

**DEPARTMENT OF SPACE**

**Demand No 93**

**1. Space Sciences(CS)**

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2019-20			OUTCOME 2019-20		
	2019-20	Output	Indicators	Targets 2019-20	Outcome	Indicators
285.8	1 Undertaking space science missions and interplanetary expeditions	1.1 Realization of Indian Lunar Mission/Chandrayaan-II	1	1 Development of indigenous capability for design and development of space infrastructure for better understanding of the Universe.	1.1 No. of science missionsundertaken	3
		1.2 Launch of Aditya-L1 Mission	1			
		1.3 No. of Publications from Space Science Missions	24			
		Release of Space Science related Data to Public for Utilization	1.5 TB		1.2 Availability of Space Platforms for Scientific Observations.	5
		1.6 No. of Research projects in Academia supported through ISRO programmes	345			

## 2.Space Technology (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2019-20			OUTCOME 2019-20		
	2019-20	Output	Indicators	Targets 2019-20	Outcome	Indicators
8407.59	1 Research & Development design of technologies and realization of space systems for launch vehicles and spacecrafts.	1.1 No. of Earth Observation (EO) spacecrafts ready for launch	3	1 Augmentation of Space Infrastructure for providing continuity of EO Services with improved capabilities	1.1 Introduction of Ocean Colour Monitor with 13 spectral bands	1
		1.2 Number of Launches of Polar Satellite Launch Vehicle(PSLV)	4		1.2 Sea surface temperature sensor	1
		1.3 Number of Launches of Geosynchronous Satellite Launch Vehicle - GSLV Mk-	3		1.3 Continuation of Microwave Imaging in C-band.	1

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2019-20			OUTCOME 2019-20			
	2019-20	Output	Indicators	Targets 2019-20	Outcome	Indicators	Targets 2019-20
		III					
		1.4 Number of Launches of Geosynchronous Satellite Launch Vehicle - GSLV Operational Flights	1		2 Ensuring operational launch services for domestic and commercial Satellites.	2.1 No. of Indigenous launches using PSLV.	4
					3 Self-sufficiency in launching 4 Tone class of communication satellites into Geo-synchronous transfer orbit.	3.1 Operational launches of GSLV Mk III	3
					4 Self-sufficiency in launching 2.5 - 3 Tone class of Communication Satellites into Geo-synchronous Transfer Orbit.	4.1 No of indigenous launches using GSLV.	1

### 3.Space Applications (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2019-20			OUTCOME 2019-20			
	2019-20	Output	Indicators	Targets 2019-20	Outcome	Indicators	Targets 2019-20
1885.45	1 Design & Development of Applications	1.1 No. of EO/Communication Payloads	9	1 Information on optimal management of natural resource, natural disasters, agricultural planning,	1.1 Availability of advanced sensors to provide space based information with		9

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2019-20			OUTCOME 2019-20			
	2019-20	Output	Indicators	Targets 2019-20	Outcome	Indicators	Targets 2019-20
	for EO, Communication, Disaster Management etc.	realized		80%	infrastructure planning and access to basic services in rural areas.	improved capability	
		1.2 Information support for major disaster events (as % of Total events occurred)					
		1.3 No. of Maps Released (Physical & Web hosting) to support National Missions and User projects	9,500				
		1.4 No. of value added data products disseminated to the users (Sales and Free Download)	4,50,000			1.2 No. of operational models, techniques developed and information services deployed	50

**4.INSAT Satellite Systems (CS)**

<b>FINANCIAL OUTLAY (Rs in Cr)</b>	<b>OUTPUTS 2019-20</b>			<b>OUTCOME 2019-20</b>		
<b>2019-20</b>	<b>Output</b>	<b>Indicators</b>	<b>Targets 2019-20</b>	<b>Outcome</b>	<b>Indicators</b>	<b>Targets 2019- 20</b>
884.42	1 Completion and launch of communication satellites	1.1 No. of communication satellites to be launched during the year.	3	1 Augment and support the existing services to telecommunication/ television broadcasting, disaster communications, Tele-education and Tele-health services.	1.1 Augmentation of INSAT/GSAT capacity with launches of communication satellites.	3