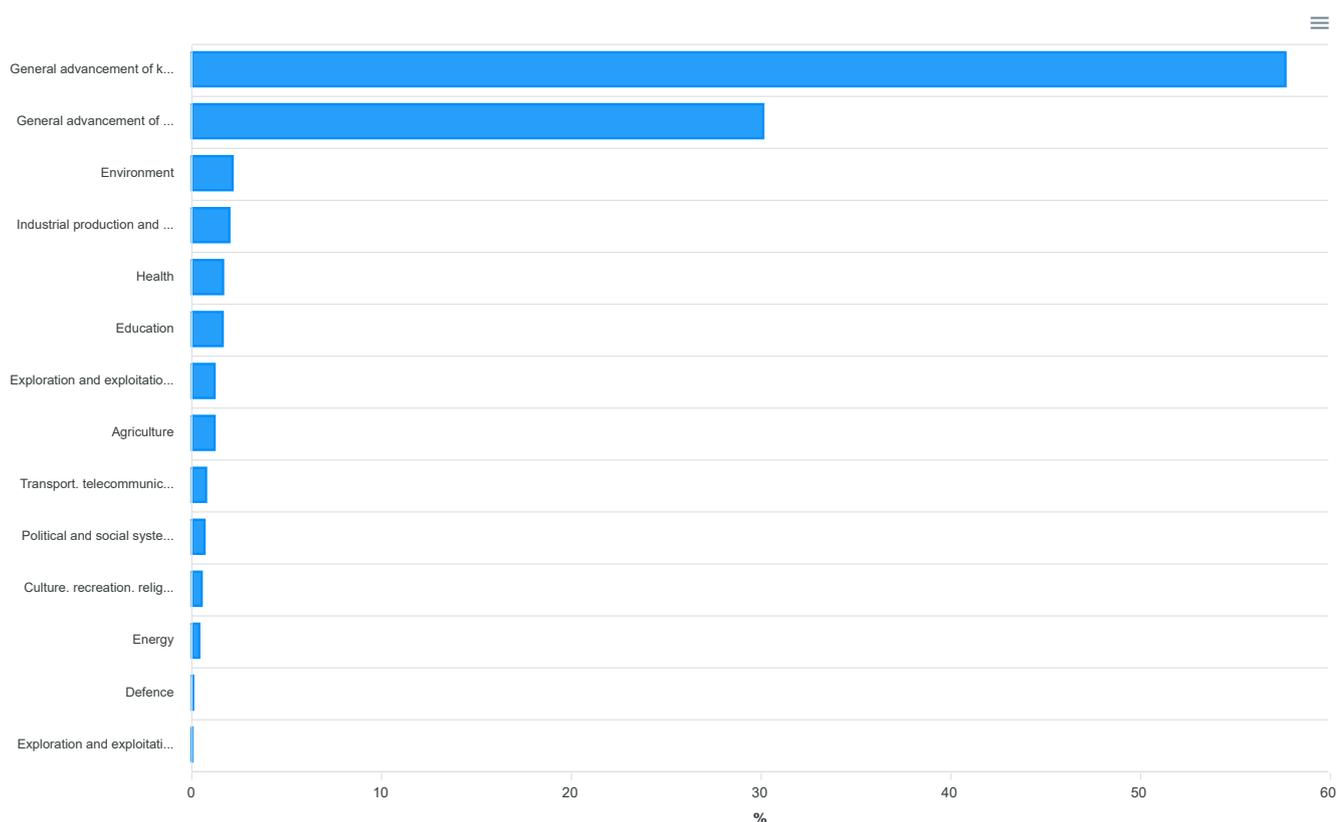
1 GOVERNMENT BUDGET ALLOCATIONS FOR R&D, BY SOCIO-ECONOMIC OBJECTIVES AND SECTORS (ACTUAL PAYMENTS), 2023

Euro

	Total	Business enterprise sector	Government sector	Higher education	Private non-profit sector	Abroad
Total	533 181 764 ¹⁾	2 410 013	130 924 147	396 513 112	1 335 384	1 999 108
Exploration and exploitation of the Earth	6 321 967	35 458	3 818 173	2 367 763	100 573	-
Environment	11 428 421	34 100	7 670 150	3 724 171	-	-
Exploration and exploitation of space	44 889	-	-	44 889	-	-
Transport, telecommunication and other infrastructures	3 947 571	59 000	363 259	3 525 312	-	-
Energy	2 026 007	-	-	2 026 007	-	-
Industrial production and technology	10 480 784	317 830	-	10 162 954	-	-
Health	8 760 375	146 500	7 605 360	1 008 515	-	-
Agriculture	6 361 841	465 512	4 824 460	1 039 968	31 901	-
Education	8 630 080	-	292 627	8 337 453	-	-
Culture, recreation, religion and mass media	2 724 928	45 094	2 377 579	302 255	-	-
Political and social systems, structures and processes	3 540 731	15 197	3 354 954	170 580	-	-
General advancement of knowledge: R&D financed from GUF	307 769 802	-	4 800 171	302 969 631	-	-
Natural sciences	26 597 153	-	2 080 400	24 516 753	-	-
Engineering	68 358 073	-	14 115	68 343 958	-	-
Biomedicine and health	76 343 310	-	778 225	75 565 086	-	-
Biotechnical sciences	26 150 594	-	358 040	25 792 554	-	-
Social sciences	69 660 110	-	720 685	68 939 425	-	-
Humanities	40 660 562	-	848 706	39 811 856	-	-
General advancement of knowledge: R&D financed from sources other than GUF	160 807 339	954 293	95 817 414	60 833 614	1 202 910	1 999 108
Natural sciences	46 944 925	55 059	41 435 531	5 056 361	-	397 973
Engineering	14 973 621	666 686	306 805	13 678 238	-	321 893
Biomedicine and health	31 174 366	14 384	15 457 255	15 123 462	151 437	427 828
Biotechnical sciences	12 647 650	120 064	7 186 390	5 174 609	-	166 586
Social sciences	28 936 132	98 100	14 607 632	13 833 069	-	397 331
Humanities	26 130 646	-	16 823 802	7 967 874	1 051 473	287 497
Defence	337 029	337 029	-	-	-	-

1) Due to the calculation of General advancement of knowledge by using the coefficients derived from the R&D survey, deviation of sums may occur.

G-2 SHARE OF GOVERNMENT BUDGET ALLOCATIONS FOR R&D, BY SOCIO-ECONOMIC OBJECTIVES IN TOTAL GOVERNMENT BUDGET ALLOCATIONS FOR R&D (ACTUAL PAYMENTS), 2023

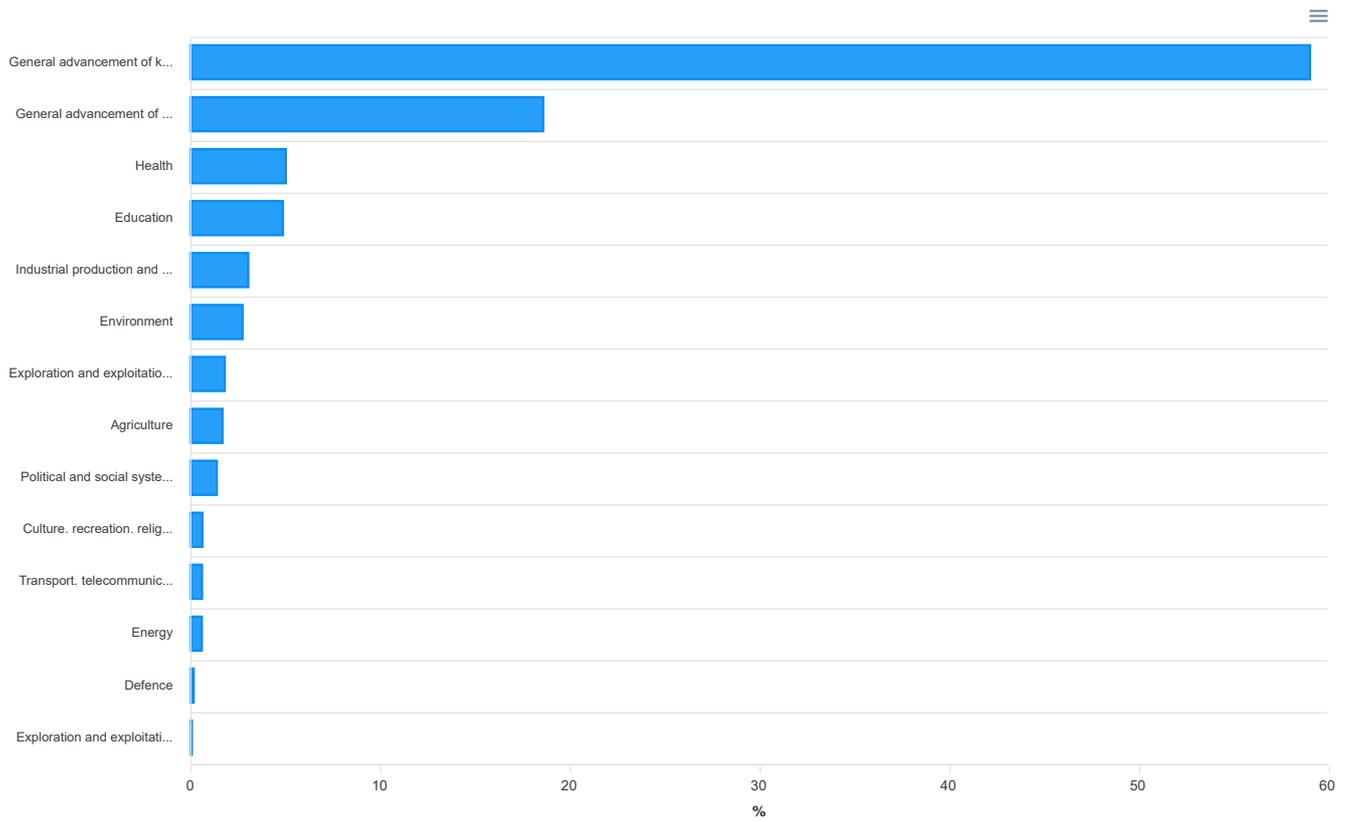


2 GOVERNMENT BUDGET ALLOCATIONS FOR R&D (ADOPTED BUDGET FOR 2024), BY SOCIO-ECONOMIC OBJECTIVES, 2024

Euro

	Total
Total	530 954 084
Exploration and exploitation of the Earth	9 448 924
Environment	14 453 924
Exploration and exploitation of space	209 174
Transport, telecommunication and other infrastructures	3 069 076
Energy	3 005 777
Industrial production and technology	16 055 265
Health	26 530 543
Agriculture	8 791 271
Education	25 767 062
Culture, recreation, religion and mass media	3 202 647
Political and social systems, structures and processes	7 231 076
General advancement of knowledge: R&D financed from GUF	313 693 990
General advancement of knowledge: R&D financed from sources other than GUF	98 775 146
Defence	720 209

G-3 SHARE OF GOVERNMENT BUDGET ALLOCATIONS FOR R&D, BY SOCIO-ECONOMIC OBJECTIVES IN TOTAL GOVERNMENT BUDGET ALLOCATIONS FOR R&D (ADOPTED BUDGET FOR 2024), 2024



3 SHARE OF GOVERNMENT BUDGET ALLOCATIONS FOR R&D, BY SOCIO-ECONOMIC OBJECTIVES, IN TOTAL GOVERNMENT BUDGET ALLOCATIONS FOR R&D FOR EUROPEAN UNION COUNTRIES AND THE REPUBLIC OF CROATIA, 2023

%

	Exploration and exploitation of the Earth	Environment	Exploration and exploitation of space	Transport, telecommunication and other infrastructures	Energy	Industrial production and technology	Health	Agriculture	Education	Culture, recreation, religion and mass media	Political and social systems, structures and processes	General advancement of knowledge: R&D financed from GUF	General advancement of knowledge: R&D financed from sources other than GUF	Defence
EU-27¹⁾	1,79	2,41	5,97	2,94	5,26	10,97	6,86	2,88	1,81	0,88	1,58	35,48	17,26	3,90
Croatia	1,05	0,62	0,01	0,42	0,17	0,65	0,79	2,41	1,66	0,21	0,90	60,65	30,15	0,33
Austria	1,30	1,37	0,68	2,30	3,59	15,91	4,55	1,34	0,77	0,38	0,90	53,92	12,83	0,16
Belgium	1,56	0,73	8,58	0,37	1,70	32,93	1,94	2,16	0,32	1,41	2,81	19,01	25,11	1,38
Bulgaria	10,75	0,62	1,06	6,20	0,84	6,66	2,62	18,85	1,05	0,94	1,51	14,06	34,45	0,41
Cyprus	0,07	0,25	0,00	0,17	0,04	0,01	5,41	4,96	1,60	0,46	0,08	21,37	65,55	0,03
Czech Republic	2,32	2,47	1,94	3,48	3,59	11,06	6,50	4,04	0,58	1,51	2,28	26,71	32,75	0,76
Denmark	1,11	1,36	1,40	0,14	4,48	4,20	17,25	2,91	4,53	1,59	1,96	42,65	16,00	0,42
Estonia	0,67	1,54	0,00	0,14	0,00	27,30	0,69	4,16	0,06	2,78	0,77	13,42	45,72	2,76
Finland	0,62	8,08	1,81	0,81	5,57	14,36	2,03	2,97	0,08	0,47	2,44	30,88	27,77	2,10
France	1,16	1,73	12,51	4,54	11,04	0,88	4,93	2,70	0,17	1,02	0,16	26,22	24,41	8,52
Greece	1,49	1,59	1,87	3,81	0,64	16,53	11,07	3,51	0,57	8,05	2,39	42,15	4,29	2,03
Ireland	1,01	2,39	3,54	0,64	1,83	12,95	5,58	9,00	3,04	0,86	0,97	29,42	28,76	0,00
Italy	6,65	2,29	13,43	2,59	3,53	9,11	12,05	2,03	2,85	1,00	2,98	39,56	1,53	0,41
Latvia	0,56	8,61	1,53	2,18	5,34	6,10	12,33	13,41	3,16	2,73	2,09	9,19	29,12	3,67
Lithuania	3,05	0,53	0,38	2,95	2,90	8,74	1,38	3,05	0,53	3,08	2,89	56,08	14,16	0,27
Luxembourg	0,01	2,54	0,09	0,70	0,05	9,80	19,57	0,14	2,62	0,05	4,93	30,42	29,07	0,00
Hungary	1,34	2,50	8,28	11,51	2,76	11,34	10,65	4,00	2,55	1,32	1,41	3,64	32,12	6,58
Malta	1,79	0,44	1,79	0,00	2,08	1,88	2,23	1,40	0,00	0,28	10,31	77,80	...	0,00
Netherlands	1,04	1,76	1,89	2,72	4,17	8,44	7,15	4,83	0,64	0,17	1,06	46,47	16,78	2,87
Germany	1,33	2,80	4,01	2,94	5,92	15,84	5,58	2,41	2,76	0,78	1,87	35,05	14,48	4,22
Poland	0,02	0,57	0,43	0,27	0,24	0,77	3,81	0,20	0,01	0,06	0,10	47,45	35,97	10,10
Portugal	1,09	4,18	0,81	2,84	2,45	5,28	9,18	2,42	2,82	1,62	1,53	58,56	6,95	0,26
Romania	2,85	5,06	26,86	1,09	3,11	18,78	2,08	4,23	0,09	0,05	0,24	...	28,21	7,34
Slovakia	2,43	3,44	1,94	1,75	1,05	7,61	8,10	2,04	1,46	4,66	2,43	42,44	16,83	3,82
Slovenia	2,82	6,08	0,55	2,47	5,31	10,61	14,14	6,81	1,84	2,48	3,96	0,33	39,28	3,32
Spain	0,90	3,13	6,15	3,02	2,71	9,42	11,98	5,78	2,11	0,66	1,00	30,32	19,53	3,29
Sweden	0,59	2,88	2,03	6,18	2,18	4,24	3,02	1,71	0,68	0,18	1,81	45,87	24,61	4,01

1) Data for EU Member States, except for Bulgaria, Cyprus, Denmark, Estonia, France, Ireland, Latvia, Malta, Romania and Slovenia are provisional. Data for Sweden are estimated.

Data source: Eurostat (website https://ec.europa.eu/eurostat/databrowser/view/gba_nabsfin07/default/table?lang=en)

NOTES ON METHODOLOGY

Purpose of the survey

This survey collects data on the government budget allocations for R&D according to the socio-economic objectives, including all grants to the international R&D programmes or institutions abroad. The objective of the survey is to enable the monitoring of the state R&D policy through its financing of the R&D activities. As opposed to the research on organisations engaged in the R&D activities, this survey focuses on organisations that finance the R&D activity.

The survey was conducted on the basis of the Official Statistics Act (NN, Nos 25/20 and 155/23). The legal basis of the European Union for the implementation of the survey is Decision No. 1608/2003/EC of the European Parliament and of the Council of 22 July 2003 concerning the production and development of Community statistics on science and technology and Commission Implementing Regulation (EU) No. 995/2012 of 26 October 2012 laying down detailed rules for the implementation of Decision No. 1608/2003/EC.

Data sources

Data are the result of statistical processing of annual reports collected from budgetary and extra-budgetary users of the government budget in 2024. The Ministry of Science, Education and Youth provided data in the Annual Report on the Government Budget Allocations for R&D – PIIR-1 form, while other government bodies provided data in the Annual Report on the Government Budget Allocations for R&D – PIIR-2 form.

Pursuant to the Official Statistics Act (NN, Nos 25/20 and 155/23), the confidentiality of all data provided by the reporting units in the form is guaranteed. The data collected are used solely for statistical purposes and are published in aggregate form.

Coverage and comparability

The statistical survey on the government budget allocations for R&D in the period from 2023 to 2024 covers budgetary and extra-budgetary users of the government budget in the Republic of Croatia, that is, all government bodies that in 2023 financed and in 2024 planned to finance the R&D activity. The data are based on the actual government budget allocations for 2023 (amounts effectively paid during the year) and the adopted government budget for 2024 (amounts enacted by the Croatian Parliament before the rebalancing of the budget).

The First Release includes data on funds that the Ministry of Science, Education and Youth directly allocated for the R&D purposes in 2023 from the government budget of the Republic of Croatia activity in the Ministry's competence as well as data submitted to the Ministry by reporting units. The First Release includes data related to institutions from the system of science and higher education (institutions of higher education and public scientific institutes).

Since October 2013, the Ministry of Science, Education and Youth has no longer funded the scientific/research projects (z-projects). The financing of research projects is carried out by the Croatian Science Foundation through its programme Research Projects and other programmes such as Installation Research Projects.

The data published in this First Release are comparable with data for previous years, including data for 2009 and 2010.

The methodological basis for the implementation of the survey is the internationally acknowledged standard, which was set up and published in the Frascati Manual 2015 by the OECD.

Definitions and explanations

Definitions of the R&D field are based on the international methodology – the Frascati Manual 2015 (Frascati Manual, 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, The Measurement of Scientific, Technological and Innovation Activities, publisher: OECD, Paris, 2015).

The Nomenclature for the Analysis and Comparison of Scientific Programmes and Budgets – NABS 2007 was used in monitoring of the allocation of the Government Budget appropriations or outlays according to the socio-economic objectives, which is correlated with the Frascati Manual. This Nomenclature explains the socio-economic objectives, that is, the purpose of the spent appropriations or outlays for the R&D in 13 categories.

Research and development (R&D) comprise systematic creative work aimed at increasing knowledge about man, culture and society and its application in practice. For an activity to be an R&D activity, it must satisfy five criteria. The activity must be novel, creative, uncertain, systematic and transferable and/or reproducible. There are three types of research and development: basic research, applied research and experimental development.

Business enterprise sector comprises enterprises the main activity of which is production of goods and services intended for market at commercial price. The business enterprise sector includes public enterprises as well as non-profit institutions that are market producers of goods or services.

Government sector comprises all units of central and local government, including social security funds, except institutions of higher education, as well as all non-profit institutions that are controlled by government units and are not market-orientated, and that are not part of the higher education sector.

Private non-profit sector comprises non-market, non-profit institutions serving households (that is, the general public), except those mainly controlled and financed by the government, their main characteristic being that they should not be the source of revenue or profit to the institutions controlling them.

Higher education includes all institutions providing formal tertiary education programmes, regardless of their source of finance or legal status, and all research institutes and centres that have their R&D activities under the direct control of, or administered by, tertiary education institutions.

Abroad includes all institutions and individuals located outside the political borders of a country as well as all international organisations (except business enterprises) including facilities and operations within the country borders.

Socio-economic objective represents the basic allocation of funds for R&D set up by the OECD and expressed in 13 categories.

Abbreviations

EC	European Community
EU	European Union
Eurostat	Statistical Office of the European Union
GDP	gross domestic product
GUF	general university funds
NN	Narodne novine, official gazette of the Republic of Croatia
OECD	Organisation for Economic Co-operation and Development
R&D	research and development

Symbols

-	no occurrence
...	data not available
0,00	value not zero but less than 0.005 of the unit of measure used

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