

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

UNSTARRED QUESTION NO.1793  
TO BE ANSWERED ON THE 25<sup>TH</sup> NOVEMBER, 2016

**PROJECTS OF DRDO**

1793. SHRI M.K. RAGHAVAN:

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

- (a) whether a number of projects of the Defence Research and Development Organisation (DRDO) has been delayed for several years;
- (b) if so, the details thereof and the reasons therefor, project-wise;
- (c) whether the Government has undertaken efforts to constitute a Commission to understand the ever increasing missing deadlines on the projects conceived by DRDO; and
- (d) if so, the details thereof?

**A N S W E R**

MINISTER OF STATE  
IN THE MINISTRY OF DEFENCE

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(DR. SUBHASH BHAMRE)

(डा. सुभाष भामरे)

**(a) & (b): There are 13 major Mission Mode (MM) projects of Defence Research & Development Organisation (DRDO) lagging behind schedule. Details are given at Annexure 'A'.**

**(c) & (d): Government has not constituted any Commission for the same, however, DRDO has already undertaken the following steps to complete ongoing projects on-time.**

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- **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.**

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**ANNEXURE 'A' REFERRED IN THE REPLY GIVEN IN PARTS (a) & (b) OF LOK SABHA UNSTARRED QUESTION NO. 1793 FOR ANSWER ON 25.11.2016**

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

S. No.	Project	Probable Date of Completion		Reasons for Delay
		Original	Current	
1.	Light Combat Aircraft (LCA) : Phase-II	Dec 2008	Dec 2015 (Under revision)	<ul style="list-style-type: none"> <li>• Technological challenges/ Embargoes</li> <li>• Flight test program restrictions</li> </ul>
2.	Naval Light Combat Aircraft (LCA Navy : Phase-I)	Mar 2010	Dec 2014 (Under revision)	<ul style="list-style-type: none"> <li>• Due to co-dependence of basic infrastructure in Air Force and Naval versions</li> <li>• Un-anticipated complexities faced in structural design</li> </ul>
3.	Medium Altitude Long Endurance (MALE) Unmanned Aerial Vehicle (UAV) -Rustom-IIø and Development of Aeronautical Test Range (ATR) at Chitradurga	Aug 2016	Feb 2017	<ul style="list-style-type: none"> <li>• Design modifications/iterations in sub-systems which led to development delays</li> <li>• Delay in availability of certified LRUs and associated software</li> <li>• Export denial of critical items and delay in procurement of imported payloads</li> <li>• Delay in completion of ATR facility at Chitradurga</li> </ul>
4.	155 mm/52 Caliber Advanced Towed Artillery Gun System (ATAGS)	Sep 2015	Mar 2017	<ul style="list-style-type: none"> <li>• Delay in realization of ordnance and recoil system</li> <li>• Delays in placing supply orders due to procedural issues for manufacturing of sub-systems.</li> </ul>
5.	Airborne Early Warning and Control System (AEW&C)	Apr 2011	Jun 2017	<ul style="list-style-type: none"> <li>• Delay in finalizing operational requirements &amp; platforms including additional requirements by IAF</li> </ul>
6.	D-Jag System (Internal RWJ System for Jaguar DARIN III Upgrade Aircraft)	Jun 2015	Dec 2016	<ul style="list-style-type: none"> <li>• Critical changes in main systems</li> </ul>
7.	D-29 System (Internal EW system for MiG-29 Upgrade Aircraft)	Dec 2012	Dec 2016	<ul style="list-style-type: none"> <li>• Delay in structural modifications tasks for MiG-29 aircraft being done at RAC MiG, Moscow.</li> </ul>
8.	EW Systems for Capital Ships, Aircrafts & Helicopter of Indian Navy titled as -Samudrikaø	Jan 2016	Jul 2017	<ul style="list-style-type: none"> <li>• Change in scope of ship-borne segment of the programme to include UETs and EA coverage from 180° to 360° for Project -Shaktiaø</li> </ul>

9.	Long Range Surface-to-Air Missile (LR-SAM)	May 2011	Dec 2017	<ul style="list-style-type: none"> <li>• Mid-way major upward revision of performance requirements by IAI (Design Authority)</li> <li>• Number of new technologies developed first time</li> <li>• Number of technical iterations required to establish Transmit-Receive Module technologies for Radar.</li> <li>• Design challenges in development of sub-systems by DRDO and foreign partner.</li> </ul>
10.	Air to Air Missile System: Astra	Sep 2012	Dec 2016	<ul style="list-style-type: none"> <li>• Technology/ design challenges</li> <li>• Delay in availability of critical components</li> </ul>
11.	Kaveri Engine for LCA	Dec 1996	Dec 2009 (Under revision)	<ul style="list-style-type: none"> <li>• Development effort was underestimated, due to lack of experience</li> <li>• Kaveri Core (Kabini) Engine development was initially not envisaged but added later based on experience of other engine houses</li> <li>• Flying test bed trials was added as an additional project milestone as recommended by IAF and CEMILAC</li> <li>• Lack of infrastructure for engine &amp; component/ system level testing in India</li> <li>• 1998 US Sanctions: Delay in delivery of critical components &amp; systems</li> </ul>
12.	Advanced Light Weight Torpedo	Aug 2013	Dec 2017	<ul style="list-style-type: none"> <li>• Indigenization development of 120 kW warshot battery has taken time by the development agency HBL, Hyderabad.</li> <li>• Non availability of testing platform.</li> <li>• Restriction in time slots for sea trials.</li> </ul>
13.	Medium Range Surface-to-Air Missile (MR-SAM)	Sep 2016	Mar 2017	<ul style="list-style-type: none"> <li>• During the development stage, systems/sub-systems has undergone multiple iterations during design, development and hardware realization.</li> <li>• Changes in system configuration.</li> <li>• Three verification flight trials included (not originally in the scope).</li> </ul>

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