

**MINISTRY OF SCIENCE AND TECHNOLOGY**

DEMAND NO. 87

**Department of Science and Technology***(In ₹ crores)*

	Actual 2018-2019			Budget 2019-2020			Revised 2019-2020			Budget 2020-2021		
	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
Gross	4982.89	64.95	5047.84	5510.11	90.00	5600.11	5445.03	56.00	5501.03	6212.63	101.00	6313.63
Recoveries	-135.30	...	-135.30	-20.10	...	-20.10	-20.10	...	-20.10	-12.10	...	-12.10
Receipts	...	...	...	...	...	...	...	...	...	...	...	...
<b>Net</b>	<b>4847.59</b>	<b>64.95</b>	<b>4912.54</b>	<b>5490.01</b>	<b>90.00</b>	<b>5580.01</b>	<b>5424.93</b>	<b>56.00</b>	<b>5480.93</b>	<b>6200.53</b>	<b>101.00</b>	<b>6301.53</b>
A. The Budget allocations, net of recoveries, are given below:												
<b>CENTRE'S EXPENDITURE</b>												
<b>Establishment Expenditure of the Centre</b>												
1. Secretariat	81.12	48.50	129.62	88.45	70.00	158.45	88.45	30.00	118.45	91.96	50.00	141.96
2. Survey of India	388.52	13.20	401.72	401.16	15.00	416.16	436.06	19.50	455.56	420.92	32.50	453.42
	...	...	...	-5.10	...	-5.10	-5.10	...	-5.10	-5.10	...	-5.10
<i>Net</i>	<i>388.52</i>	<i>13.20</i>	<i>401.72</i>	<i>396.06</i>	<i>15.00</i>	<i>411.06</i>	<i>430.96</i>	<i>19.50</i>	<i>450.46</i>	<i>415.82</i>	<i>32.50</i>	<i>448.32</i>
3. National Atlas and Thematic Mapping Organization	15.79	3.25	19.04	20.75	5.00	25.75	20.75	6.50	27.25	23.75	18.50	42.25
4. Science Counsellor Abroad	6.52	...	6.52	9.50	...	9.50	9.50	...	9.50	10.00	...	10.00
<b>Total-Establishment Expenditure of the Centre</b>	<b>491.95</b>	<b>64.95</b>	<b>556.90</b>	<b>514.76</b>	<b>90.00</b>	<b>604.76</b>	<b>549.66</b>	<b>56.00</b>	<b>605.66</b>	<b>541.53</b>	<b>101.00</b>	<b>642.53</b>
<b>Central Sector Schemes/Projects</b>												
5. Science and Technology Institutional and Human Capacity Building	1004.10	...	1004.10	1100.20	...	1100.20	1091.30	...	1091.30	1169.50	...	1169.50
	-15.00	...	-15.00	-15.00	...	-15.00	-15.00	...	-15.00	-7.00	...	-7.00
<i>Net</i>	<i>989.10</i>	<i>...</i>	<i>989.10</i>	<i>1085.20</i>	<i>...</i>	<i>1085.20</i>	<i>1076.30</i>	<i>...</i>	<i>1076.30</i>	<i>1162.50</i>	<i>...</i>	<i>1162.50</i>
6. Research and Development	471.73	...	471.73	611.00	...	611.00	589.00	...	589.00	718.00	...	718.00
7. Innovation, Technology Development and Deployment	772.60	...	772.60	872.35	...	872.35	811.87	...	811.87	1050.65	...	1050.65
8. National Mission on Interdisciplinary Cyber Physical Systems	0.01	...	0.01	124.00	...	124.00	123.83	...	123.83	270.85	...	270.85
<b>Total-Central Sector Schemes/Projects</b>	<b>2233.44</b>	<b>...</b>	<b>2233.44</b>	<b>2692.55</b>	<b>...</b>	<b>2692.55</b>	<b>2601.00</b>	<b>...</b>	<b>2601.00</b>	<b>3202.00</b>	<b>...</b>	<b>3202.00</b>
<b>Other Central Sector Expenditure</b>												
<b>Statutory and Regulatory Bodies</b>												
9. Science and Engineering Research Board	1000.00	...	1000.00	1000.00	...	1000.00	956.57	...	956.57	1000.00	...	1000.00
10. Technology Development Board	100.00	...	100.00	100.00	...	100.00	100.00	...	100.00	100.00	...	100.00

(In ₹ crores)

	Actual 2018-2019			Budget 2019-2020			Revised 2019-2020			Budget 2020-2021		
	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
<b>Total-Statutory and Regulatory Bodies</b>	<b>1100.00</b>	...	<b>1100.00</b>	<b>1100.00</b>	...	<b>1100.00</b>	<b>1056.57</b>	...	<b>1056.57</b>	<b>1100.00</b>	...	<b>1100.00</b>
<b>Autonomous Bodies</b>												
11. Assistance to Autonomous Bodies	1142.50	...	1142.50	1182.70	...	1182.70	1217.70	...	1217.70	1357.00	...	1357.00
<b>Others</b>												
12. Actual Recoveries	-120.30	...	-120.30	...	...	...	...	...	...	...	...	...
<b>Total-Other Central Sector Expenditure</b>	<b>2122.20</b>	...	<b>2122.20</b>	<b>2282.70</b>	...	<b>2282.70</b>	<b>2274.27</b>	...	<b>2274.27</b>	<b>2457.00</b>	...	<b>2457.00</b>
<b>Grand Total</b>	<b>4847.59</b>	<b>64.95</b>	<b>4912.54</b>	<b>5490.01</b>	<b>90.00</b>	<b>5580.01</b>	<b>5424.93</b>	<b>56.00</b>	<b>5480.93</b>	<b>6200.53</b>	<b>101.00</b>	<b>6301.53</b>
<b>B. Developmental Heads</b>												
<b>Economic Services</b>												
1. Other Scientific Research	4766.47	...	4766.47	5401.56	...	5401.56	5336.48	...	5336.48	6108.57	...	6108.57
2. Secretariat-Economic Services	81.12	...	81.12	88.45	...	88.45	88.45	...	88.45	91.96	...	91.96
3. Capital Outlay on Other Scientific and Environmental Research	...	64.95	64.95	...	90.00	90.00	...	56.00	56.00	...	101.00	101.00
4. Loans for Other Scientific Research	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total-Economic Services</b>	<b>4847.59</b>	<b>64.95</b>	<b>4912.54</b>	<b>5490.01</b>	<b>90.00</b>	<b>5580.01</b>	<b>5424.93</b>	<b>56.00</b>	<b>5480.93</b>	<b>6200.53</b>	<b>101.00</b>	<b>6301.53</b>
<b>Grand Total</b>	<b>4847.59</b>	<b>64.95</b>	<b>4912.54</b>	<b>5490.01</b>	<b>90.00</b>	<b>5580.01</b>	<b>5424.93</b>	<b>56.00</b>	<b>5480.93</b>	<b>6200.53</b>	<b>101.00</b>	<b>6301.53</b>

- Secretariat:** Provision is for establishment related expenditure of the Department.
- Survey of India:** Provision is for expenditure on Direction and Administration (Surveyor General), Training Organisations and Publication of Maps, Charts, Reports etc. under Survey of India.
- National Atlas and Thematic Mapping Organization:** Provision is for the Compilation of the National Atlas of India in English and Hindi, Golden Map Service covering whole of India and Geographical/Cartographical research & training under National Atlas and Thematic Mapping Organisation.
- Science Counsellor Abroad:** Provision is for the counsellors deployed at various Indian embassies abroad.
- Science and Technology Institutional and Human Capacity Building:** This includes allocation for the R&D Support, State S& T Programme, Policy Research Cell, DISHA Programme for women in Science, Alliance and R&D Mission (Inspire Award and Inspire Programme).
- Research and Development:** This includes allocation for International Co-operation, National Mission on Nano Science & Nano Technology, Mega Facilities for Basic Research, Alliance and R&D Mission (Climate Change Programme) & Super Computing Facility & Capacity Building, Technology fusion & Applications Research

7. **Innovation, Technology Development and Deployment:** This includes allocation for the Technology Development Programme, S&T Programmes for Socio Economic Development, Other Programmes (Exhibition & Fairs), Drugs and Pharmaceutical Research and Technical Research Centres.

8. **National Mission on Interdisciplinary Cyber Physical Systems:** Cyber Physical Systems (CPS) are new class of engineered systems that integrate computation and physical processes in a dynamic environment. CPS encompasses technology areas of Cybernetics, Mechatronics, Design and Embedded systems, Internet of Things (IoT), Big Data, Artificial Intelligence (AI) and many more. The CPS systems are intelligent, autonomous and efficient and are expected to drive innovation in sectors as diverse as agriculture, water, energy, transportation, infrastructure, security, health and manufacturing. Thus, it is heralded as the next paradigm shift in technology that can exponentially spur growth and development.

9. **Science and Engineering Research Board:** This includes the provision for the Science and Engineering Research Board (SERB), a statutory body under Department of Science & Technology to support basic research in emerging areas of Science & Engineering which are the primary and distinctive mandate of the board.

10. **Technology Development Board:** This includes the provision for Technology Development Board (TDB), a statutory body under the Department of Science & Technology to promote development and commercialization of indigenous technology and adaptation of imported technology for wider application.

11. **Assistance to Autonomous Bodies:** This includes the provision for the following Autonomous Institutes and Professional Bodies under the Department of Science & Technology

25) The North East Centre for Technology Application and Reach, Shillong

- 1) MACS Agharkar Research Institute, Pune
- 2) Aryabhata Research Institute of Observational Sciences (ARIES), Nainital
- 3) Birbal Sahni Institute of Palaeo sciences BSIP), Lucknow
- 4) Bose Institute, Kolkata
- 5) Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru
- 6) International Advanced Research Centre for Powder Metallurgy and New Materials, (ARCI), Hyderabad
- 7) Institute of Nano Science and Technology (INST), Mohali
- 8) Indian Association for the Cultivation of Science (IACS), Kolkata
- 9) Indian Institute of Geomagnetism, Navi Mumbai
- 10) Jawahar Lal Nehru Centre for Advanced Scientific Research, Bengaluru
- 11) National Innovation Foundation India, Gandhinagar
- 12) Raman Research Institute (RRI), Bengaluru
- 13) Satyendra Nath Bose National Centre for Basic Sciences, (SNBNCBS) Kolkata
- 14) Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram
- 15) Institute of Advanced Study in Science and Technology (IASST), Guwahati
- 16) Technology Information, Forecasting and Assessment Council (TIFAC), New Delhi
- 17) Wadia Institute of Himalayan Geology, Dehradun
- 18) Vigyan Prasar, Noida
- 19) The National Academy of Sciences, India, Allahabad
- 20) The Indian Science Congress Association, Kolkata
- 21) Indian National Science Academy, New Delhi
- 22) Indian Academy of Sciences, Bengaluru;
- 23) Indian National Academy of Engineering, Gurugram
- 24) Indian Institute of Astrophysics, Bengaluru