

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

STARRED QUESTION NO.360

TO BE ANSWERED ON THE 9TH DECEMBER, 2016

DEVELOPMENT OF NAVAL SYSTEMS BY DRDO

*360. SHRI SHRIRANG APPA BARNE:
DR. SHRIKANT EKNATH SHINDE:

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

- (a) whether the Defence Research and Development Organisation (DRDO) has developed four Naval Systems for the Indian Navy and if so, the details thereof;
- (b) whether these systems have been designed and developed by a laboratory of DRDO and if so, the details thereof;
- (c) whether these systems are likely to provide a fillip to self-reliance in this critical area of technology; and
- (d) if so, the details thereof and the extent to which the underwater surveillance capability of the Indian Navy will get a boost from these new systems?

A N S W E R

MINISTER OF DEFENCE

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(SHRI MANOHAR PARRIKAR)

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(a) to (d): A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF LOK SABHA STARRED QUESTION NO. 360 FOR ANSWER ON 9.12.2016

Defence Research and Development Organisation (DRDO) has developed many systems for Indian Navy. Some of the major systems are Heavy Weight Torpedo (Varunastra), Advanced Torpedo Defence System (Mareech), Multi Influence Ground Mines, etc. Recently, on 18 Nov 2016, Kochi based Naval Physical Oceanographic Laboratory (NPOL) of DRDO, has handed over the following four naval systems to Indian Navy:-

Abhay (Compact Hull-Mounted Sonar for Small Ships & Shallow Water Crafts)

Induction of Abhay (by replacing the vintage Russian sonar) enables indigenous sonar system to be installed on small ships, thereby enhancing the ASW surveillance capability of the fleet to smaller vessel, like Shallows Water Crafts, Light Frigates & Patrol Vessels, which was hitherto limited to frigates and destroyers.

HUMSA-UG (Upgrade for the Hull-Mounted Sonar Array (HUMSA) Series of Sonar Systems for Ships)

It enables smooth upgrade of the capabilities of the indigenously-developed legacy Sonar System HUMSA, by drastically minimizing the existing hardware and addressing technology obsolescence issues, which is currently operational on-board on 18 ships.

NACS (Near-field Acoustic Characterization System (NACS) for Ship Sonars)

It provides a simple and operationally efficient means to determine the frequency-dependent 3-D transmission and reception characteristics of the hull-mounted sonar aiding in the optimum performance and maintenance of the sonar.

AIDSS (Advanced Indigenous Distress Sonar System (AIDSS) for Submarines)

It is used to signal that a submarine is in distress and thereby enable quick rescue and salvage. It is a life-saving alarm system designed to transmit sonar signals of pre-designated frequency and pulse shape in an emergency situation, so as to attract the attention of Rescue Vessel in the vicinity.

The extent to which capability of the Indian Navy will get a boost with the induction of these systems are:

Three systems of Abhay are slated for installation on the Abhay Class of Ships. 7 systems of HUMSA-UG are proposed for installation on the Teg Class G-Class and R-Class ships. 4 systems of NACS are proposed for the Kolkata Class of Ships. 9 systems of AIDSS are planned for the Sindhu Class Submarines (EKM Submarines). Induction of these will increase the underwater surveillance capability of Indian Naval ships. All these Systems are to be productionised in India.
