

Translation



The following document is the 2022 budget for the Chinese Academy of Sciences, a huge PRC government-run complex of scientific research institutes.

Title

Chinese Academy of Sciences 2022 Budget
中国科学院2022年部门预算

Author

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

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Chinese Academy of Sciences 2022 Budget



Contents

I.	Basic information on the Chinese Academy of Sciences.....	1
	(i) Departmental Responsibilities	1
	(ii) Institutional Configuration.....	2
II.	2022 CAS Budget.....	2
	Summary of Departmental Revenue and Expenditures	4
	Explanations Regarding the Summary of Departmental Income and Expenditures	4
	Summary of Departmental Revenue.....	7
	Explanations Regarding the Summary of Departmental Income.....	9
	Summary of Departmental Expenditures.....	10
	Explanations Regarding the Summary of Departmental Expenditures	12
	Summary of Fiscal Allocation Revenue and Expenditures.....	12
	Explanations Regarding the Summary of Government Budget Allocation Income and Expenditures.....	12
	General Public Budget Expenditures	14
	Explanations Regarding the General Public Budget Expenditures Form	15
	General Public Budget Basic Expenditures	17
	Explanations Regarding the General Public Budget Basic Expenditures Form	18
	General Public Budget Expenditures for "Three Public" Expenses	19
	Explanations Regarding the General Public Budget "Three Public" Expenses Expenditures Form	19
	Government Fund Income and Expenditures	20
	Description of Government Fund Revenue and Expenditures.....	20
	State-Owned Capital Operating Budget Expenditure Table.....	21

III. Description of Other Items	21
(i) Explanation of the scientific research facility special operation and maintenance items	21
(ii) Description of government procurement	23
(iii) Possession and use of state-owned assets	24
(iv) Budget performance.....	24
IV. Glossary.....	24
(i) Revenue items	24
(ii) Expenditure Items	25

I. Basic information on the Chinese Academy of Sciences

(i) Departmental Responsibilities

The Chinese Academy of Sciences (CAS) was established in November 1949 as a public institution¹ directly under the State Council. 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 (R&D) 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 departments, and educational institutions. Its main responsibilities include:

1. 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 strengthen national strategic S&T power; to play a central driving role in the national innovation system with Chinese characteristics; to boost China's S&T self-reliance (自立自强); and to provide a scientific foundation and technological wellspring for China's high-quality development.

2. To build itself into a national high-level S&T think tank, 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.

3. 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

¹ Translator's note: "Public institutions" (事业单位) are organizations created and led by PRC government departments that provide social services. Unlike state-owned enterprises (SOEs), public institutions do not create material products and do not generate income. Public institutions are not considered government agencies, and their employees are not civil servants. Most public institutions are fully or partially government-funded, but some fully privately funded (but still government-led) public institutions exist. Public institutions typically provide services in areas such as education, science and technology, culture, health, and sanitation.

entrepreneurship.

4. To insist upon being an openly run academy (开放办院), broadly carry out S&T collaboration and exchanges at home and abroad, actively integrate with global innovation networks, and build itself into a world-class scientific research institution.

5. To perform the duties of a public institution directly under the State Council, and take on other work entrusted to it by the State.

(ii) Institutional Configuration

There are 13 institutions established within CAS, which include: the General Office (办公厅), Bureau of Academic Department Work, Bureau of Cutting-Edge Science and Education, Bureau of Major Technology Tasks, Bureau of Science and Technology for Development, Bureau of Development and Planning, Bureau of Prerequisite Assurance and Financial Affairs (条件保障与财务局), Bureau of Personnel, Party Committee for Subordinate Organs (直属机关党委), Bureau of International Cooperation, Bureau of Science Communication, Bureau of Supervision and Auditing, Bureau of Retired Cadre Work (离退休干部工作局).

The departmental budget of CAS includes 146 budget units, of which 132 are public institutions and 14 are transformed institutions.² Among the public institutions, there are 109 scientific research institutions, 13 management institutions, two educational institutions, and eight support institutions.

II. 2022 CAS Budget

2022 is a crucial year for comprehensively advancing the 14th Five-Year Plan and paying close attention to its implementation. The work of CAS will be guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and will fully implement the spirit of the 19th Party Congress and the previous plenary sessions of the 19th Central Committee, the Central Economic Work Conference and the spirit of this

² Translator's note: A converted institution (转制单位) is typically a Chinese state-owned enterprise (SOE) or public institution (事业单位)—that is, a Chinese government-controlled and funded agency that fills the niche that private nonprofits and non-governmental organizations (NGOs) typically fill in the United States—that has been converted into a corporation. This is most commonly done to improve the efficiency of what was formerly an inefficient, state-managed agency. Converted institutions usually retain their original personnel at the same pay scale as they were pre-conversion, and the government body that formerly directly managed them typically retains a controlling share of their stock.

year's "Two Sessions."³ We will benchmark the "Four Leads"⁴ and the "Two Accelerates and One Assiduously"⁵ goals and requirements. With a focus on main responsibilities and tasks at hand, we will pay close attention to the implementation of work and focus on "strengthening the foundation, tackling key problems, gathering talent, and promoting reform." We will focus on strengthening mission-driven institutionalized basic research, focus on tackling key S&T tasks, focus on cultivating a cadre of high-level S&T talents, and focus on deepening the reform of scientific research institutes. We will strengthen the construction of work style (作风) and academic style (学风) and coordinate all tasks. A number of major achievements will be made in original innovation (原始创新) and key and core technology (关键核心技术) research and will strengthen national strategic S&T power and achieve high-level S&T self-reliance to make due contributions to innovation. We aim to welcome the 20th Party Congress with outstanding results.

The early 2022 CAS departmental budget totals RMB 162,131,018,100. The departmental budget includes not only the organization and carrying out of S&T innovation activities, deepening the reform of scientific research institutes, talent recruitment and training, academician consultation and evaluation and popular science activities, domestic and foreign S&T exchanges and cooperation, and education expenditures, but also includes expenditures for incumbents and retirees, the operation and maintenance of scientific research facilities, the construction of scientific research prerequisites and logistical support, and other institutional operating expenditures.

³ Translator's note: The "two sessions" (两会) are the annual full sessions of the National People's Congress (NPC; 全国人民代表大会; 全国人大), China's parliament, and the National Committee of the Chinese People's Political Consultative Conference (CPPCC; 中国人民政治协商会议全国委员会; 全国政协), an advisory body, which are held concurrently each year in March.

⁴ On July 17, 2013, when General Secretary Xi Jinping inspected CAS, he put forward the requirements to "lead in achieving leapfrog development of science and technology, lead in constructing a national bastion of innovative talent, lead in constructing a high-quality national S&T think tank, and lead in building a world-class scientific research institution."

⁵ On the occasion of the 70th anniversary of the founding of CAS, Xi Jinping, General Secretary of the CCP Central Committee, President of the State, and Chairman of the Central Military Commission, sent a congratulatory letter to extend sincere greetings to the S&T workers and cadres and workers of the entire Academy on behalf of the Party Central Committee. The congratulatory letter put forward his requirements to "accelerate the creation of a wellspring of original innovation, accelerate breakthroughs in key and core technologies, and assiduously seize the high ground in S&T."

Summary of Departmental Revenue and Expenditures

Departmental Disclosures Table 1

Units: RMB 10,000

Revenue		Expenditures	
Item	Budgeted amount	Item	Budgeted amount
1. General public budget allocation	4,833,689.57 ⁶	1. General public services expenditures	100.58
2. Government fund budget allocation	1,626.00	2. Diplomatic expenditures	1,808.00
3. State-owned capital operating budget allocations		3. Education expenditures	664,106.10
4. Business revenue	5,381,320.26	4. S&T expenditures	10,727,096.53
5. Public institution operating revenue	134,553.96	5. Culture, tourism, sports, and media expenditures	69.50
6. Other revenue	526,219.42	6. Social security and employment expenditures	261,163.81
		7. Resource exploration, industrial information, and other expenditures	4,058.50
		8. Housing assurance expenditures	242,401.25
Total current year revenue	10,877,409.21	Total current year expenditures	11,901,034.27
Use of non-fiscal appropriation balance	208,431.17	Balance carried over to following year	4,312,067.54
Balance carried forward from previous year	5,127,261.43		
Total revenue	16,213,101.81	Total expenditures	16,213,101.81

Explanations Regarding the Summary of Departmental Income and Expenditures

(i) Projected Income

1. General public budget allocation income: The early 2022 budget figure is RMB 48,336,895,700, an increase of RMB 1,910,227,700, or 4.73% from 2021. This is mainly due to an increase in support for basic research and talent teams.

2. Government fund budget allocation income: The early 2022 budget figure is RMB 16,260,000, a decrease of RMB 11,850,000, or 46.53% from the beginning of 2021. This is mainly due to the reduction of government fund budgeting tasks.

3. State-owned capital operating budget allocations: None.

4. Business revenue: The early 2022 budget figure is RMB 53,813,202,600, an increase of RMB 10,072,917,600, or 23.03% from the beginning of 2021. This is mainly due to the expected increase of the revenue from the professional business activities and auxiliary activities carried out by the relevant public institutions according to their work needs.

5. Public institution operating income: The early 2022 budget figure is RMB 1,345,539,600, an increase of RMB 251,257,400, or 22.96% from the beginning of 2021.

⁶ Discrepancies in the decimal portions of the individual data exist due to rounding.

This is mainly due to the expected increase in the relevant business income of public institutions.

6. Other income: The early 2022 budget figure is RMB 5,262,194,200, a decrease of RMB 4,580,035,000, or 46.53% from the beginning of 2021. This is mainly due to the expected decrease in the relevant business income of public institutions.

7. Balance carried forward from previous year: The early 2022 budget figure is RMB 51,272,614,300. This is mainly due to the implementation of the government accounting system, wherein the scientific research tasks carried out across the year are included in the carry-over from the previous year.

(ii) Expenditure Budget

1. General public service expenditures: The early 2022 budget figure is RMB 1,005,800, an increase of RMB 505,800, or 101.16% from the beginning of 2021. This is mainly due to the pandemic, and the related business of 2021 will continue to be implemented in 2022.

2. Diplomatic expenditure: The budgeted amount for early 2022 is RMB 18,080,000, which was not budgeted for in the previous year. This is mainly due to newly undertaken multilateral cooperation tasks.

3. Education expenditures: The early 2022 budget figure is RMB 6,641,061,000, an increase of RMB 526,551,000, or 8.61% from the beginning of 2021. This is mainly due to the increase in the number of students and the corresponding increase in education expenditures.

4. S&T expenditures: The early 2022 budget figure is RMB 107,270,965,300, an increase of RMB 21,361,455,800, or 24.87% from the beginning of 2021. This is mainly due to an increase in support for basic research and talent teams. Affected by the pandemic, some scientific research tasks will continue to be carried out until 2022.

5. Culture, tourism, sports and media expenditures: The early 2022 budget figure is RMB 695,000, a decrease of RMB 5,319,700, or 88.44%, from the beginning of 2021. This is mainly due to a small amount of final payment for the special projects related to the protection of national cultural relics.

6. Social security and employment expenditures: The early 2022 budget figure is RMB 2,611,638,100, an increase of RMB 1,710,730,600, or 189.89% from the beginning of 2021. According to the reform requirements of the old-age insurance system for the staff of government offices and public institutions, starting from 2022, the basic old-age insurance payment and occupational annuity payment of public institutions outside Beijing will be adjusted from the S&T expenditures item to this special expenditures item.

7. Resource exploration and industrial information expenditures: The early 2022 budget figure is RMB 40,585,000, an increase of RMB 38,445,000 from the beginning of 2021. This is mainly due to increases in the budget for undertaking related special item costs.

8. Housing assurance expenditures: The early 2022 budget figure is RMB 2,424,012,500, an increase of RMB 309,770,600, or 14.65% from the beginning of 2021. This is mainly due to an increase in expenditures for personnel changes and job rank changes.

Summary of Departmental Revenue

Departmental Disclosures Table 2

Units: RMB 10,000

Item code	Item name	Total	Balance carried forward from previous year	General public budget allocations	Government fund budget allocations	Business revenue		Public institution operating revenue	Subsidy revenue from higher levels	Revenue from payments by lower-level units	Other revenue	Use of non-fiscal appropriation balance
						Amount	Of which: Educational charges					
201	General public services expenditures	100.58	50.58	50.00								
202	Diplomatic expenditures	1,808.00		308.00		1,500.00						
20205	Foreign cooperation and exchanges	1,500.00				1,500.00						
2020505	Foreign cooperation activities	1,500.00				1,500.00						
20299	Other diplomatic expenditures	308.00		308.00								
2029999	Other diplomatic expenditures	308.00		308.00								
205	Education expenditures	943,506.10	302,670.00	408,596.16		118,239.94	97,239.94	30,000.00			84,000.00	
20502	General education	943,506.10	302,670.00	408,596.16		118,239.94	97,239.94	30,000.00			84,000.00	
2050205	Higher education	943,506.10	302,670.00	408,596.16		118,239.94	97,239.94	30,000.00			84,000.00	
206	S&T expenditures	14,756,474.26	4,821,068.61	4,094,626.52	1,626.00	5,157,131.92	11,255.18	104,433.96			378,145.70	199,441.55
20602	Basic research	6,880,580.84	2,033,444.71	2,982,851.18		1,455,081.77	11,183.00	64,380.64			230,352.62	114,469.92
2060201	Institutional operations	1,351,973.26	47,183.63	753,087.29		333,981.18	1,183.00	30,955.14			144,564.95	42,201.07
2060203	National Natural Science Foundation of China	1,357,965.52	901,415.18			456,550.34						
2060204	Laboratories and related facilities	130,005.04	39,786.54	77,995.50		12,223.00						
2060205	Major science projects	214,379.30	19,779.51	186,599.79		8,000.00						
2060206	Special projects for basic scientific research	2,054,470.30	405,353.84	1,368,942.59		230,717.87					34,841.00	14,615.00
2060207	Special technical foundation	12,252.62	3,616.73			8,635.89						
2060208	Construction of S&T talent teams	8,758.11	3,162.51			3,445.00					2,150.60	
2060299	Other basic research expenditures	1,750,776.69	613,146.77	596,226.01		401,528.49	10,000.00	33,425.50			48,796.07	57,653.85
20603	Applied research	5,495,539.77	1,890,465.40	718,701.76		2,627,699.58	72.18	38,958.32			144,033.08	75,681.63
20604	Technology R&D	246,464.28	85,768.85			155,795.43					3,100.00	1,800.00
2060404	S&T achievement conversion (科技成果转化) and dispersion	14,381.02	4,381.02			10,000.00						
2060405	General purpose technology R&D	1,000.00				1,000.00						
2060499	Other technology R&D expenditures	231,083.26	81,387.83			144,795.43					3,100.00	1,800.00
20605	S&T prerequisites and services	313,707.86	55,838.64	183,335.15		66,594.07					450.00	7,490.00
2060501	Institutional operations	26,570.94	11,920.94			14,650.00						
2060503	S&T prerequisites special projects	271,056.02	41,207.80	183,335.15		38,573.07					450.00	7,490.00
2060599	Other S&T prerequisites and services expenditures	16,080.90	2,709.90			13,371.00						
20606	Social sciences	188.95	142.95			46.00						
2060603	Social science fund expenditures	188.95	142.95			46.00						
20608	S&T exchange and cooperation	108,387.59	13,798.09	91,000.00		3,364.50		15.00			210.00	
2060801	International exchange and cooperation	106,590.66	13,773.29	90,800.87		1,791.50		15.00			210.00	
2060802	Major S&T cooperative projects	1,573.00				1,573.00						

Item code	Item name	Total	Balance carried forward from previous year	General public budget allocations	Government fund budget allocations	Business revenue		Public institution operating revenue	Subsidy revenue from higher levels	Revenue from payments by lower-level units	Other revenue	Use of non-fiscal appropriation balance
						Amount	Of which: Educational charges					
2060899	Other S&T exchange and cooperation expenditures	223.93	24.80	199.13								
20610	Nuclear power plant spent fuel treatment and disposal fund expenditures	2,265.02	639.02		1,626.00							
2061099	Other spent fuel treatment and disposal fund expenditures	2,265.02	639.02		1,626.00							
20699	Other S&T expenditures	205,737.10	83,172.67	17,146.43		104,338.00		1,080.00				
2069903	Converted scientific research institutes (转制科研机构)	17,146.43		17,146.43								
2069999	Other S&T expenditures	188,590.67	83,172.67			104,338.00		1,080.00				
207	Culture, tourism, sports, and media expenditures	69.50	52.50	17.00								
20702	Cultural relics	52.50	52.50									
2070204	Cultural relic conservation	52.50	52.50									
20799	Other culture, tourism, sports, and media expenditures	17.00		17.00								
2079903	Special cultural industry development project expenditures	17.00		17.00								
208	Social security and employment expenditures	263,713.42	689.82	170,561.89		58,832.24					27,066.01	6,563.46
20805	Retirement from administrative units and public institutions	263,713.42	689.82	170,561.89		58,832.24					27,066.01	6,563.46
2080505	Expenditures on basic old age insurance contributions of government offices and public institutions	176,602.21	460.47	113,749.32		40,942.90					16,966.98	4,482.54
2080506	Expenditures on occupational annuity contributions of government offices and public institutions	87,111.21	229.35	56,812.57		17,889.34					10,099.03	2,080.92
215	Resource exploration, industrial informatization, and other expenditures	4,058.50	8.50	4,050.00								
21502	Manufacturing	4,050.00		4,050.00								
2150299	Other manufacturing expenditures	4,050.00		4,050.00								
21599	Other resource exploration, industrial informatization, etc. expenditures	8.50	8.50									
2159904	Technological transformation expenditures	8.50	8.50									
221	Housing assurance expenditures	243,141.45	2,721.42	155,250.00		45,616.16	2,760.06	120.00			37,007.71	2,426.16
22102	Housing reform expenditures	243,141.45	2,721.42	155,250.00		45,616.16	2,760.06	120.00			37,007.71	2,426.16
2210201	Housing provident fund	169,977.61	779.08	104,500.00		38,434.43	2,760.06	120.00			24,107.63	2,036.47
2210202	Rent subsidies	4,473.57	38.49	4,250.00		68.18					114.68	2.22
2210203	Home purchase subsidies	68,690.27	1,903.85	46,500.00		7,113.55					12,785.40	387.47
	Total	16,213,101.81	5,127,261.43	4,833,689.57	1,626.00	5,381,320.26	111,255.18	134,553.96			526,219.42	208,431.17

Explanations Regarding the Summary of Departmental Income

The income budget of CAS in early 2022 is RMB 162,131,018,100, of which: general public budget allocation income is RMB 48,336,895,700, accounting for 29.81%; government fiscal budget allocation income is RMB 16,260,000, accounting for 0.01%; business income is RMB 53,813,202,600, accounting for 33.19%; operating income of public institutions is RMB 1,345,539,600, accounting for 0.83%; other income is RMB 5,262,194,200, accounting for 3.25%; RMB 51,272,614,300 is carried over from the previous year, accounting for 31.62%; the balance of non-fiscal appropriations is RMB 2,084,311,700, accounting for 1.29%.

Summary of Departmental Expenditures

Departmental Disclosures Table 3

Units: RMB 10,000

Item code	Item name	Total	Basic expenditures	Project expenditures	Payments to higher authorities	Public institution operating expenses	Subsidies for lower-level units
201	General public services expenditures	100.58		100.58			
202	Diplomatic expenditures	1,808.00		1,808.00			
20205	Foreign cooperation and exchanges	1,500.00		1,500.00			
2020505	Foreign cooperation activities	1,500.00		1,500.00			
20299	Other diplomatic expenditures	308.00		308.00			
2029999	Other diplomatic expenditures	308.00		308.00			
205	Education expenditures	664,106.10	561,643.02	102,463.08			
20502	General education	664,106.10	561,643.02	102,463.08			
2050205	Higher education	664,106.10	561,643.02	102,463.08			
206	S&T expenditures	10,727,096.53	2,609,090.07	7,900,522.58		217,483.88	
20602	Basic research	5,266,069.33	1,395,469.56	3,693,130.63		177,469.14	
2060201	Institutional operations	1,315,347.76	1,283,055.01	2,637.61		29,655.14	
2060203	National Natural Science Foundation of China	489,323.75		489,323.75			
2060204	Laboratories and related facilities	108,561.62		108,561.62			
2060205	Major science projects	208,779.30		208,779.30			
2060206	Special projects for basic scientific research	1,790,762.23		1,790,762.23			
2060207	Special technical foundation	9,498.82		9,498.82			
2060208	Construction of S&T talent teams	7,180.00		7,180.00			
2060299	Other basic research expenditures	1,336,615.85	112,414.55	1,076,387.30		147,814.00	
20603	Applied research	3,825,272.70	1,166,862.81	2,619,483.15		38,926.74	
20604	Technology R&D	173,903.29	28,401.39	145,501.90			
2060404	S&T achievement conversion and dispersion	8,000.00		8,000.00			
2060405	General purpose technology R&D	1,000.00		1,000.00			
2060499	Other technology R&D expenditures	164,903.29	28,401.39	136,501.90			
20605	S&T prerequisites and services	281,826.54	729.88	281,096.66			
2060501	Institutional operations	12,005.88	5.88	12,000.00			
2060503	S&T prerequisites special projects	256,585.66		256,585.66			
2060599	Other S&T prerequisites and services expenditures	13,235.00	724.00	12,511.00			
20606	Social sciences	44.00		44.00			
2060603	Social science fund expenditures	44.00		44.00			
20608	S&T exchange and cooperation	108,380.59	480.00	107,892.59		8.00	

Item code	Item name	Total	Basic expenditures	Project expenditures	Payments to higher authorities	Public institution operating expenses	Subsidies for lower-level units
2060801	International exchange and cooperation	106,583.66	480.00	106,095.66		8.00	
2060802	Major S&T cooperative projects	1,573.00		1,573.00			
2060899	Other S&T exchange and cooperation expenditures	223.93		223.93			
20610	Nuclear power plant spent fuel treatment and disposal fund expenditures	2,265.02		2,265.02			
2061099	Other spent fuel treatment and disposal fund expenditures	2,265.02		2,265.02			
20699	Other S&T expenditures	126,899.14	17,146.43	108,672.71		1,080.00	
2069903	Converted scientific research institutes	17,146.43	17,146.43				
2069999	Other S&T expenditures	109,752.71		108,672.71		1,080.00	
207	Culture, tourism, sports, and media expenditures	69.50		69.50			
20702	Cultural relics	52.50		52.50			
2070204	Cultural relic conservation	52.50		52.50			
20799	Other culture, tourism, sports, and media expenditures	17.00		17.00			
2079903	Special cultural industry development project expenditures	17.00		17.00			
208	Social security and employment expenditures	261,163.81	261,163.81				
20805	Retirement from administrative units and public institutions	261,163.81	261,163.81				
2080505	Expenditures on basic old age insurance contributions of government offices and public institutions	174,902.38	174,902.38				
2080506	Expenditures on occupational annuity contributions of government offices and public institutions	86,261.43	86,261.43				
215	Resource exploration, industrial informatization, and other expenditures	4,058.50		4,058.50			
21502	Manufacturing	4,050.00		4,050.00			
2150299	Other manufacturing expenditures	4,050.00		4,050.00			
21599	Other resource exploration, industrial information, etc. expenditures	8.50		8.50			
2159904	Technological transformation expenditures	8.50		8.50			
221	Housing assurance expenditures	242,401.25	242,401.25				
22102	Housing reform expenditures	242,401.25	242,401.25				
2210201	Housing provident fund	169,462.90	169,462.90				
2210202	Rent subsidies	4,473.57	4,473.57				
2210203	Home purchase subsidies	68,464.78	68,464.78				
	Total	11,901,034.27	3,674,298.15	8,009,252.24		217,483.88	

Explanations Regarding the Summary of Departmental Expenditures

At the beginning of 2022, total expenditures for CAS are RMB 119,010,342,700, of which: basic expenditures are RMB 36,742,981,500, accounting for 30.87%; project expenditures are RMB 80,092,522,400, accounting for 67.30%; operating expenditures of public institutions are RMB 2,174,838,800, accounting for 1.83%.

Summary of Fiscal Allocation Revenue and Expenditures

Departmental Disclosures Table 4

Units: RMB 10,000

Revenue		Expenditures	
Item	Budgeted amount	Item	Budgeted amount
1. Current year revenue	4,835,315.57	1. Current year expenditures	5,139,762.67
(1) General public budget fiscal appropriations	4,833,689.57	(1) General public service expenditures	100.58
(2) Government fund budget fiscal appropriations	1,626.00	(2) Diplomatic expenditures	308.00
(3) State-owned capital operating budget allocations		(3) Educational expenditures	413,266.16
		(4) S&T expenditures	4,395,251.36
2. Balance carried forward from previous year	304,447.10	(5) Culture, tourism, sports, and media expenditures	69.50
(1) General public budget fiscal appropriations	303,808.08	(6) Social security and employment expenditures	170,878.62
(2) Government fund budget fiscal appropriations	639.02	(7) Resource exploration, industrial information, and other expenditures	4,058.50
(3) State-owned capital operating budget allocations		(8) Housing assurance expenditures	155,599.95
		2. Balance carried over to following year	
Total revenue	5,139,762.67	Total expenditures	5,139,762.67

Explanations Regarding the Summary of Government Budget Allocation Income and Expenditures

(i) Projected Income

1. General public budget allocation income: The early 2022 budget figure is RMB 48,336,895,700, an increase of RMB 1,910,227,700, or 4.73% from the beginning of 2021. This is mainly due to an increase in support for basic research and talent teams.

2. Balance carried forward from previous year: The early 2022 budget figure is RMB 3,044,471,000, an increase of RMB 1,528,952,300 from the beginning of 2021. This

is mainly due to the implementation of the government accounting system, wherein the scientific research tasks carried out across the year are included in the carry-over from the previous year.

(ii) Expenditure Budget

1. General public service expenditures: The early 2022 budget figure is RMB 1,005,800, an increase of RMB 505,800, or 101.16% from the beginning of 2021. This is mainly due to the pandemic, and the related business of 2021 will continue in 2022.

2. Diplomatic expenditures: The budgeted amount for early 2022 is RMB 3,080,000, and this expenditure budget did not occur in the previous year. This is mainly due to newly undertaken multilateral cooperation tasks.

3. Education expenditures: The early 2022 budget figure is RMB 4,132,661,600, an increase of RMB 195,394,800, or 4.96% from the beginning of 2021. This is mainly due to the increase in the number of students and the corresponding increase in education expenditures.

4. S&T expenditures: The early 2022 budget figure is RMB 43,952,513,600, an increase of RMB 8,269,647,400, or 23.18% from the beginning of 2021. This is mainly due to an increase in support for basic research and talent teams.

5. Culture, tourism, sports and media expenditures: The early 2022 budget figure is RMB 695,000, a decrease of RMB 5,319,700, or 88.44%, from the beginning of 2021. This is mainly due to a decrease in the budget for special expenditures related to the protection of national cultural relics.

6. Social security and employment expenditures: The early 2022 budget figure is RMB 1,708,786,200, an increase of RMB 980,137,200, or 134.51% from the beginning of 2021. According to the reform requirements of the old-age insurance system for the staff of government offices and public institutions, starting from 2022, the basic old-age insurance payment and occupational annuity payment of public institutions outside Beijing will be adjusted from the S&T expenditures item to this special expenditures item.

7. Resource exploration and industrial information expenditures: The early 2022 budget figure is RMB 40,585,000, an increase of RMB 38,445,000 from the beginning of 2021. This is mainly due to increases in the budget for related special operating costs.

8. Housing assurance expenditures: The early 2022 budget figure is RMB 1,555,999,500, an increase of RMB 12,739,500, or 0.83% from the beginning of 2021. This is mainly due to an increase in the expenditure budget for personnel changes and job rank changes.

General Public Budget Expenditures

Departmental Disclosures Table 5

Units: RMB 10,000

Functional categorization item		2021 actual amount		2022 budgeted amount				2022 budgeted amount to 2021 actual amount		2022 budget to 2021 actual (less central infrastructure investments)	
Item code	Item name	Actual amount	Actual amount after deducting central infrastructure investments	Initial Annual Budget			Budgeted amount after deducting central infrastructure investments	Increase amount	Increase (%)	Increase amount	Increase (%)
				Subtotal	Basic expenditures	Project expenditures					
201	General public services expenditures	50.00	50.00	50.00	0.00	50.00	50.00	0.00	0.00	0.00	0.00
202	Diplomatic expenditures	0.00	0.00	308.00	0.00	308.00	308.00	308.00	0.00	308.00	0.00
20299	Other diplomatic expenditures	0.00	0.00	308.00	0.00	308.00	308.00	308.00	0.00	308.00	0.00
2029999	Of which: Other diplomatic expenditures	0.00	0.00	308.00	0.00	308.00	308.00	308.00	0.00	308.00	0.00
205	Education expenditures	384,169.18	384,169.18	408,596.16	329,403.08	79,193.08	408,596.16	24,426.98	6.36	24,426.98	6.36
20502	General education	384,169.18	384,169.18	408,596.16	329,403.08	79,193.08	408,596.16	24,426.98	6.36	24,426.98	6.36
2050205	Of which: Higher education	384,169.18	384,169.18	408,596.16	329,403.08	79,193.08	408,596.16	24,426.98	6.36	24,426.98	6.36
206	S&T expenditures	3,837,819.17	3,312,559.17	4,094,626.52	1,148,460.42	2,946,166.10	3,487,446.52	256,807.35	6.69	174,887.35	5.28
20602	Basic research	2,479,757.24	1,981,473.24	2,982,851.18	765,080.23	2,217,770.95	2,412,062.18	503,093.94	20.29	430,588.94	21.73
2060201	Of which: Institutional operations	453,142.66	453,142.66	753,087.29	753,087.29	0.00	753,087.29	299,944.63	66.19	299,944.63	66.19
2060204	Laboratories and related facilities	95,553.00	95,553.00	77,995.50	0.00	77,995.50	77,995.50	-17,557.50	-18.37	-17,557.50	-18.37
2060205	Major science projects	186,599.79	186,599.79	186,599.79	0.00	186,599.79	186,599.79	0.00	0.00	0.00	0.00
2060206	Special projects for basic scientific research	1,221,299.70	728,928.70	1,368,942.59	0.00	1,368,942.59	799,733.59	147,642.89	12.09	70,804.89	9.71
2060299	Other basic research expenditures	523,162.09	517,249.09	596,226.01	11,992.94	584,233.07	594,646.01	73,063.92	13.97	77,396.92	14.96
20603	Applied research	1,021,074.58	994,098.58	718,701.76	366,233.76	352,468.00	682,310.76	-302,372.82	-29.61	-311,787.82	-31.36
20605	S&T prerequisites and services	193,484.77	193,484.77	183,335.15	0.00	183,335.15	183,335.15	-10,149.62	-5.25	-10,149.62	-5.25
2060501	Of which: Institutional operations	9,709.77	9,709.77	0.00	0.00	0.00	0.00	-9,709.77	-100.00	-9,709.77	-100.00
2060503	S&T prerequisites special projects	183,775.00	183,775.00	183,335.15	0.00	183,335.15	183,335.15	-439.85	-0.24	-439.85	-0.24
20608	S&T exchange and cooperation	84,099.52	84,099.52	91,000.00	0.00	91,000.00	91,000.00	6,900.48	8.21	6,900.48	8.21
2060801	Of which: International exchange and cooperation	81,535.19	81,535.19	90,800.87	0.00	90,800.87	90,800.87	9,265.68	11.36	9,265.68	11.36
2060899	Other S&T exchange and cooperation expenditures	2,564.33	2,564.33	199.13	0.00	199.13	199.13	-2,365.20	-92.23	-2,365.20	-92.23
20699	Other S&T expenditures	17,094.06	17,094.06	17,146.43	17,146.43	0.00	17,146.43	52.37	0.31	52.37	0.31
2069903	Of which: converted scientific research institutes	17,094.06	17,094.06	17,146.43	17,146.43	0.00	17,146.43	52.37	0.31	52.37	0.31
207	Culture, tourism, sports, and media expenditures	22.00	22.00	17.00	0.00	17.00	17.00	-5.00	-22.73	-5.00	-22.73
20799	Other culture, tourism, sports, and media expenditures	22.00	22.00	17.00	0.00	17.00	17.00	-5.00	-22.73	-5.00	-22.73
2079903	Of which: Cultural industry development project expenditures	22.00	22.00	17.00	0.00	17.00	17.00	-5.00	-22.73	-5.00	-22.73
208	Social security and employment expenditures	171,308.45	171,308.45	170,561.89	170,561.89	0.00	170,561.89	-746.56	-0.44	-746.56	-0.44
20805	Retirement from administrative units and public institutions	171,308.45	171,308.45	170,561.89	170,561.89	0.00	170,561.89	-746.56	-0.44	-746.56	-0.44
2080505	Of which: Expenditures on basic old age insurance contributions of government offices and public institutions	114,247.01	114,247.01	113,749.32	113,749.32	0.00	113,749.32	-497.69	-0.44	-497.69	-0.44

Functional categorization item		2021 actual amount		2022 budgeted amount				2022 budgeted amount to 2021 actual amount		2022 budget to 2021 actual (less central infrastructure investments)	
Item code	Item name	Actual amount	Actual amount after deducting central infrastructure investments	Initial Annual Budget			Budgeted amount after deducting central infrastructure investments	Increase amount	Increase (%)	Increase amount	Increase (%)
				Subtotal	Basic expenditures	Project expenditures					
2080506	Expenditures on occupational annuity contributions of government offices and public institutions	57,061.44	57,061.44	56,812.57	56,812.57	0.00	56,812.57	-248.87	-0.44	-248.87	-0.44
215	Resource exploration, industrial information, and other expenditures	214.00	214.00	4,050.00	0.00	4,050.00	4,050.00	3,836.00	1792.52	3,836.00	1,792.52
21502	Manufacturing	214.00	214.00	4,050.00	0.00	4,050.00	4,050.00	3,836.00	1792.52	3,836.00	1,792.52
2150299	Of which: Other manufacturing expenditures	214.00	214.00	4,050.00	0.00	4,050.00	4,050.00	3,836.00	1792.52	3,836.00	1,792.52
221	Housing assurance expenditures	154,305.00	154,305.00	155,250.00	155,250.00	0.00	155,250.00	945.00	0.61	945.00	0.61
22102	Housing reform expenditures	154,305.00	154,305.00	155,250.00	155,250.00	0.00	155,250.00	945.00	0.61	945.00	0.61
2210201	Of which: Housing provident fund	103,680.00	103,680.00	104,500.00	104,500.00	0.00	104,500.00	820.00	0.79	820.00	0.79
2210202	Rent subsidies	4,125.00	4,125.00	4,250.00	4,250.00	0.00	4,250.00	125.00	3.03	125.00	3.03
2210203	Home purchase subsidies	46,500.00	46,500.00	46,500.00	46,500.00	0.00	46,500.00	0.00	0.00	0.00	0.00
	Total	4,547,887.80	4,022,627.80	4,833,689.57	1,803,675.39	3,030,014.18	4,226,509.57	285,801.77	6.28	203,881.77	5.07

Explanations Regarding the General Public Budget Expenditures Form

The general public budget expenditure of CAS in 2022 is estimated to be RMB 48,336,895,700, which, after deducting capital construction investments, is an increase of RMB 2,038,817,700, or 5.07%, over the amount executed in 2021. In 2022, in accordance with the requirements of the Party Central Committee and the State Council on “belt-tightening” (过“紧日子”), all undertakings will be carried out sparingly, general and non-fixed expenditures will be reduced, public expenditures will be focused on, and the spending needs of strategic pilot S&T projects and basic research will be reasonably guaranteed. Of which:

(1) General public service expenditures: The early 2022 budget figure is RMB 500,000, which is the same as the amount executed in 2021.

(2) Diplomatic expenditures: The early 2022 budgeted amount is RMB 3.08 million, an increase of RMB 3.08 million from the amount executed in 2021. This is mainly due to newly undertaken multilateral cooperation tasks.

(3) Education expenditures: The early 2022 budget figure is RMB 4,085,961,600, an increase of RMB 244,269,800, or 6.36% from the amount executed in 2021. This is mainly due to the increase in the number of students and the corresponding increase in education expenditures.

(4) S&T expenditures: The early 2022 budget figure is RMB 34,874,465,200, an

increase of RMB 1,748,873,500, or 5.28% from the amount executed in 2021. This is mainly due to an increase in support for basic research and talent teams.

(5) Culture, tourism, sports and media expenditures: The 2022 budgeted amount is RMB 170,000, a decrease of RMB 50,000, or 22.73% from the amount executed in 2021. This is mainly due to a decrease in the budget for special expenditures related to the protection of national cultural relics.

(6) Social security and employment expenditures: The early 2022 budgeted amount is RMB 1,705,618,900, a decrease of RMB 7,465,600, or 0.44% from the amount executed in 2021. This is mainly due to personnel changes and payment base adjustments.

(7) Resource exploration, industrial information, and other expenditures: The early 2022 budget figure is RMB 40.500 million, an increase of RMB 38.360 million from the amount executed in 2021. This is mainly due to increases in the budget for related special operating costs.

(8) Housing expenditures: The 2022 budgeted amount is RMB 1,552,500,000, an increase of RMB 9,450,000, or 0.61% from the amount executed in 2021. This is mainly due to personnel changes and job rank changes.

General Public Budget Basic Expenditures

Departmental Disclosures Table 6

Units: RMB 10,000

Personnel expenses			Public expenses					
Item code	Item name	Budgeted amount	Item code	Item name	Routine public expenses	Item code	Item name	Routine public expenses
301	Salary and benefits expenditures	1,304,228.36	302	Goods and services expenditures	236,026.13	310	Capital expenditures	25,192.12
30101	Basic salaries	339,501.82	30201	Office expenses	5,717.89	31002	Office equipment procurement	8,853.82
30102	Subsidies and allowances	286,649.94	30202	Printing expenses	2,979.52	31003	Specialized equipment procurement	11,682.20
30103	Bonuses	11,335.61	30203	Consulting fees	2,258.56	31005	Infrastructure construction	99.20
30106	Meal allowances	2,248.31	30204	Service charges	447.65	31006	Major repairs	410.00
30107	Performance pay	289,682.32	30205	Water fees	7,312.70	31007	Acquisition and upgrading of information networks and software	1,601.52
30108	Expenditures on basic old age insurance contributions of government offices and public institutions	127,080.15	30206	Electricity fees	26,354.00	31013	Official vehicle purchases	336.65
30109	Occupational annuity contributions	61,540.67	30207	Postage and cable fees	3,638.17	31019	Acquisition of other means of transport	100.00
30110	Contributions to employee basic health insurance	37,097.25	30208	Heating expenses	13,406.82	31022	Acquisition of intangible assets	273.62
30112	Other social security contributions	12,048.62	30209	Property management fees	40,580.88	31099	Other capital expenditures	1,835.11
30113	Housing provident fund	104,500.00	30211	Travel expenses	12,045.22			
30114	Medical expenses	4,295.53	30212	Expenses for official travel abroad	204.71			
30199	Other salary and benefits expenditures	28,248.14	30213	Repair and maintenance costs	24,899.71			
303	Assistance for individuals and families	238,228.78	30214	Rental fees	6,063.54			
30301	Pensions (离休费)	14,213.66	30215	Conference fees	3,015.19			
30302	Pensions (退休费)	31,754.83	30216	Training fees	2,272.17			
30303	Retirement (decommissioning) costs	45.20	30217	Official reception expenses	1,189.47			
30304	Survivors' benefits	13,456.97	30218	Special-use material costs	9,121.60			
30305	Subsistence allowances	3,249.75	30225	Special-use fuel costs	257.21			
30306	Relief funds	5.00	30226	Labor costs	18,758.50			
30307	Medical expense assistance	6,736.24	30227	Contracted business fees	14,268.20			
30308	Scholarships	150,592.05	30228	Trade union funds	15,372.71			
30309	Awards	194.50	30229	Welfare expenses	5,712.25			
30399	Other assistance for individuals and families	17,980.58	30231	Government vehicle operation and	3,249.45			

Personnel expenses			Public expenses					
Item code	Item name	Budgeted amount	Item code	Item name	Routine public expenses	Item code	Item name	Routine public expenses
				maintenance costs				
			30239	Other transportation expenses	2,499.64			
			30240	Taxes and surcharges	745.16			
			30299	Other goods and services expenditures	13,655.21			
	Total personnel expenditures	1,542,457.14					Total public expenditures	261,218.25

Explanations Regarding the General Public Budget Basic Expenditures Form

The budget for basic expenditures in the early 2022 general public budget for the Chinese Academy of Sciences is RMB 18,036,753,900. Of which:

(i) Personnel expenditures account for RMB 15,424,571,400, which, for 146 budgetary institutions, mainly include: Basic wages, subsidies and allowances, bonuses, food allowance, performance-based wages, endowment insurance for government offices and public institutions, occupational pensions, basic employee health insurance, other social security expenditures, housing provident fund contributions, medical expenses, other salary and benefit expenditures, retirement expenses, workers' compensation, living expense subsidies, medical expense subsidies, incentives, and other individual and family subsidies.

(ii) Routine public expenditures account for RMB 2,612,182,500, which, for 146 budgetary institutions, 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 reception expenses, special-use material costs, special-use fuel costs, labor costs, contracted business fees, trade union funds, welfare expenses, government vehicle operation and maintenance costs, other transportation expenses, taxes, and surcharges, other goods and services expenditures, 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 Expenditures for "Three Public" Expenses⁷

Departmental Disclosures Table 7

Units: RMB 10,000

2021 budgeted amount						2022 budgeted amount					
Total	Expenses for official travel abroad	Government vehicle acquisition and operation costs			Official reception expenses	Total	Expenses for official travel abroad	Government vehicle acquisition and operation costs			Official reception expenses
		Subtotal	Government vehicle acquisition	Government vehicle operation costs				Subtotal	Government vehicle acquisition	Government vehicle operation costs	
6,343.85	0.00	4,310.63	266.65	4,043.98	2,033.22	5770.63	0.00	4262.19	401.65	3860.54	1508.44

Note: In accordance with the *Notice of the General Office of the CCP Central Committee 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 (区别管理) 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 not be included in the "three public" expenses budgets of central departments.

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

The "Three Public" expenditures of the general public budget of CAS refer to the "three public" expenditures of the 146 budget units of the whole academy. CAS conscientiously implements the requirements of the Party Central Committee and the State Council on "belt tightening" and insisting on strict economy and fighting waste, takes practical measures, and strictly controls spending on the "Three Public" expenses. The 2022 budget amount for the "Three Public" expenses is RMB 57,706,300, a decrease of RMB 5,732,200 from 2021.

In accordance with the *Notice of the General Office of the CCP 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 traveling abroad temporarily on official business to carry out academic exchanges

⁷ 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. PRC central government and Party Central Committee agencies have been required to publicly disclose their annual spending on these categories—the most visible examples of corruption and waste of public funds, when abused—since 2011.

and cooperation, and such expenses shall not be included in the "three public" expenses budgets of central departments. Teaching and research personnel of CAS temporarily go abroad (or into Hong Kong, Macau, or Taiwan) to carry out academic exchanges and cooperation on business, and a strict approval system is implemented. The budgeted amount for the purchase and operation of official vehicles in 2022 is RMB 42,621,900, which is mainly used for the purchase and operation of scientific research vehicles. Specifically, the budget for the purchase of official vehicles is RMB 4,016,500, an increase of RMB1,350,000 over the 2021 budget (mainly due to the increase in vehicles that need to be scrapped and updated). Official vehicle operation and maintenance costs amounts to RMB 38,605,400, a decrease of RMB 1,834,400 from the 2021 budget. The budgeted amount for official reception expenses for 2022 is RMB 15,084,400, a decrease of RMB 5,247,800 compared with the budget in 2021. This is mainly used for official reception expenses for scientific and technological exchanges and cooperation at home and abroad. Affected by the pandemic, activities such as international conferences, international exchange activities, and foreign cooperation and exchanges are expected to decrease.

Government Fund Income and Expenditures

Departmental Disclosures Table 8

Units: RMB 10,000

Item code	Item name	2022 Government Fund Budget Expenditures		
		Total	Basic expenditures	Project expenditures
206	S&T expenditures	2,265.02		2,265.02
20610	Nuclear power plant spent fuel treatment and disposal fund expenditures	2,265.02		2,265.02
2061099	Other spent fuel treatment and disposal fund expenditures	2,265.02		2,265.02
	Total	2,265.02		2,265.02

Description of Government Fund Revenue and Expenditures

The 2022 government fund budget of CAS is RMB 22,650,200, all of which is spent on the spent fuel treatment and disposal fund for nuclear power plants.

State-Owned Capital Operating Budget Expenditure Table

Departmental Disclosures Table 9

Units: RMB 10,000

Item code	Item name	2022 State-Owned Capital Operating Budget Expenditures		
		Subtotal	Basic expenditures	Project expenditures
Total				

Note: CAS does not use state-owned capital in the 2022 operating budget.

III. Description of Other Items

(i) Explanation of the scientific research facility special operation and maintenance items

1. Overview of project

Key national S&T infrastructure ("infrastructure"), "science treasures" ("科学重器"), are the large-scale, complex scientific research systems and important S&T innovation platforms 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 national S&T level and comprehensive strength, and their development level is one of the important symbols of the country's prosperity.

CAS has always been an important force for the operation and maintenance of China's major national S&T infrastructure. With the support of the National Development and Reform Commission (NDRC), the Ministry of Finance (MOF), and other relevant authorities, we have built and put into operation or are currently constructing over 34 infrastructure projects, including dedicated research facilities for high energy physics, heavy ion physics and plasma physics, and astronomical observation. There are also public experimental synchrotron radiation platforms for basic research, applied basic research and applied research in multidisciplinary fields, as well as China's remote sensing satellite ground stations, long and short wave timing systems, remote sensing system aircraft, and other public infrastructure.

Scientific research infrastructure special project operation and maintenance costs are an important basis for ensuring the stable operation of facilities, carrying out scientific research work, producing high-level achievements and talents, and continuously improving conditions and functions.

2. Basis for project establishment

In November 2014, NDRC, MOF, the Ministry of Science and Technology (MOST), and the National Natural Science Foundation of China (NSFC) jointly issued and implemented the *Administrative Measures for Key National Science and Technology Infrastructure* ([2014] No. 2545), which clearly stated: facility operation funding mainly comes from government fiscal funds, as well as the necessary financial support provided by the main oversight units (主管单位) and supporting units (依托单位). Arrangements for infrastructure operating expenses shall be linked to the operations 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 affiliated research institutes ("research institutes") that have business legal person (事业法人) qualifications and which rely on the infrastructure. The management of subsystems (stations) of units that are outside of CAS but participate in infrastructure operations shall be stipulated in the form of an agreement (contract).

4. Implementation scheme

Pursuant to *Implementation Rules for the Operation of Key Science and Technology Infrastructure of the Chinese Academy of Sciences* (2019 No 61), operating expenses shall be divided into basic operating expenses and repair and renovation project expenses.

(1) Basic operating expenses

Basic operating expenses, which are used to ensure the normal operation and routine maintenance of infrastructure, as well as business expenditures inclusive of those for opening up to the outside (对外开放), are supported in a relatively stable manner, including direct consumption expenses, operations and maintenance (O&M) expenses, personnel expenses, and other business expenses.

Direct consumption expenses refer to expenditures for water, electricity, natural gas, heating, special consumables, contracted business, rent, and other consumption expenditures that must be paid in order to ensure infrastructure operations. Direct consumption expenses are determined based on the hours of infrastructure operation and the approved consumption per operating hour of the unit.

O&M expenses refer to expenses for one-time spare parts, equipment upgrades, and equipment maintenance. 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 their quotas for O&M expenses, prepare annual budgets with maintenance expenses categorized 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.

Personnel expenses refer to the expenses for O&M personnel positions and performance allowances and project employment personnel and temporary workers wages that do not exceed total salaries. Personnel expenses are approved according to uniform standards based on the number of infrastructure O&M staff positions.

Other business expenses refer to the public expenses paid by the supporting units to support the operation of the facilities, such as office expenses, major repair fees, information network costs, international exchange costs, conference fees, travel expenses, training fees, and user services costs. Other business expenses are based on direct consumption expenses and O&M expenses and are approved in accordance with the gradual excess regressive ratio method (分段超额累退比例法).

(2) Repair and renovation project expenses

Repair and renovation project expenditures are mainly used to support the maintenance of facility systems or major equipment and are one-time support funds.

5. Implementation cycle

These projects are multi-year ongoing projects.

6. Annual budget arrangements

In 2022, the general public budget for these projects is planned to be RMB 1,865,997,900, which is mainly used for O&M for the facilities in operation.

(ii) Description of government procurement

In early 2022, the total budget for government procurement is RMB

15,609,465,700, of which, the budget for government procurement of goods is RMB 9,299,144,800, the budget for government procurement for projects is RMB 3,883,336,500, and the budget for government procurement of services is RMB 2,426,954,400.

(iii) Possession and use of state-owned assets

As of July 31, 2021, CAS had a total of 1,582 vehicles (a decrease of 31 vehicles from July 31, 2020), of which 16 were vehicles used by department-level leading cadres, 33 were vehicles for confidential communication (机要通信用车), 19 were emergency support vehicles, 47 were for specialized technical uses, and 1,467 vehicles were for other uses. Vehicles for other uses are mainly vehicles for field stations, observation, collection, testing, and other such business. There were 23,150 units (sets) of general purpose equipment with a unit value over RMB 500,000, and 2,790 units (sets) of special use equipment with a unit value over RMB 1 million.

The 2022 budget arranges for procurement of 103 vehicles, of which, one is for specialized technical uses, two are vehicles for confidential communications, three are vehicles for emergency support, and 97 are for other uses (primarily for scientific research). The budget also arranges for procurement of 2,534 units (sets) of general purpose equipment with a unit value of over RMB 500,000, and 1,129 units (sets) of special-use equipment with a unit value of over RMB 3 million.

(iv) Budget performance

In 2022, performance target management will be fully implemented for the project expenditures of CAS, involving a budget appropriation of RMB 30,316,401,800, including a general public budget appropriation of RMB 30,300,141,800 and a government fund budget appropriation of RMB 16,260,000. Based on the results of previous annual performance evaluations, we have optimized the 2022 budget arrangements for project expenditures such as strategic pilot S&T projects and scientific research institutions to improve scientific research conditions and to further improve management and policies.

IV. Glossary

(i) Revenue items

1. **General public budget appropriations revenue:** Refers to funds allocated by the central government in the current year.
2. **Business revenue:** The revenue earned by public institutions through professional business activities and auxiliary activities.
3. **Public institution operating income:** Income obtained by business units through

non-independent accounting (非独立核算) business activities other than professional business activities and auxiliary activities.

4. **Other revenue:** This refers to revenue other than "general public budget allocations," "business revenue," and "business unit operating revenue" as described above.

5. **Balance carried forward from prior 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. **General public service expenditures (category):** Government expenditures in providing general public services.

2. **Diplomatic expenditures (category):** Reflects expenditures for diplomatic affairs.

3. **Education expenditures (category):** 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 (社会中介组织), is also reflected in this item.

4. **S&T expenditures (class):** Expenditures related to S&T, which in the CAS budget mainly involve the sub-category-level budget items of basic research, applied research, technology research and development, S&T conditions and services, S&T exchanges and cooperation, and other S&T projects.

(1) **Basic research:** Expenditures by research institutions on basic research and applied research that will not produce practical value in the near future, special scientific research expenditures, and expenditures of key laboratories and major scientific projects.

(2) **Applied research:** Expenditures on innovative research work building on the achievements of basic research to achieve specific practical purposes or goals.

(3) **Technology R&D:** Expenditures for technology research and development, including expenditures on technology development research and special technology development research, that is expected to achieve practical value in the near future and expenditures on the application and promotion involved in converting S&T achievements

into real productive forces (现实生产力).

(4) **S&T prerequisites and services:** Expenditures to improve S&T conditions and provide the foundational and general services for work related to S&T standards, measurement, and testing; collection, processing, and services for S&T data, germplasm resources, specimens, and genetic data; collection, preservation, processing, and services for S&T literature and information resources; and other S&T activities.

(5) **S&T exchange and cooperation:** Expenditures on S&T exchanges and cooperation, including expenditures on research and scientific exchanges with foreign governments and international organizations to improve China's S&T level as well as special expenditures on major international S&T cooperation projects.

(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.

5. **Social security and employment (category):** Reflects expenditures used for social security and employment matters.

6. **Resource exploration and information (category):** Expenditures used for business such as resource exploration and information.

7. **Culture, tourism, sports, and media expenditures (category):** Expenditures on promoting the development direction of foreign cultural trade (对外文化贸易发展方向).

8. **Housing expenditures (category):** 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. Among these, the housing provident fund is a long-term housing savings contribution paid by the employer and its employees in accordance with the provisions of the *Regulations on Management of the Housing Provident Fund*. 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.

9. **Carry over to next year:** Funds in the budget of one year which could not be

used as originally planned due to changes in objective conditions. These funds must be carried over to the next year, when then must continue to be used for their original purposes.