

INTEGRATED HEADQUARTERS OF MINISTRY OF DEFENCE (NAVY)
DIRECTORATE OF INDIGENISATION (DOI): REQUEST FOR PROPOSALS (RFP)
INDIGENOUS DEVELOPMENT OF SUBMARINE BATTERY TYPE-II

1. RFP is invited for developing second source for design and development of the Type-II Batteries for SSK Class of Submarines of the Indian Navy as per brief technical specification furnished below:-

<u>BRIEF TECHNICAL SPECIFICATION</u>					
a) Type: Lead Acid					
b) Dimension					
Dry Cell Length – 290 mm ± 1mm					
Dry Cell Width – 450 mm ± 1mm					
Dry Cell Height – 1421 mm ± 1mm					
(upto terminal top)					
c) <u>Energy Data</u> : Data given below is for single cell for acceptance level only					
SI No	Discharge time Hrs	Energy Data(at constant power)		Energy Data(at constant current)	
		Energy (Watt Hrs)	End Voltage (Volts)	Current (Amps)	End Voltage (Volts)
(i)	100	24800	1.77	126	1.77
(ii).	20	22040	1.75	565	1.75
(iii).	5	17430	1.67	1844	1.685
(iv).	1.5	12310	1.44	5725	1.49

2. **Quantity**. One full set of battery (04 Groups consisting of total 540 nos cells) plus 06 cells required for type testing and 26 types of battery spares.

3. **Eligibility**.

(a) Firm should have the experience of having successfully completed at least one order for Indigenous development / supply of Type-I/ Type-IV batteries/ cells for Submarine.

OR

A reputed Lead Acid battery manufacturer with turnover of over Rs 100 Crs during the preceding financial year with strong in-house R&D capability with at least Rs 20 Cr R&D budget (or tie up with established R&D Centers/ industries having annual R&D budget of not less than Rs 20 Crs by a JV/ partnership) with demonstrable capability to design, develop, manufacture and test high end large capacity batteries meeting the stringent quality and safety requirements for submarine application.

(b) This development order being for the second source, the firm already developed Type-II batteries need not respond.

4. **RFP and Technical Details**. The RFP along with technical details of items to be developed will be issued to the firms on written request.

5. **Scope of Work**. Indigenously design, develop, manufacture, test and supply the above items along with one set of maker's recommended spares.

6. Interested Firms qualifying the above eligibility criteria are to forward a formal request for RFP and Technical details by fax/ letter to this Directorate by **23 March 2018**. Requests received after **23 March 2018**, will not be entertained.

7. On forwarding RFP and technical details to firms by **registered post**, the firms will be called for a **Pre-Bid Conference**.

8. The firms would then be required to submit their proposal at the address given below in accordance with the RFP.

9. All correspondence with regards to RFP is to be clearly marked RFP: **INDIGENOUS DEVELOPMENT OF SUBMARINE BATTERY TYPE-II** and should be addressed to:

The Principal Director
 Directorate of Indigenisation, Integrated Headquarters, Ministry of Defence (Navy)
 5th Floor, Chanakya Bhawan, Chanakya Puri, New Delhi – 110 021

Tel: 011-24103984, Fax: 011-24122689, Email: doi-navy@nic.in