

Translation



The following document is the 2019 budget for the Chinese Academy of Sciences (CAS), a huge PRC state-run scientific research institute and think tank. CAS' level of funding, particularly for basic and applied research, increased significantly in 2019 over the previous year.

Title

Chinese Academy of Sciences 2019 Departmental Budget
中国科学院2019年部门预算

Author

Chinese Academy of Sciences (CAS; 中国科学院; 中科院)

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I. Functions of the Chinese Academy of Sciences

The Chinese Academy of Sciences (CAS) was established in 1949 following the birth of New China. The CAS is a comprehensive state research institution established by the central people's government. It is the nation's highest academic institution for natural sciences, the highest advisory body for science and technology, and the highest integrated research and development center for natural sciences and high technology. It is a national force for strategic science and technology (S&T) that combines scientific research institutes, academic divisions, and educational institutions. Its main functions include:

(I) To engage mainly in basic research, strategic high-tech research, and research relating to sustainable economic and social development; to lead China's leapfrog development in S&T; to focus on solving major basic, strategic, and cutting-edge technical issues in China's modernization; to play a central driving role in the national innovation system with Chinese characteristics; to boost China's independent innovation (自主创新) capability; to promote commercialization of S&T achievements (科技成果转化) and the development of high-tech industries; and to provide a scientific foundation and technological wellspring for China's innovation-based, coordinated, green, open, and shared development;

(II) To adhere to the integration of science and education, simultaneous development of scientific research and education, simultaneous emphasis on producing achievements and talents, construction of a national bastion of innovative talents, and the training and assignment of high-level talents in S&T and innovation and entrepreneurship;

(III) To construct high-level S&T think tanks, provide insights and deliberation on significant S&T issues, take on strategic research and consultation and evaluation tasks entrusted to it by the State, and to provide consulting advice and scientific evidence for the nation's macro-level decision-making; and to abide by scientific ethics, regulate scientific behavior, and promote the progress of society and civilization while popularizing scientific knowledge throughout society, carrying forward the scientific spirit, disseminating scientific ideas, advocating the scientific method, and making scientific culture flourish;

(IV) To insist upon openly run institutions, broadly carry out S&T collaboration and exchanges at home and abroad, actively integrate with global innovation networks, and build a world-class scientific research institution;

(V) To perform the duties of an institution directly under the State Council, and take on other work entrusted to it by the State.

II. Organizational Structure of CAS

Institutions established within CAS: Office of General Affairs (办公厅), Bureau of Academic Divisions, Bureau of Frontier Sciences and Education, Bureau of Major R&D Programs, Bureau of Science and Technology for Development, Bureau of Development and Planning, Bureau of Facility Support and Budget, Bureau of Personnel, CPC Committee at CAS (直属机关党委), Bureau of International Cooperation, Bureau of Science Communication, Bureau of

Supervision and Auditing, Bureau of Veteran Cadres (离退休干部工作局).

The departmental budget of CAS includes the CAS level itself, the Institute of Physics of the Chinese Academy of Sciences, the University of the Chinese Academy of Sciences, and other budgetary units, 139 in all, of which 125 are business units and 14 are units under transformation (转制单位). Among the business units, there are: 102 scientific research institutions, including the Academy of Mathematics and Systems Science and the Institute of Physics; 12 administrative institutions, including the CAS Shanghai Branch and the CAS Shenyang Branch; two educational institutions, i.e., the University of the Chinese Academy of Sciences and the University of Science and Technology of China; and nine support institutions.

III. 2019 CAS Departmental Budget

The year 2019 marks the 70th anniversary of the founding of New China, and it is also the 70th anniversary of CAS's founding and a key year in the resolution to basically achieve the "four leads" goals.¹ The overall idea of this year's work is: Under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, deeply implement the spirit of the 19th CPC National Congress, and of the Second and Third Plenums of the 19th CPC Central Committee, as well as the spirit of the Grand Gathering to Celebrate the 40th Anniversary of Reform and Opening Up and the Central Economic Work Conference, deeply implement the major decisions and arrangements of the CPC Central Committee and the State Council, comprehensively strengthen the Party's leadership of S&T undertakings, deeply implement the "leading initiative" plan, promote continuous deepening of reform and opening at higher starting points, higher levels, and higher objectives, lay the decisive groundwork for the basic achievement of the "four leads" goals, and accelerate promotion of CAS' entry into a new phase of high-quality development, so as to greet with excellent results the 70th anniversaries of the founding of New China and the establishment of CAS.

The early 2019 CAS departmental budget totals RMB 87,827,013,100, an increase of RMB 12,832,624,500 or 17.11%, from early 2018. The CAS departmental budget includes expenditures for the retired staff, current staff, and institutional operations for the entire Academy, and also includes expenditures for organizing S&T innovation activities; talent recruitment and training; scientific research conditions and logistics support (科研条件及后勤保障); cooperation, exchanges, consulting, and communications; S&T restructuring; academician advisory and science popularization activities; operation of special scientific research facilities; and funding for education.

¹ Translator's note: Xi Jinping formulated the "four leads" during his inspection of the Chinese Academy of Sciences on July 17, 2013. He said: "The Chinese Academy of Sciences must keep its mission firmly in mind, and must lead the realization of leapfrog development of science and technology, lead the construction of a national bastion of innovative talents, lead the construction of a high-level national S&T think tank, and lead the building of a world-class scientific research institution" (中国科学院要牢记责任, 率先实现科学技术跨越发展, 率先建成国家创新人才高地, 率先建成国家高水平科技智库, 率先建设国际一流科研机构).

Note: Discrepancies in the decimal portions of the individual data exist due to rounding.

Summary of Government Budget Allocation Income and Expenditures

Departmental open form 1

Units: RMB 10,000

Income		Expenditures	
Item	Budget	Item	Budget
I. Current year income	4,448,969.30	I. Current year expenditures	4,804,306.22
(I) General public budget (一般公共预算) allocation	4,448,969.30	(I) General public services expenditures	90.00
(II) Governmental fund budget (政府性基金预算) allocation	-	(II) Education expenditures	413,907.21
	-	(III) Science and technology expenditures	4,155,355.09
II. Balance carried forward from previous year	355,336.92	(IV) Culture, tourism, sports and media	116.49
(I) General public budget allocation	355,336.92	(V) Social security and employment expenditures	95,405.49
(II) Governmental fund budget allocation		(VI) Expenditures for resource exploration and information, etc.	3,214.00
		(VII) Housing expenditures	136,217.94
		II. Balance carried over to following year	
Total income	4,804,306.22	Total expenditures	4,804,306.22

Explanations Regarding the Summary of Government Budget Allocation Income and Expenditures

(I) Income budget

1. General public budget allocation: The early 2019 budget figure is RMB 44,489,693,000, an increase of RMB 6,459,339,900, or 16.98%, from early 2018. Main reason: Increases in the special operating costs of scientific research institutions.

2. Balance carried forward from previous year: The early 2019 budget figure is RMB 3,553,369,200, an increase of RMB 488,711,700, or 15.95%, from early 2018. Main reason: Funds for scientific research tasks uncompleted in the previous year were carried forward to 2019 for continued use.

(II) Expenditures budget

1. General public service expenditures: The early 2019 budget figure is RMB 900,000, an increase of RMB 100,000, or 12.50%, from early 2018. Main reason: Increased discipline inspection and supervision appropriation expenditures.

2. Education expenditures: The early 2019 budget figure is RMB 4,139,072,100, an increase of RMB 340,515,800, or 8.96%, from early 2018. Main reason: Increased education appropriation expenditures.

3. Science and technology expenditures: The early 2019 budget figure is RMB 41,553,550,900, an increase of RMB 5,527,626,600, or 15.34%, from early 2018. Main reason: Increased expenditures for special operating expenses of scientific research institutions.

4. Culture, tourism, sports and media expenditures: The early 2019 budget is 1,164,900, a decrease of RMB 13,675,100 from early 2018. Main reason: Decreased expenditures on special funds for cultural industry development.

5.

6. Social security and employment expenditures: The early 2019 budget figure is RMB 954,054,900, an increase of RMB 954,054,900 from early 2018. Main reason: Increases in appropriations of contribution assistance funds for central units participating in pension insurance reform, and of occupational pension contribution funds for state organs and public institutions.

7. Education expenditures: The early 2019 budget figure is RMB 4,139,072,100, an increase of RMB 340,515,800, or 233.40%, from early 2018. Main reason: An increase in one-time project expenditures

8. Housing expenditures: The early 2019 budget figure is RMB 1,362,179,400, an increase of RMB 116,929,400, or 9.39%, from early 2018.

General Public Budget Expenditures Form

Departmental open form 2
Units: RMB 10,000

Functional classification item		2018 actual amount		2019 budgeted amount				2019 budget compared to 2018 actual		2019 budget compared to 2018 actual (less NDRC infrastructure)	
Item code	Item name	Actual amount	Actual amount after deducting NDRC infrastructure	Budgeted amount			Budgeted amount after deducting NDRC infrastructure	Increase amount	Increase %	Increase amount	Increase %
				Subtotal	Basic expenditures	Project expenditures					
201	General public services expenditures	80.00	80.00	90.00	-	90.00	90.00	10.00	12.50	10.00	12.50
205	Education expenditures	358,142.75	358,142.75	389,107.21	294,883.76	94,223.45	389,107.21	30,964.46	8.65	30,964.46	8.65
20502	General education	358,142.75	358,142.75	389,107.21	294,883.76	94,223.45	389,107.21	30,964.46	8.65	30,964.46	8.65
2050205	Higher education	358,142.75	358,142.75	389,107.21	294,883.76	94,223.45	389,107.21	30,964.46	8.65	30,964.46	8.65
206	Science and technology expenditures	3,375,592.42	3,213,446.42	3,828,218.07	1,341,601.23	2,486,616.84	3,431,669.07	452,625.65	13.41	218,222.65	6.79
20602	Basic research	1,928,130.99	1,771,891.99	2,249,615.07	551,128.56	1,698,486.51	2,016,015.07	321,484.08	16.67	244,123.08	13.78
2060201	Institutional operations	521,743.50	521,743.50	530,047.57	530,047.57	-	530,047.57	8,304.07	1.59	8,304.07	1.59
2060204	Key laboratories and related facilities	198,673.50	198,673.50	215,395.00	-	215,395.00	215,395.00	16,721.50	8.42	16,721.50	8.42
2060205	Major science projects	140,690.00	140,690.00	176,599.79	-	176,599.79	176,599.79	35,909.79	25.52	35,909.79	25.52
2060206	Special basic research projects	266,376.74	110,137.74	398,422.79	-	398,422.79	164,822.79	132,046.05	49.57	54,685.05	49.65
2060299	Other basic research expenditures	800,647.25	800,647.25	929,149.92	21,080.99	908,068.93	929,149.92	128,502.67	16.05	128,502.67	16.07
20603	Applied research	1,107,378.39	1,101,471.39	1,234,201.37	752,688.04	481,513.33	1,071,252.37	126,822.98	11.45	-30,219.02	-2.74
20604	Technology R&D	35,000.00	35,000.00	20,000.00	-	20,000.00	20,000.00	-15,000.00	-42.86	-15,000.00	-42.86
2060499	Other technology R&D expenditures	35,000.00	35,000.00	20,000.00	-	20,000.00	20,000.00	-15,000.00	-42.86	-15,000.00	-42.86
20605	Technology conditions and services	203,714.70	203,714.70	199,298.23	16,113.23	183,185.00	199,298.23	-4,416.47	-2.17	-4,416.47	-2.17
2060501	Institutional operations	19,209.70	19,209.70	16,113.23	16,113.23	-	16,113.23	-3,096.47	-16.12	-3,096.47	-16.12
2060503	Special technology conditions projects	184,505.00	184,505.00	183,185.00	-	183,185.00	183,185.00	-1,320.00	-0.72	-1,320.00	-0.72
20608	S&T exchanges and cooperation	55,000.00	55,000.00	85,000.00	-	85,000.00	85,000.00	30,000.00	54.55	30,000.00	54.55
2060899	Other S&T exchanges and cooperation expenditures	55,000.00	55,000.00	85,000.00	-	85,000.00	85,000.00	30,000.00	54.55	30,000.00	54.55
207	Culture, tourism, sports and	1,484.00	1,484.00	-	-	-	-	-1,484.00	-100.00	-1,484.00	-100.00

Functional classification item		2018 actual amount		2019 budgeted amount				2019 budget compared to 2018 actual		2019 budget compared to 2018 actual (less NDRC infrastructure)	
Item code	Item name	Actual amount	Actual amount after deducting NDRC infrastructure	Budgeted amount			Budgeted amount after deducting NDRC infrastructure	Increase amount	Increase %	Increase amount	Increase %
				Subtotal	Basic expenditures	Project expenditures					
	media expenditures										
20799	Other culture, tourism, sports and media expenditures	1,484.00	1,484.00	-	-	-	-	-1,484.00	-100.00	-1,484.00	-100.00
2079903	Special cultural industry development project expenditures	1,484.00	1,484.00	-	-	-	-	-1,484.00	-100.00	-1,484.00	-100.00
208	Social security and employment expenditures	11,119.69	11,119.69	95,240.02	95,240.02	-	95,240.02	84,120.33	756.50	84,120.33	756.50
20805	Administrative business unit pensions	11,119.69	11,119.69	95,240.02	95,240.02	-	95,240.02	84,120.33	756.50	84,120.33	756.50
2080505	Expenditures on basic pension insurance contributions of state organ business units	11,119.69	11,119.69	70,430.43	70,430.43	-	70,430.43	59,310.74	533.38	59,310.74	533.38
2080506	Expenditures on occupational annuity contributions of state organ business units	-	-	24,809.59	24,809.59	-	24,809.59	24,809.59	0.00	24,809.59	-
215	Expenditures for resource exploration and information, etc.	4,564.00	964.00	214.00	214.00	-	214.00	-4,350.00	-95.31	-750.00	-77.80
21502	Manufacturing	-	-	214.00	214.00	-	214.00	214.00	0.00	214.00	-
21599	Other expenditures for resource exploration and information, etc.	4,564.00	964.00	-	-	-	-	-4,564.00	-100.00	-964.00	-100.00
2159999	Other expenditures for resource exploration and information, etc.	4,564.00	964.00	-	-	-	-	-4,564.00	-100.00	-964.00	-100.00
221	Housing expenditures	124,400.00	124,400.00	136,100.00	136,100.00	-	136,100.00	11,700.00	9.41	11,700.00	9.41
22102	Housing reform expenditures	124,400.00	124,400.00	136,100.00	136,100.00	-	136,100.00	11,700.00	9.41	11,700.00	9.41
2210201	Housing provident fund	79,500.00	79,500.00	91,500.00	91,500.00	-	91,500.00	12,000.00	15.09	12,000.00	15.09
2210202	Rent subsidies	4,050.00	4,050.00	3,850.00	3,850.00	-	3,850.00	-200.00	-4.94	-200.00	-4.94
2210203	Home purchase subsidies	40,850.00	40,850.00	40,750.00	40,750.00	-	40,750.00	-100.00	-0.24	-100.00	-0.24
	Total	3,875,382.86	3,709,636.86	4,448,969.30	1,868,039.01	2,580,930.29	4,052,420.30	573,586.44	14.80	342,783.44	9.24

Explanations regarding the General Public Budget Expenditures Form

After deducting National Development and Reform Commission (NDRC) infrastructure, the 2019 budgeted amount is RMB 40,524,203,000, an increase of RMB 3,427,834,400, or 9.24%, from the 2018 actual amount. The key tasks and expenditure policies of 2019 include: To comprehensively strengthen the Party's leadership over S&T undertakings, ensure high-quality task completion of the Phase I goals under the "lead initiative" plan, and enhance focus on tackling major scientific and technological tasks, among which are:

(I) General public service expenditures: The early 2019 budget figure is RMB 900,000, an increase of RMB 100,000, or 12.50%, from the 2018 actual amount. Main reason: Increased discipline inspection and supervision appropriation expenditures.

(II) Education expenditures: The early 2019 budget figure is RMB 3,891,072,100, an increase of RMB 309,644,600, or 8.65%, from the 2018 actual amount. Main reason: Increased education appropriation expenditures.

(III) Science and technology expenditures: The early 2019 budget figure is RMB 34,316,690,700, an increase of RMB 2,182,226,500, or 6.79%, from the 2018 actual amount. Main reason: Increases in the special operating costs of scientific research institutions.

(IV) Culture, tourism, sports and media expenditures: The 2019 budgeted amount is RMB 0, a decrease of RMB 14,840,000, or 100%, from the 2018 actual amount. Main reason: Decreased expenditures on special funds for cultural industry development.

(V) Social security and employment expenditures: The 2019 budgeted amount is RMB 952,400,200, an increase of RMB 841,203,300 from the 2018 actual amount. Main reason: Increases in appropriations of contribution assistance funds for central units participating in pension insurance reform, and of occupational pension contribution funds for state organs and public institutions.

(VI) Resource exploration and information expenditures: The 2019 budgeted amount is RMB 2,140,000, a decrease of RMB 7,500,000, or 77.8%, from the 2018 actual amount. Main reason: A decrease in one-time project expenditures.

(VII) Housing expenditures: The 2019 budgeted amount is RMB 1,361,000,000, an increase of RMB 117,000,000, or 9.41%, from the 2018 actual amount. Main reason: An increase in the housing provident fund.

General Public Budget Basic Expenditures Form

Departmental open form 3

Units: RMB 10,000

Departmental budget expenditures – economic classification items		Current year general public budget basic expenditures		
Item code	Item name	Total	Personnel expenses	Public expenses
301	Salary and benefits expenditures	1,116,588.53	1,116,588.53	0.00
30101	Basic salaries	319,544.41	319,544.41	0.00
30102	Subsidies and allowances	317,212.14	317,212.14	0.00
30103	Bonuses	15,859.30	15,859.30	0.00
30106	Meal allowances	4,368.33	4,368.33	0.00
30107	Performance pay	134,103.15	134,103.15	0.00
30108	Basic pension insurance contributions of state organ business units	126,730.39	126,730.39	0.00
30109	Occupational annuity contributions	37,908.15	37,908.15	0.00
30110	Contributions to employee basic medical insurance	29,141.06	29,141.06	0.00
30112	Other social security contributions	25,323.35	25,323.35	0.00
30113	Housing provident fund	91,500.00	91,500.00	0.00
30114	Medical expenses	3,322.12	3,322.12	0.00
30199	Other salary and benefits expenditures	11,576.13	11,576.13	0.00
302	Goods and services expenditures	330,517.24	0.00	330,517.24
30201	Office expenses	7,330.57	0.00	7,330.57
30202	Printing expenses	4,555.17	0.00	4,555.17
30203	Consulting fees	2,763.76	0.00	2,763.76
30204	Service charges	1,095.54	0.00	1,095.54
30205	Water fees	7,224.08	0.00	7,224.08
30206	Electricity fees	42,205.96	0.00	42,205.96
30207	Postage/cable fees	6,008.10	0.00	6,008.10
30208	Heating expenses	18,247.87	0.00	18,247.87
30209	Property management fees	37,431.57	0.00	37,431.57
30211	Travel expenses	19,487.33	0.00	19,487.33
30212	Expenses for official travel abroad	1,741.53	0.00	1,741.53
30213	Repair and maintenance costs	29,728.01	0.00	29,728.01
30214	Rental fees	11,298.27	0.00	11,298.27
30215	Conference fees	5,481.70	0.00	5,481.70
30216	Training fees	3,428.21	0.00	3,428.21
30217	Official hospitality expenses	5,049.69	0.00	5,049.69
30218	Special-use material costs	13,813.88	0.00	13,813.88
30224	Installed acquisition costs	30.00	0.00	30.00
30225	Special-use fuel costs	381.22	0.00	381.22
30226	Labor costs	28,198.95	0.00	28,198.95
30227	Commissioned business fees	20,128.34	0.00	20,128.34
30228	Trade union funds	13,755.42	0.00	13,755.42
30229	Welfare expenses	10,042.65	0.00	10,042.65
30231	Public vehicle operation and maintenance costs	4,386.48	0.00	4,386.48
30239	Other transportation expenses	3,963.30	0.00	3,963.30
30240	Taxes and surcharges	1,028.27	0.00	1,028.27
30299	Other goods and services expenditures	31,711.37	0.00	31,711.37
303	Assistance for individuals and families	387,399.61	387,399.61	0.00
30301	Separation costs	23,556.84	23,556.84	0.00

Departmental budget expenditures – economic classification items		Current year general public budget basic expenditures		
Item code	Item name	Total	Personnel expenses	Public expenses
30302	Pension costs	180,749.29	180,749.29	0.00
30303	Retirement (decommissioning) costs	82.35	82.35	0.00
30304	Survivors' benefits	10,864.84	10,864.84	0.00
30305	Subsistence allowances	2,845.33	2,845.33	0.00
30306	Relief funds	5.50	5.50	0.00
30307	Medical expense assistance	6,548.93	6,548.93	0.00
30308	Scholarships	149,353.58	149,353.58	0.00
30309	Rewards	706.99	706.99	0.00
30399	Other assistance for individuals and families	12,685.96	12,685.96	0.00
310	Capital expenditures	33,533.63	0.00	33,533.63
31001	Building acquisition and construction	4,138.00	0.00	4,138.00
31002	Office equipment procurement	9,600.57	0.00	9,600.57
31003	Specialized equipment procurement	10,873.42	0.00	10,873.42
31005	Infrastructure construction	748.54	0.00	748.54
31006	Major repairs	2,219.00	0.00	2,219.00
31007	Acquisition and upgrading of information networks and software	2,334.37	0.00	2,334.37
31013	Government public vehicle acquisition	344.20	0.00	344.20
31019	Acquisition of other means of transport	20.00	0.00	20.00
31021	Cultural relics and display items	20.00	0.00	20.00
31022	Acquisition of intangible assets	376.70	0.00	376.70
31099	Other capital expenditures	2,858.83	0.00	2,858.83
Total		1,868,039.01	1,503,988.14	364,050.87

Explanations regarding the General Public Budget Basic Expenditures Form

The beginning budget for basic expenditures in the early 2019 CAS general public budget is RMB 18,680,390,100. Of which:

(I) RMB 15,039,881,400 is personnel expenses, which mainly include expenditures for basic salary, subsidies and allowances, bonuses, meal allowances, performance pay, basic pension insurance contributions for state organ business units, occupational pension contributions, occupational basic medical insurance contributions, other social insurance contributions, the housing provident fund, medical expenses, other salary and benefits expenditures, separation costs, pension costs, retirement (decommissioning) costs, survivors' benefits, subsistence allowances, relief funds, medical expense subsidies, scholarships, rewards, and other assistance for individuals and families.

(II) RMB 3,640,508,700 is routine public expenditures, which mainly include office expenses, printing costs, consulting fees, service fees, water fees, electricity fees, postal/cable fees, heating expenses, property management fees, travel expenses, expenses for official travel abroad, repair and maintenance costs, rental fees, conference fees, training fees, official hospitality expenses, special-use material costs, special-use fuel costs, labor costs, commissioned business fees, trade union funds, welfare expenses, public vehicle operation and maintenance costs, other transportation expenses, taxes, and surcharges, other goods and services expenditures, building acquisition and construction, office equipment procurement, specialized equipment procurement, infrastructure construction, major repairs, acquisition and upgrading of information networks and software, government public vehicle acquisition, acquisition of other means of transport, acquisition of intangible assets, and other capital expenditures.

General Public Budget "Three Public" Expenses² Expenditures

Departmental open form 4
Units: RMB 10,000

Early 2018 budgeted amount					Adjusted 2018 budgeted amount					2019 budgeted amount							
Total	Expenses for official travel abroad	Government public vehicle acquisition and operation costs			Official hospitality expenses	Total	Expenses for official travel abroad	Government public vehicle acquisition and operation costs			Official hospitality expenses	Total	Expenses for official travel abroad	Government public vehicle acquisition and operation costs			Official hospitality expenses
		Subtotal	Government public vehicle acquisition	Public vehicle operation costs				Subtotal	Government public vehicle acquisition	Public vehicle operation costs				Subtotal	Government public vehicle acquisition	Public vehicle operation costs	
10,714.21	0.00	5,508.35	354.85	5,153.50	5,205.86	10,714.21	0.00	5,508.35	354.85	5,153.50	5,205.86	10,392.82	0.00	5,343.13	344.20	4,998.93	5,049.69

Notes: 1. The 2018 budgeted amounts, adjusted 2018 budgeted amounts and 2019 budgeted amounts include the government appropriations budget for the given year and funds carried over from the prior year.

2. In accordance with the requirements of *Notice of the General Office of the CPC and the General Office of the State Council on Forwarding the "Guiding Opinions on Strengthening and Improving the Administration of Temporary Overseas Trips of Teaching and Research Staff for Official Business"* (2016 No. 17), beginning from 2017, differentiated management shall be implemented with respect to expenses for teaching and research staff going abroad temporarily on official business to carry out academic exchanges and cooperation, and such expenses shall no longer be included in the "three public" expenses budgets of central departments.

² Translator's note: The "three public" expenses (“三公” 经费) refer to spending on (1) foreign travel, (2) cars and chauffeurs, and (3) official receptions. Chinese auditors pay close attention to these three categories of expenditures because they are often the most visible manifestations of corruption and waste of public funds.

Explanations Regarding the General Public Budget "Three Public" Expenses Expenditures Form

CAS conscientiously and thoroughly implements the economizing spirit of the CPC Central Committee and the State Council, takes practical measures, and strictly controls spending on the "three public" expenses. The 2019 budget amount for the "three public" expenses is RMB 103,928,200, a decrease of RMB 3,213,900 from 2018, with all of the "three public" expenses expenditure items in the detailed schedule having been reduced by 3%.

In accordance with the requirements of *Notice of the General Office of the CPC and the General Office of the State Council on Forwarding the "Guiding Opinions on Strengthening and Improving the Administration of Temporary Overseas Trips of Teaching and Research Staff for Official Business"* (2016 No. 17), beginning from 2017, differentiated management shall be implemented with respect to expenses for teaching and research staff going abroad temporarily on official business to carry out academic exchanges and cooperation, and such expenses shall no longer be included in the "three public" expenses budgets of central departments, and the CAS 2019 budget for "expenses for official travel abroad" is RMB 0, the same as in the 2018 budget. The "expense budgeting" system and "examination and approval in advance" system are implemented for temporary overseas trips on official business by CAS teaching and research staff to carry out academic exchanges and cooperation, with execution only after first planning and having a budget, and the number of overseas trips on official business by personnel of Academy institutions is subject to management in accordance with strict limits. The 2019 budget amount for "Government public vehicle acquisition and operation costs" is RMB 53,431,300, of which RMB 3,442,000 is for public vehicle acquisition, while RMB 49,989,300 is for public vehicle operation and maintenance, a decrease of 3% compared with the 2018 budget. The 2019 budget amount for "Official hospitality expenses" is RMB 50,496,900, a decrease of RMB 1,561,700 from the 2018 budget for a reduction of 3%.

Governmental Fund Income and Expenditures

Departmental open
form 5
Units: RMB 10,000

Account item		Governmental fund income	Governmental fund expenditures		
Item code	Item name		Total	Basic expenditures	Project expenditures
	Total				

Note: CAS has no governmental fund income

Summary of Departmental Income and Expenditures

Departmental open
form 6
Units: RMB 10,000

Income		Expenditures	
Item	Budgeted amount	Item	Budgeted amount
I. General public budget allocation	4,448,969.30	I. General public services expenditures	90.00
II. Governmental fund budget allocation	-	II. Education expenditures	590,607.21
III. Business income	3,005,031.65	III. Science and technology expenditures	7,875,678.25
IV. Business unit operating income	95,039.83	IV. Culture, tourism, sports and media	116.49
V. Other income	794,359.31	V. Social security and employment expenditures	95,405.49
	-	VI. Expenditures for resource exploration information, etc.	3,214.00
	-	VII. Housing expenditures	176,734.81
Total current year income	8,343,400.09	Total current year expenditures	8,741,846.25
Business funds used to make up the balance of income and expenditures	53,498.14	Balance carried over to following year	40,855.06
Balance carried forward from previous year	385,803.08		-
	-		-
Total income	8,782,701.31	Total expenditures	8,782,701.31

Explanations regarding the Summary of Departmental Income and Expenditures

(I) Income budget

1. General public budget allocation income: The early 2019 budget figure is RMB 44,489,693,000, an increase of RMB 6,459,339,900, or 16.98% from early 2018.
2. Business income: The early 2019 budget figure is RMB 30,050,316,500, an increase of RMB 2,887,878,700, or 10.63% from early 2018.
3. Business unit operating income: The early 2019 budget figure is RMB 950,398,300, an increase of RMB 270,565,900, or 39.80% from early 2018.
4. Other income: The early 2019 budget figure is RMB 7,943,593,100, an increase of RMB 3,179,440,900, or 66.74% from early 2018.

(II) Expenditures budget

1. General public service expenditures: The early 2019 budget figure is RMB 900,000, an increase of RMB 100,000, or 12.50%, from early 2018. Main reason: Increased discipline inspection and supervision appropriation expenditures.
2. Education expenditures: The early 2019 budget figure is RMB 5,906,072,100, an increase of RMB 236,065,800, or 4.16%, from early 2018. Main reason: Increased education appropriation expenditures.
3. Science and technology expenditures: The early 2019 budget figure is RMB 78,756,782,500 an increase of RMB 11,468,896,900, or 17.04%, from early 2018. Main reason: Increases in the special operating costs (专项业务费支出) of scientific research institutions.
4. Culture, tourism, sports, and media expenditures: The early 2019 budget figure is RMB 1,164,900 a decrease of RMB 13,675,100, or 4.16%, from early 2018. Main reason: Decreased expenditures on special funds for cultural industry development.
5. Social security and employment expenditures: The early 2019 budget figure is RMB 954,054,900. Main reason: Increases in expenditures on contribution assistance funds for central units participating in pension insurance reform, and on occupational pension contribution funds for state organs and public institutions.
6. Resource exploration and information expenditures: The early 2019 budget figure is RMB 32,140,000, an increase of RMB 22,500,000, or 233.40%, from early 2018. Main reason: An increase in one-time project expenditures
7. Housing security expenditures: The early 2019 budget figure is RMB 1,767,348,100, an increase of RMB 143,773,100, or 8.86%, from early 2018. Main reason: An increase in the housing provident fund.

Summary of Departmental Income

Departmental open form 7
Units: RMB 10,000

Item code	Item name	Total	Balance carried forward from previous year	General public budget allocation	Governmental fund budget allocation	Business income		Business unit operating income	Subsidy income from higher levels	Income received from subsidiary units	Other income	Business funds used to make up the balance of income and expenditures
						Amount	Of which: Educational charges					
201	General public services expenditures	90.00	-	90.00								
205	Education expenditures	593,607.21	24,800.00	389,107.21	-	98,700.00	78,500.00	18,000.00	-	-	63,000.00	-
20502	General education	593,607.21	24,800.00	389,107.21	-	98,700.00	78,500.00	18,000.00	-	-	63,000.00	-
2050205	Higher education	593,607.21	24,800.00	389,107.21	-	98,700.00	78,500.00	18,000.00	-	-	63,000.00	-
206	Science and technology expenditures	7,913,233.31	357,586.48	3,828,218.07	-	2,881,036.76	37,313.60	76,478.61	-	5,000.00	713,311.47	51,601.92
20602	Basic research	3,810,131.48	251,676.70	2,249,615.07	-	826,927.42	34,889.14	25,618.76	-	5,000.00	419,267.61	32,025.92
2060201	Institutional operations	813,886.01	14,838.75	530,047.57	-	118,521.04	7,593.11	13,966.76	-	-	113,785.97	22,725.92
2060204	Key laboratories and related facilities	242,286.87	14,381.87	215,395.00	-	12,510.00	-	-	-	-	-	-
2060205	Major science projects	223,909.27	4,809.48	176,599.79	-	42,500.00	-	-	-	-	-	-
2060206	Special basic research projects	610,627.56	143,660.72	398,422.79	-	51,634.05	26,922.42	-	-	-	15,110.00	1,800.00
2060299	Other basic research expenditures	1,470,571.38	72,851.63	929,149.92	-	221,315.97	-	11,652.00	-	5,000.00	223,101.86	7,500.00
20603	Applied research	2,868,385.62	55,167.03	1,234,201.37	-	1,314,538.58	1,793.52	49,839.85	-	-	197,862.79	16,776.00
20604	Technology R&D	106,302.61	7,099.61	20,000.00	-	73,003.00	-	-	-	-	6,200.00	-
2060499	Other technology R&D expenditures	66,099.61	7,099.61	20,000.00	-	39,000.00	-	-	-	-	-	-
20605	Technology conditions and services	323,638.72	27,168.07	199,298.23	-	67,834.35	-	-	-	-	29,338.07	-
2060501	Institutional operations	53,667.58	-	16,113.23	-	18,264.35	-	-	-	-	19,290.00	-
2060503	Special technology conditions projects	218,471.14	27,168.07	183,185.00	-	370.00	-	-	-	-	7,748.07	-
20608	S&T exchanges and cooperation	88,650.61	3,370.61	85,000.00	-	40.00	-	120.00	-	-	120.00	-

Item code	Item name	Total	Balance carried forward from previous year	General public budget allocation	Governmental fund budget allocation	Business income		Business unit operating income	Subsidy income from higher levels	Income received from subsidiary units	Other income	Business funds used to make up the balance of income and expenditures
						Amount	Of which: Educational charges					
2060899	Other S&T exchanges and cooperation expenditures	88,410.61	3,370.61	85,000.00	-	40.00	-	-	-	-	-	-
207	Culture, tourism, sports and media expenditures	116.49	116.49	-	-	-	-	-	-	-	-	-
20799	Other culture, tourism, sports and media expenditures	116.49	116.49	-	-	-	-	-	-	-	-	-
2079903	Special cultural industry development project expenditures	116.49	116.49	-	-	-	-	-	-	-	-	-
208	Social security and employment expenditures	95,405.49	165.47	95,240.02	-	-	-	-	-	-	-	-
20805	Administrative business unit pensions	95,405.49	165.47	95,240.02	-	-	-	-	-	-	-	-
2080505	Expenditures on basic pension insurance contributions of state organ business units	70,595.90	165.47	70,430.43	-	-	-	-	-	-	-	-
2080506	Expenditures on occupational annuity contributions of state organ business units	24,809.59	-	24,809.59	-	-	-	-	-	-	-	-
215	Expenditures for resource exploration and information, etc.	3,214.00	3,000.00	214.00	-	-	-	-	-	-	-	-
21502	Manufacturing	214.00	-	214.00	-	-	-	-	-	-	-	-
21599	Other expenditures for resource exploration and information, etc.	3,000.00	3,000.00	-	-	-	-	-	-	-	-	-
2159999	Other expenditures for resource exploration and information, etc.	3,000.00	3,000.00	-	-	-	-	-	-	-	-	-
221	Housing expenditures	176,734.81	134.64	136,100.00	-	25,294.89	1,500.00	561.22	-	-	12,747.84	1,896.22
22102	Housing reform expenditures	176,734.81	134.64	136,100.00	-	25,294.89	1,500.00	561.22	-	-	12,747.84	1,896.22
2210201	Housing provident fund	121,349.52	11.00	91,500.00	-	19,338.15	1,500.00	529.62	-	-	9,726.84	243.91
2210202	Rent subsidies	4,190.24	20.00	3,850.00	-	153.29	-	-	-	-	166.95	-

Item code	Item name	Total	Balance carried forward from previous year	General public budget allocation	Governmental fund budget allocation	Business income		Business unit operating income	Subsidy income from higher levels	Income received from subsidiary units	Other income	Business funds used to make up the balance of income and expenditures
						Amount	Of which: Educational charges					
2210203	Home purchase subsidies	51,195.05	103.64	40,750.00	-	5,803.45	-	31.60	-	-	2,854.05	1,652.31
Total		8,782,701.31	385,803.08	4,448,969.30	-	3,005,031.65	117,313.60	95,039.83	-	5,000.00	789,359.31	53,498.14

Explanations Regarding the Summary of Departmental Income

The early 2019 CAS income budget of RMB 87,827,013,100 primarily includes:

(I) General public budget allocation income of RMB 44,489,693,000, representing 50.66% of the total income.

1. General public services expenditures of RMB 900,000, representing 0.002% of government allocation income, and which is mainly for discipline inspection and supervision-related expenses.

2. Education expenditures of RMB 3,891,072,100, representing 8.75% of government allocation income, and which are mainly expenses for supporting educational activities carried out by the University of Science and Technology of China and the University of the Chinese Academy of Sciences.

3. Science and technology expenditures of RMB 38,282,180,700, representing 86.05% of government allocation income. Of which:

(1) Basic research: RMB 22,496,150,700, of which RMB 5,300,475,700 is for institutional operations, RMB 2,153,950,000 is for key laboratories and related facilities, 1,765,997,900 is for major science projects, RMB 3,984,227,900 is for special basic research projects, and RMB 9,291,499,200 is for other basic research expenditures;

(2) Applied research: RMB 12,342,013,700;

(3) Technology research and development: RMB 200,000,000, all of which is other technology research and development expenditures;

(4) S&T conditions and services: RMB 1,992,982,300, of which RMB 161,132,300 is for institutional operations, and RMB 1,831,850,000 is for special S&T conditions projects;

(5) S&T exchanges and cooperation: RMB 850,000,000, all of which is for other S&T exchanges and cooperation expenditures.

4. Social security and employment expenditures: RMB 954,054,900.

5. Expenditures for resource exploration and information, etc.: RMB 2,140,000.

6. Housing expenditures: RMB 1,361,000,000, all of which is for housing reform expenditures, including RMB 915,000,000 for housing provident fund, RMB 38,500,000 for rent subsidies, and RMB 407,500,000 for home purchase subsidies.

(II) Business income of RMB 30,050,316,500, representing 34.22% of the total income. Of which:

1. Education expenditures of RMB 987,000,000, representing 3.28% of business income, and which are mainly income derived from educational activities carried out by the University of Science and Technology of China and the University of the Chinese Academy of Sciences.

2. Science and technology expenditures of RMB 28,810,367,600, representing 95.87% of business income, and which are mainly income derived from CAS taking on various scientific research tasks of the State, localities, corporations, higher education institutions, or foreign entities, of which amount:

(1) Basic research: RMB 8,269,274,200, of which RMB 1,185,210,400 is for institutional operations, RMB 125,100,000 is for key laboratories and related facilities, RMB 425,000,000 is for major science projects, RMB 516,340,500 is for special basic research projects, and RMB 2,213,159,700 is for other basic research expenditures;

(2) Applied research: RMB 13,145,385,800;

(3) Technology research and development: RMB 730,030,000, of which RMB 390,000,000 is for other technology research and development expenditures;

(4) S&T conditions and services: RMB 678,343,500, of which RMB 182,643,500 is for institutional operations, and RMB 3,700,000 is for special S&T conditions projects;

(5) S&T exchanges and cooperation: RMB 400,000, all of which is for other S&T exchanges and cooperation expenditures.

3. Housing expenditures: RMB 252,948,900, representing 0.84% of business income, and which includes RMB 193,381,500 for housing provident fund, RMB 1,532,900 for rent subsidies, and RMB 58,034,500 for home purchase subsidies.

(II) Business unit operating income of RMB 950,398,300, representing 1.08% of total income, and which includes:

1. Education expenditures of RMB 180,000,000, representing 18.94% of business unit operating income; and

2. Science and technology expenditures of RMB 764,786,100, representing 80.47% of business unit operating income. Including:

(1) Basic research: RMB 256,187,600, which is mainly institutional operations (RMB 139,667,600) and other basic research expenditures (RMB 116,520,000);

(2) Applied research: RMB 498,398,500;

(3) S&T exchanges and cooperation: RMB 1,200,000, all of which is for international S&T exchanges and cooperation.

3. Housing expenditures of RMB 5,612,200, representing 0.59% of business unit operating income. Including: RMB 5,296,200 for housing provident fund, and RMB 316,000 for home purchase subsidies;

(IV) Income received from subsidiary units of RMB 50,000,000, representing 0.06% of total income, and all of which is other basic research expenditures within science and technology expenditures.

(V) Other income of RMB 7,893,593,100, representing 8.99% of total income. Of which:

1. Education expenditures of RMB 630,000,000, representing 7.98% of other income.

2. Science and technology expenditures of RMB 7,133,114,700, representing 90.37% of other income. Including:

(1) Basic research: RMB 4,192,676,100, which is mainly institutional operations (RMB 1,137,859,700), special basic scientific research projects (RMB 151,100,000) and other basic research expenditures (RMB 2,231,018,600);

(2) Applied research: RMB 1,978,627,900;

(3) Technology research and development: RMB 62,000,000, all of which is for applied technology research and development;

(4) S&T conditions and services: RMB 293,380,700, which is mainly for institutional operations (RMB 192,900,000), and special S&T conditions projects (RMB 77,480,700);

(5) S&T exchanges and cooperation: RMB 1,200,000, all of which is for other S&T exchanges and cooperation expenditures.

3. Housing security expenditures of RMB 127,478,400, representing 1.61% of other income. Including: RMB 97,268,400 for the housing provident fund, RMB 1,669,500 for rent subsidies, and RMB 28,540,500 for home purchase subsidies;

(VII) Business funds used to make up the balance of income and expenditures: RMB 534,981,400, representing 0.61% of total income, of which amount:

1. Science and technology expenditures: RMB 516,019,200, which is mainly business funds used to make up the balance of science and technology income and expenditures.

2. Housing expenditures: RMB 18,962,200, which is mainly for the housing provident fund (RMB 2,439,100) and home purchase subsidies (RMB 16,523,100).

(VIII) Balance carried forward from previous year: RMB 3,858,030,800, representing 4.39% of total income. Main reason: Funds for scientific research tasks uncompleted in the previous year were carried forward to 2019 for continued use.

Summary of Departmental Expenditures

Departmental
open form 8
Units: RMB
10,000

Item code	Item name	Total	Basic expenditures	Project expenditures	Pay-ments to higher authorities	Business unit operating expenses	Assistance paid to subsidiary units
201	General public services expenditures	90.00	-	90.00	-	-	-
205	Education expenditures	590,607.21	449,583.76	123,023.45	-	18,000.00	-
20502	General education	590,607.21	449,583.76	123,023.45	-	18,000.00	-
2050205	Higher education	590,607.21	449,583.76	123,023.45	-	18,000.00	
206	Science and technology expenditures	7,875,678.25	2,512,819.68	5,183,965.34	1,300.00	77,593.23	100,000.00
20602	Basic research	3,786,553.14	806,860.38	2,852,406.60	-	27,286.16	100,000.00
2060201	Institutional operations	795,639.45	720,289.24	62,216.05	-	13,134.16	-
2060204	Key laboratories and related facilities	242,286.87	-	242,286.87	-	-	-
2060205	Major science projects	223,909.27	-	223,909.27	-	-	-
2060206	Special basic scientific research projects	610,627.56	-	610,627.56	-	-	
2060299	Other basic research expenditures	1,470,071.38	86,571.14	1,269,348.24	-	14,152.00	100,000.00
20603	Applied research	2,854,658.90	1,594,730.32	1,209,221.51	1,300.00	49,407.07	-
20604	Technology R&D	106,302.61	-	106,302.61	-	-	-
2060499	Other technology R&D expenditures	66,099.61	-	66,099.61	-	-	-
20605	Technology conditions and services	323,388.72	89,317.58	234,071.14	-	-	-
2060501	Institutional operations	53,667.58	53,317.58	350.00	-	-	
2060503	Special technology conditions projects	218,221.14	-	218,221.14	-	-	-
20608	S&T exchanges and cooperation	88,650.61	240.00	88,410.61	-	-	
2060899	Other S&T exchanges and cooperation expenditures	88,410.61	-	88,410.61	-	-	-
207	Culture, tourism, sports, and media expenditures	116.49	-	116.49	-	-	-
20799	Other culture, tourism, sports,	116.49	-	116.49	-	-	-

Item code	Item name	Total	Basic expenditures	Project expenditures	Payments to higher authorities	Business unit operating expenses	Assistance paid to subsidiary units
	and media expenditures						
2079903	Special cultural industry development project expenditures	116.49	-	116.49	-	-	-
208	Social security and employment expenditures	95,405.49	95,405.49	-	-	-	-
20805	Administrative business unit pensions	95,405.49	95,405.49	-	-	-	-
2080505	Expenditures on basic pension insurance contributions of state organ business units	70,595.90	70,595.90	-	-	-	-
2080506	Expenditures on occupational annuity contributions of state organ business units	24,809.59	24,809.59	-	-	-	-
215	Expenditures for resource exploration and information, etc.	3,214.00	214.00	3,000.00	-	-	-
21502	Manufacturing	214.00	214.00	-	-	-	-
21599	Other expenditures for resource exploration and information, etc.	3,000.00	-	3,000.00	-	-	-
2159999	Other expenditures for resource exploration and information, etc.	3,000.00	-	3,000.00	-	-	-
221	Housing expenditures	176,734.81	176,734.81	-	-	-	-
22102	Housing reform expenditures	176,734.81	176,734.81	-	-	-	-
2210201	Housing provident fund	121,349.52	121,349.52	-	-	-	-
2210202	Rent subsidies	4,190.24	4,190.24	-	-	-	-
2210203	Home purchase subsidies	51,195.05	51,195.05	-	-	-	-
	Total	8,741,846.25	3,234,757.74	5,310,195.28	1,300.00	95,593.23	100,000.00

Explanations Regarding the Summary of Departmental Expenditures

The early 2019 CAS expenditures budget totals RMB 87,418,462,500. Details are as follows:

(I) Basic expenditures total RMB 32,347,577,400, representing 37.00% of total expenditures. They are mainly various expenditures arising in order to ensure the normal operation of units and institutions and to complete routine work tasks, including those used for such personnel expenses as basic salaries, subsidies and allowances, and for routine business expenses such as office expenses, printing costs, utility charges, and office equipment acquisition. Of which:

1. Education expenditures of RMB 4,495,837,600, which are mainly basic expenditures of the University of Science and Technology of China and the University of the Chinese Academy of Sciences.
2. Science and technology expenditures of RMB 25,128,196,800, which are mainly basic expenditures of CAS subsidiary institutions. Including:
 - (1) Basic research: RMB 8,068,603,800, of which RMB 7,202,892,400 is institutional operations and RMB 865,711,400 is other basic research expenditures;
 - (2) Applied research: RMB 15,947,303,200;
 - (3) S&T conditions and services: RMB 893,175,800, of which RMB 533,175,800 is for institutional operations;
 - (4) S&T exchanges and cooperation: RMB 2,400,000.
3. Social security and employment: RMB 954,054,900, which is mainly used for expenditures on the basic pension insurance contributions and occupational annuity contributions of state organ business units.
4. Expenditures for resource exploration and information, etc.: RMB 2,140,000.
5. Housing expenditures: RMB 1,767,348,100, which amount is mainly used for the housing provident fund contributions, rent subsidies, and home purchase subsidies granted by CAS to employees in accordance with national policies and regulations, of which housing provident fund contributions are RMB 1,213,495,200, rent subsidies are RMB 41,902,400, and home purchase subsidies are RMB 511,950,500.

(II) Project expenditures total RMB 53,101,952,800, representing 60.74% of total expenditures. These are mainly expenditures arising in order for units to achieve specific business development goals, and include expenditures for research projects undertaken and self-arranged by subordinate units of CAS, expenditures for construction and operation of key national technology infrastructure and other S&T support conditions, and expenditures for training and recruitment of outstanding talents. Specifically, they include:

1. General public services expenditures of RMB 900,000, all of which are for special operating expenses for stationing a discipline inspection group of the Central Commission for Discipline Inspection and the National Supervisory Commission (CCDI-NSC) at CAS to carry out work.
2. Education expenditures of RMB 1,230,234,500, which are mainly expenditures of

the University of Science and Technology of China and the University of the Chinese Academy of Sciences for carrying out educational activities.

3. Science and technology expenditures of RMB 51,839,653,400, which amount mainly includes expenditures for research projects undertaken and self-arranged by subordinate units of CAS, expenditures for construction and operation of key national technology infrastructure and other S&T support conditions, expenditures for training and recruitment of outstanding talents, capital expenditures, etc. Of which:

(1) Basic research: RMB 28,524,066,000, of which RMB 622,160,500 is for institutional operations, RMB 2,422,868,700 is for key laboratories and related facilities, RMB 2,239,092,700 is for major science projects, RMB 6,106,275,600 is for special basic research projects, and RMB 12,693,482,400 is for other basic research expenditures;

(2) Applied research: RMB 12,092,215,100;

(3) Technology research and development: RMB 1,063,026,100, including RMB 660,996,100 for other technology research and development expenditures;

(4) S&T conditions and services: RMB 2,340,711,400, including RMB 3,500,000 for institutional operations, and RMB 2,182,211,400 for special S&T conditions projects;

(5) S&T exchanges and cooperation: RMB 884,106,100, all of which is for other S&T exchanges and cooperation expenditures.

4. Culture, tourism, sports, and media expenditures: RMB 1,164,900, all of which is special cultural industry development project expenditures.

5. Expenditures for resource exploration and information, etc.: RMB 30,000,000, all of which amount is other resource exploration and information, etc. expenditures.

(III) Business unit operating expenditures of RMB 955,932,300, representing 1.09% of total expenditures, and which are mainly various expenditures incurred by CAS from engaging in non-independent accounting business activities undertaken outside of its professional activities and auxiliary activities; Specifically, they include:

1. Education expenditures of RMB 180,000,000;

2. Science and technology expenditures of RMB 775,932,300, which amount includes RMB 272,861,600 for basic research, mainly for institutional operations (RMB 131,341,600) and other basic research expenditures (RMB 141,520,000); while the amount for applied research is RMB 494,070,700.

IV. Other matters

(I) Special scientific research facility operation and maintenance items

1. Overview of items

Key national S&T infrastructure ("infrastructure"), often called "science treasures" (“科学重器”) are the large-scale, complex scientific research systems that provide cutting-edge scientific research tools for exploring the unknown, discovering natural laws, and achieving technological change. They are the material technological foundation for making breakthroughs on the cutting edge of science and solving major technical problems in economic and social development and national security. To a certain extent, they represent

the nation's S&T level and overall strength, and their development level is an important indicator of national prosperity and advancement.

CAS has always been an important force for the operation and maintenance of China's special infrastructure projects, and there are over 20 infrastructure projects that it has built and put into operation or is currently constructing, including dedicated research facilities for high energy physics, heavy ion physics, and plasma physics, and astronomical telescopes. There are also public experimental synchrotron radiation platforms for basic research, applied basic research, and applied research in multidisciplinary fields, as well as remote sensing satellite ground stations, long and short wave timing stations, remote sensing aircraft, and other public infrastructure.

In the management process for special infrastructure project operation and maintenance, the relevant national authorities cooperate based on a division of labor, each performing its own function, creating a good arena for synergistic advancement. The special scientific research infrastructure project operation and maintenance costs supported by the Ministry of Finance are an important foundation for ensuring that such infrastructure achieves stable operation, achievement generation, talent cultivation, and sustainable development.

2. Basis for project establishment

In November 2014, the NDRC, Ministry of Finance, Ministry of Science and Technology, and National Natural Science Foundation jointly issued and implemented *Administrative Measures for Key National Science and Technology Infrastructure* (2014 No. 2545). It expressly proposes that infrastructure operating expenses shall come primarily from government funding. Arrangements for infrastructure operating expenses shall be linked to the operation and open sharing circumstances of infrastructure, and be implemented in accordance with budget management-related regulations.

3. Implementing entities

CAS has made clear that the units responsible for implementing infrastructure operation shall be the research institutes, research academies, centers, and universities ("research institutes") that have business legal person qualifications and which rely on the infrastructure. The management of subsystems (stations) of units that are outside of CAS but participate in infrastructure operation shall be stipulated in the form of an agreement (contract).

4. Implementation scheme

Pursuant to *Administrative Measures for the Operation of Key Science and Technology Infrastructure of the Chinese Academy of Sciences* (2013 No 188), operating expenses shall be divided into basic operating expenses and repair project expenses. Basic operating expenses, which are used to ensure that the normal operation and routine maintenance of infrastructure, as well as business expenditures inclusive of those for external opening, are supported in a relatively stable manner; maintenance project expenses, which are used in the repair of support systems or major infrastructure, are expenses supported on a one-time basis. The scope for expenditures on operating expenses mainly includes equipment costs, materials costs, testing and laboratory processing fees, fuel and power costs, travel expenses, conference fees, international cooperation and exchange costs, publishing/documentation/information dissemination/intellectual property services costs,

labor costs, expert consulting fees, and special outsourcing costs incurred in infrastructure operation.

(1) Basic operating expenses

Pursuant to *Implementation Rules for the Management of Basic Operating Expenses for Key Science and Technology Infrastructure of the China Academy of Sciences* (2013 No. 32), basic operating expenses are expenditures for the routine operation, maintenance, and external opening of infrastructure, and include direct consumption expenses, operation and maintenance expenses, and other business expenses.

Direct consumption expenses refers to expenditures for water, electricity, natural gas, heating, special consumables, commissioned business, rent, and other consumption expenditures that must be paid in order to ensure infrastructure operation. Direct consumption expenses are determined based on the hours of infrastructure operation and the approved consumption per operating hour of the unit. The direct consumption of infrastructure must be measured separately from the direct consumption of other departments of units that rely on it.

Operations and maintenance expenses are divided into: spare parts expenses, one-time spare parts expenses, equipment upgrading expenses, and equipment maintenance expenses. Spare parts refers to parts that frequently require replacement, are prone to wear, and are necessary to have on hand in order to assure normal operation of infrastructure; one-time spare parts refers to indispensable key parts or components which have relatively long service lives, and for which any damage to the original parts would affect infrastructure operation. Spare parts of this sort cannot be restocked until after they are used. Equipment upgrading refers to where upgrading is necessary because production of the same model of product has been discontinued, or where there is equipment with superior performance available for the same price. Equipment maintenance expenses refers to the consumption expenses or maintenance contract expenses incurred for the routine maintenance, repair, and upkeep of equipment currently in operation. Research institutes, in accordance with the their quotas for basic maintenance expenses, prepare annual budgets with maintenance expenses classified into spare parts, one-time spare parts, equipment upgrading, and equipment maintenance. In principle, [budget] preparation for spare parts, one-time spare parts, and equipment upgrading expenses is at the component level. Preparation for equipment maintenance expenses is at the part level.

Other business expenses refers to expenses for infrastructure purposes such as office expenses, major repair fees, and information network costs; international exchange costs, conference fees, travel expenses, training fees, and user services costs; and remuneration for operation and staff positions, project personnel, and temporary workers. Other business expenses are approved according to uniform standards based on the number of infrastructure operation and maintenance staff positions.

(2) Repair and renovation project expenses

Repair and renovation projects mainly support the repair and renovation of scientific research systems or key equipment, and are applicable in three kinds of situations: The first is where it is necessary to carry out repair and renovation of a system or key equipment in order to ensure the stable operation of infrastructure under conditions of aging equipment or deteriorating performance. The second is where it is necessary to carry out performance

upgrading of a system or key equipment in order to maintain and improve the advanced nature of infrastructure and promote the nation's progress in relevant technologies. The third is where it is necessary to extend the functionality of a system or key equipment in order to meet significant scientific research needs or expand areas of research.

5. Implementation cycle The projects are multi-year ongoing projects.

6. Annual budget arrangements

For 2019, the general public budget arranged for such projects was RMB 1,765,997,900, to be used mainly for the operation and maintenance of over 20 infrastructure facilities such as the Shanghai Synchrotron Radiation Facility and the Beijing Electron - Positron Collider.

7. Performance Objectives and Metrics

Level 1 Expenditures Performance Objectives

(2019)

Project Name		Operation and maintenance costs of special scientific research facilities						
Competent authority and code		[173] Chinese Academy of Sciences			Implementing unit		University of Chinese Academy of Sciences	
Project attributes		Continuation project			Project cycle		Annual implementation	
Project funds (RMB 10,000)		Intermediate term total funds			Annual total funds		179099.79	
		Of which: government budget allocation			Of which: government budget allocation		176599.79	
		Other funds			Other funds		2500	
Overall objectives	Interim objectives				Annual objectives			
	<p>1. Ensure that all operating infrastructure achieves safe, stable and efficient operation according to plan; 2. Ensure that routine maintenance work for infrastructure is completed according to requirements; 3. Ensure that infrastructure is shared openly, and provide users timing and data services; 4. Ensure that infrastructure undergoes necessary equipment repair and renovation, and maintain the efficient operation and performance improvement of equipment.</p>				<p>1. Ensure that infrastructure achieves safe, stable and efficient operation according to plan, and complete operating tasks for the full year; 2. Ensure that routine maintenance work for infrastructure is completed according to requirements; 3. Ensure that infrastructure is shared openly, and provide users timing and data services; 4. Ensure that infrastructure undergoes necessary equipment repair and renovation, and maintain the efficient operation and performance improvement of equipment.</p>			
Performance metrics	Level 1 metrics	Level 2 metrics	Level 3 metrics	Metric Value		Level 2 metrics	Level 3 metrics	Metric Value
	Output metrics	Quantitative metrics	Operating time (total time infrastructure was on and in an operating state)	Fulfill operating plans set annually. E.g.: approximately 6,500 hours of accelerator availability; for remote sensing ground stations, at least 35,000 satellite orbits received throughout the year, with a successful reception rate over 97%. Strive to raise it year by year		Quantitative metrics	Operating time (total time infrastructure was on and in an operating state)	Fulfill operating plans set for the current year. E.g.: approximately 6,500 hours of accelerator availability; for remote sensing ground stations, at least 35,000 satellite orbits received throughout the year, with a successful reception rate over 97%.
		Qualitative metrics	Machine time utilization rate	Fulfill operating plans set annually. E.g., achieve a machine time utilization rate of 80% for accelerators. Strive to raise it year by year		Qualitative metrics	Machine time utilization rate	Fulfill operating plans set for the current year. E.g., achieve a machine time utilization rate of 80% for accelerators

	Qualitative metrics	Downtime rate (infrastructure downtime as a percentage of total operating time)	No higher than the annual plan's control rate. E.g., a downtime rate under 5% for the Shanghai Synchrotron Radiation Facility, and a downtime rate under 3% for the Experimental Advanced Superconducting Tokamak. Strive to lower it year by year	Qualitative metrics	Downtime rate (infrastructure downtime as a percentage of total operating time)	No higher than the annual plan's control rate. E.g., a downtime rate under 5% for the Shanghai Synchrotron Radiation Facility, and a downtime rate under 3% for the Experimental Advanced Superconducting Tokamak
	Timeliness metrics	Access efficiency	Fulfill operating plans set annually. E.g., the Daya Bay [Reactor Neutrino Experiment] shall reach 95%; and the Shen-Guang II facility shall achieve a target-hitting success rate of 88%. Strive to raise it year by year	Timeliness metrics	Access efficiency	Fulfill operating plans set for the current year. E.g., the Daya Bay [Reactor Neutrino Experiment] shall reach 95%; and the Shen-Guang II facility shall achieve a target-hitting success rate of 88%
Benefit metrics	Social benefit metrics	Degree of sharing (ratios of non-CAS user experiment machine time/number of non-CAS topics/number of non-CAS users to total users' machine beam time provided/total number of topics/total number of users)	Fulfill annual open sharing plans for infrastructure E.g., achieve 70% for public experimental platforms. Strive to raise it year by year	Social benefit metrics	Degree of sharing (ratios of non-CAS user experiment machine time/number of non-CAS topics/number of non-CAS users to total users' machine beam time provided/total number of topics/total number of users)	Fulfill the current year's open sharing plans for infrastructure, e.g., achieve 70% for public experimental platforms.
		Sharing of accomplishments (reaching leading levels domestically in papers published, patents obtained and technological breakthroughs made)	Meet major national needs, publish high-level academic papers, solve core technological problems of industry		Sharing of accomplishments (reaching leading levels domestically in papers published, patents obtained and technological breakthroughs made)	Meet major national needs, publish high-level academic papers, solve core technological problems of industry
		Talent pool recruitment and talent training circumstances	Annual recruitment \geq 60 technical talents; training \geq 1200 graduate students. Strive for increases year by year		Talent pool recruitment and talent training circumstances	Recruitment \geq 20 technical talents; training \geq 400 graduate students
	Sustainable impact metrics	Impact on academic discipline development	Utilization of infrastructure by scientific research staff and users to carry out relevant research; promotion of development in relevant academic disciplines	Sustainable impact metrics	Impact on academic discipline development	Utilization of infrastructure by scientific research staff and users to carry out relevant research; promotion of development in relevant academic disciplines

			Impact on participation in international competition	More significant		Impact on participation in international competition	More significant
	Satisfaction metrics	Service recipient satisfaction metrics	User satisfaction with technology level, reflecting user satisfaction with the technical level of infrastructure platforms and operation and maintenance staff	≥85%, and increasing year by year	Service recipient satisfaction metrics	User satisfaction with technology level, reflecting the degree of user satisfaction with the technology levels of infrastructure platforms and operation and maintenance staff	≥85%
				≥85%, and increasing year by year		User satisfaction with service quality, reflecting the degree of user satisfaction with the quality of infrastructure user services	≥85%

(II) Government procurement

The 2019 government procurement budget totals RMB 13,017,640,900, of which: government procurement of goods budget of RMB 9,253,930,300, government procurement of construction budget of RMB 2,693,599,000, and government procurement of services budget of RMB 1,070,111,600.

(III) Occupation and use of state-owned assets

As of July 31, 2018, departments (units) had a total of 1,621 vehicles, of which 17 were vehicles used by department-level leading cadres, 21 were vehicles for confidential communication, 1 was an emergency support vehicle, 0 were for law enforcement duties, 54 were for specialized technical uses, and 1,528 vehicles were for other uses. Vehicles for other uses are mainly vehicles for field stations, observation, collection, testing and other such business. There were 16,631 units (sets) of general use equipment with a unit value over RMB 500,000, and 2,487 sets of special use equipment with a unit value over RMB 1 million.

The 2019 departmental budget arranged for procurement of 208 vehicles, of which 0 were vehicles used by department-level leading cadres, 1 was a vehicle for confidential communication, 1 was an emergency support vehicle, 0 were for law enforcement duties, 9 were for specialized technical uses, and 197 vehicles were for other uses. There were 2,376 units (sets) of general use equipment with a unit value over RMB 500,000, and 925 sets of special use equipment with a unit value over RMB 1 million.

(IV) Budget performance

In 2018 CAS implemented 31 Level 1 projects with departmental budget performance objective management, involving general public budget allocations of RMB 20,426,277,300; and 3 projects included under the departmental budget performance evaluation pilot program, involving general public budget allocations of RMB 1,806,050,000.

In 2019, all of CAS's government-funded project expenditures continued implementing projects with departmental budget performance objective management, 28 in total, involving general public budget allocations of RMB 25,809,302,900; and there were 3 projects included under the departmental budget performance evaluation pilot program, involving general public budget allocations of RMB 653,210,000.

V. Explanation of terms

(I) Income items

1. Government allocation income (财政拨款收入): Refers to funds allocated by the central government in the current year.

2. Business income: Refers to income derived from professional and ancillary activities of business units.

3. Business unit operating income: Refers to income derived by business units from engaging in non-independent accounting business activities undertaken outside of its professional activities and auxiliary activities;

4. Other income: Refers to income other than "government allocation income," "business income," and "business unit operating income" described above.

5. Business funds used to make up the balance of income and expenditures: Refers to the operating funds accumulated in previous years (funds drawn down and used to make up the balance of income and expenditure in future years in accordance with national regulations, after offsetting the income and expenditures of the business unit for the current year) that business units use to make up the balance of income and expenditures in the current year, under circumstances in which they expect that the current year's "government allocation income," "business income," and "business unit operating income" and "other income" will be insufficient to cover the current year's expenditures.

6. Balance carried forward from previous year: Refers to the funds that were not used up in prior years and are carried over to the current year but continue to be used for their original intended purposes.

(II) Expenditure items

1. Education expenditures (class): Reflects expenditures used for education-related matters.

Higher education: Reflects expenditures for ordinary, full-time, state-approved colleges and universities of various departments of the central government, and of provinces, autonomous regions, or municipalities directly under the central government. Financial assistance, such as grants, subsidies, etc., from various government departments for higher education institutions run by social intermediary organizations, is also reflected in this item.

2. Science and technology expenditures (class): Reflects expenditures for science and technology matters, which in the CAS budget mainly involve 7 secondary expenditure items: basic research, applied research, technology research and development, S&T conditions and services, S&T exchanges and cooperation, major S&T projects, and other S&T projects.

(1) Basic research: Reflects expenditures for basic research, applied research institutions that cannot obtain practical value in the near future, special scientific research, and key laboratories and major scientific projects.

(2) Applied research: Reflects expenditures for creative research work, conducted on the basis of basic research achievements, for a particular practical aim or objective.

(3) Technology research and development: Reflects expenditures for technology R&D matters, including expenses for engaging in technology development research and specialized technology development research that is expected to be of practical value in the near future, as well as expenditures for promoting the application and extension of S&T achievements converted into real productivity.

(4) S&T conditions and services: Reflects expenditures for providing basic, general-purpose services used to improve S&T conditions and engage in activities on behalf of science and technology such as those for S&T standards, measurement and testing, S&T data, germplasm resources, and specimens, genes (collection, processing and related services), and S&T literature and information resources (collection, preservation, processing and related services).

(5) S&T exchanges and cooperation: Reflects expenditures on matters relating to S&T exchanges and cooperation, including expenditures for collaborative research and S&T exchanges carried out with foreign governments and international organizations in order to raise the national level of science and technology, as well as expenditures on major special projects for international S&T cooperation.

(6) Other S&T expenditures: Reflects expenditures for S&T matters other than those listed above, including expenditures used for the assistance of various kinds of scientific research institutions that have been converted into enterprises.

3. Social security and employment (class): Reflects expenditures used for social security and employment matters.

4. Resource exploration and information (class): Reflects expenditures used for business such as resource exploration and information, etc.

Manufacturing: Reflects expenditures for manufacturing industries such as textiles, light industry, chemicals, healthcare, machinery, smelting, building materials, transportation equipment, tobacco, weaponry, nuclear industry, aviation, aerospace, shipbuilding, electronics, and communication equipment.

5. Housing expenditures (class): Reflects expenditures used for housing matters, which in the CAS budget mainly involve the 1 secondary level item of housing reform expenditures. Housing reform expenditures include three items: housing provident fund, rent subsidies, and home purchase subsidies. Of which: The housing provident fund is a long-term housing savings fund contributed to by work units and their active employees in accordance with *Regulations on the Management of the Housing Provident Fund*. The policy began in the mid-1990s and is universally implemented among active employees of state organs, enterprises, and institutions nationwide. The contribution percentage must be no lower than 5% and no higher than 12%, based on the employee's salary in the previous year. It has now been implemented for close to 20 years. The bases for contributions by administrative units include the salaries for the posts and grades of civil servants, salaries for posts and technical grades (positions) of workers in institutions, one-time year-end bonuses, special post allowances, and allowances for hardship and remote areas, as uniformly stipulated by the State, and work-related subsidies and living allowances issued after the regulation; the bases for contributions by business units include the salaries for posts, pay scale salaries, allowances for hardship and remote areas, and special post allowances, as uniformly stipulated by the State. Rent subsidies were approved by the State Council. Subsidies aimed at the increase in public housing rental rates of central government units in Beijing began to be issued in 2000, and are determined by central government units in Beijing based on the number of active staff and retirees and the subsidy standards for the

corresponding job grades. Home purchase subsidies are subsidy funds for the monetary reform of housing allocation, in accordance with *Circular of the State Council on Promoting the Continuous and Healthy Development of the Real Estate Markets* (1998 No. 23), issued to workers without homes or with sub-standard housing, after physical allocation was ended in the second half of 1998. Central government administrative units began issuing home purchase subsidies in 2000, while local administrative units began issuing them in 1999. Enterprises determine them based on their own circumstances. Implementation on the part of central government units in Beijing is in accordance with the standards stipulated in *Notice of the General Office of the CPC and the General Office of the State Council on Forwarding the "Opinions on Improving the Housing System for Central and State Organs in Beijing"* (2005 No. 8), while implementation on the part of central government units outside of Beijing is in accordance with the standards stipulated in the policies of local people's governments on the monetary reform of housing allocation.