

GOVERNMENT OF INDIA
MINISTRY OF DEFENCE
DEFENCE RESEARCH & DEVELOPMENT ORGANISATION
LOK SABHA

UNSTARRED QUESTION NO.4927
TO BE ANSWERED ON THE 31ST MARCH, 2017

EMPLOYEES WORKING IN DRDO

4927. SHRI VENKATESH BABU T.G.:

Will the Minister of DEFENCE j{k k ea=h
be pleased to state:

- (a) the total number of employees working in the Defence Research and Development Organisation (DRDO) in various grades, grade-wise including permanent and contractual basis;
- (b) whether frequent delaying of various projects of DRDO results in cost and time overrun;
- (c) if so, the details thereof, project-wise; and
- (d) the action taken by the Government to adhere to the time schedule and to reduce the costs?

A N S W E R

MINISTER OF STATE (DR. SUBHASH BHAMRE)
IN THE MINISTRY OF DEFENCE

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(डा. सुभाष भामरे)

(a) The total number of permanent employees working in the Defence Research and Development Organisation (DRDO) are:

Cadre	Strength
Defence Research and Development Service (DRDS)	7410
Defence Research and Technical Cadre (DRTC)	9220
Administration Cadre	2936
Allied Cadre	2880
Service Officers	334
Other Service Personnel	1617
Total:	24397

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DRDO has been outsourcing various logistic and support services (both skilled and unskilled) but not directly employing the staff. Besides, DRDO also grants fellowship to Research Scholars and strategic consultancies from subject expert.

(b) & (c): There are 13 major Mission Mode (MM) projects of DRDO-lagging behind schedule. Details are given at Annexure 'A'.

(d) DRDO has already undertaken the following steps to complete ongoing projects on-time.

- Consortium approach is being used for design, development and fabrication of critical components.
- Three-tier project monitoring approach has been instituted.
- Project Monitoring Review Committee (PMRC) and Project Appraisal and Review Committee (PARC) meetings are held regularly to monitor the progress of ongoing projects.
- Concurrent engineering approach has been adopted in technology intensive projects to minimize time-lag between development and productionisation of the systems.
- Information Technology and modern management techniques are being applied.
- Encouraging joint funding by users to ensure their commitment towards earliest completion.
- Organisational re-structuring:
 - Decentralization of authority and responsibility with Director Generals (DGs) of Technology Clusters and Directors of laboratories/ establishments
 - High empowerment and accountability
- Involvement of Services & Production Partners during development process and reviews – to know their views in advance including finalisation of GSQRs.
- Revised Procedures for Project Formulation and Management (PPFM - 2016) also elaborated on cost-benefit analysis and validation.

ANNEXURE 'A' REFERRED IN THE REPLY GIVEN IN PARTS (b) & (c) OF LOK SABHA UNSTARRED QUESTION NO. 4927 FOR ANSWER ON 31.3.2017

Major Delayed Ongoing Mission Mode DRDO Projects
(Cost more than Rs. 100 Crore)

S. No.	Project	Probable Date of Completion		Original Estimated Cost (Rs. in Cr)	Revised Cost (Rs. in Cr)	Reasons for Delay
		Original	Current			
1.	Light Combat Aircraft (LCA) : Phase-II.	Dec 2008	Dec 2015 (Under revision)	3301.78	6933.08	<ul style="list-style-type: none"> • Technological challenges/ Embargoes. • Flight test program restrictions.
2.	Full Scale Engineering Development of Naval Light Combat Aircraft (FSED Navy Phase I).	Mar 2010	Dec 2014 (Under revision)	561.67	2103.21	<ul style="list-style-type: none"> • Due to co-dependence of basic infrastructure in Air Force and Naval versions. • Un-anticipated complexities faced in structural design.
3.	Medium Altitude Long Endurance (MALE) Unmanned Aerial Vehicle (UAV) -Rustom-IIø and Development of Aeronautical Test Range (ATR) at Chitradurga.	Aug 2016	Aug 2017	1649.74	No revision	<ul style="list-style-type: none"> • Design modifications/iterations in sub-systems which led to development delays. • Delay in availability of certified LRUs and associated software. • Export denial of critical items and delay in procurement of imported payloads. • Delay in completion of ATR facility at Chitradurga.
4.	155 mm/52 Caliber Advanced Towed Artillery Gun System (ATAGS).	Sep 2015	Sep 2018	247.90	No revision	<ul style="list-style-type: none"> • Delay in realization of ordnance and recoil system • Delay in placing supply orders due to procedural issues for manufacturing of sub-systems.
5.	Airborne Early Warning and Control (AEW&C)System.	Apr 2011	Jun 2017	1800.00	2425.00	<ul style="list-style-type: none"> • Delay in finalizing operational requirements & platforms including additional requirements by IAF.

6.	D-Jag System (Internal RWJ System for Jaguar DARIN III Upgrade Aircraft).	Jun 2015	Jun 2018	268.27	No revision	<ul style="list-style-type: none"> Critical changes in main systems.
7.	D-29 System (Internal EW system for MiG-29 Upgrade Aircraft).	Dec 2012	Dec 2016 (Under revision)	168.85	No revision	<ul style="list-style-type: none"> Delay in structural modifications tasks for MiG-29 aircraft being done at RAC MiG, Moscow.
8.	EW Systems for Capital Ships, Aircrafts & Helicopter of Indian Navy titled as 'Samudrika'	Jan 2016	Jul 2017	342.29	No revision	<ul style="list-style-type: none"> Change in scope of ship-borne segment of the programme to include UETs and EA coverage from 180° to 360° for Project 'Shakti'
9.	Long Range Surface-to-Air Missile (LR-SAM).	May 2011	Dec 2017	2606.02	No revision	<ul style="list-style-type: none"> Mid-way major upward revision of performance requirements by IAI (Design Authority). Number of new technologies developed first time. Number of technical iterations required to establish Transmit-Receive Module technologies for Radar. Design challenges in development of sub-systems by DRDO and foreign partner.
10.	Air to Air Missile System: Astra.	Sep 2012	Jun 2017	955.00	No revision	<ul style="list-style-type: none"> Technology/ design challenges. Delay in availability of critical components.
11	Kaveri Engine for LCA.	Dec 1996	Dec 2009 (Under revision)	382.8 1	2839.0 0	<ul style="list-style-type: none"> Development effort was underestimated, due to lack of experience. Kaveri Core (Kabini) Engine development was initially not envisaged but added later based on experience of other engine houses. Flying test bed trials was added as an additional project milestone as recommended by IAF and CEMILAC.

						<ul style="list-style-type: none"> • Lack of infrastructure for engine & component/ system level testing in India. • 1998 US Sanctions: Delay in delivery of critical components & systems.
12.	Advanced Light Weight Torpedo.	Aug 2013	Dec 2017	194.53	No revision	<ul style="list-style-type: none"> • Indigenization development of 120 kW warshotbattery has taken time by the development agency HBL, Hyderabad. • Non availability of testing platform. • Restriction in time slots for sea trials.
13	Medium Range Surface-to-Air Missile (MR-SAM).	Sep 2016	Mar 2017 (Under revision)	10075.68	No revision	<ul style="list-style-type: none"> • During the development stage, systems/sub-systems has undergone multiple iterations during design, development and hardware realization. • Changes in system configuration. • Three verification flight trials included (not originally in the scope).
