



# CODISSIA Defence Innovation and Atal Incubation Centre

“Supported by Atal Innovation Mission, NITI Aayog & Defence Innovation Organisation, MOD”

### Special points of interest:

- **CDIIC Success stores**
- **Requirement from Indian Navy**
- **Defence India Startup Challenge 5**
- **TDF funding**

### Introduction

**CDIIC** – “CODISSIA Defence Innovation and Atal Incubation Centre”, a not-for-profit section 8 company, established by its founding association – CODISSIA, in the year 2019, with the aim of bridging the gap between the Defence requirements & the skilled Vendors and to provide the required hand-holding, support & guidance needed by individuals/start-ups to commercialise their products.

**CDIIC intends to integrate start-ups by:**

**Identification** – CDIIC will identify talents, start-ups, ideas, businesses, products and services by conducting Competitions/Hackathons and also

through the requirements of customers.

**Innovation** – Start-ups/businesses having proof of concept, prototype, IPR, etc., with potential business would be provided the required Mentoring and Technical support by CDIIC to help them commercialise their product and graduate from the incubation centre.

**Indigenisation** – CDIIC will identify the products/services available for indigenisation by Defence for Import Substitution and intimate the same to the MSME/SME vendors. This will be done by

routing information received directly from Defence forces/circulating the details posted on the official sites of Defence.

**Incubation** – CDIIC will provide Co-working space, test/lab facility, Seed funding, networking, etc., to the incubatees. CDIIC will create an AIC-specific start-up/entrepreneurship facility for its incubatees.

**We invite innovative technology based start-ups to join CDIIC and get accelerate towards success!**

## CDIIC Co-ordinates a one day ‘VENDOR DEVELOPMENT PROGRAMME- INTERACTION WITH MSME’ on 27 Aug 2021 at 5 BRD, Air Force Station Suler



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**Press Release by 5 BRD :** As a centre of excellence and designated agency for maintenance, upkeep and development of ground support, air borne and avionics spares for various western aircrafts, 5 Base Repair Depot (5 BRD) organized a one day seminar. The event was attended by more than 35 industrial partners through CDIIC-CODISSIA. The seminar was a knowledge sharing platform with an aim to gather information about the latest developments, capabilities, qualitative requirements etc of the partners vis-à-vis the requirements of the IAF. Development of various spares pertaining to different aircraft systems was discussed. The procedures and airworthiness requirements were discussed in great detail. “Saving foreign exchequer and reducing imports is the need of the hour to achieve the mission of AATMANIRBHARAT” said **Air Cmde PK Sreekumar, VSM** Air Office Commanding, 5 BRD. The gathering was also apprised about the various initiatives taken by IAF to ensure that all the concerns and apprehensions of the industries are resolved. **Wg Cdr S Raghavendran**, Senior Production Engineer, Indigenisation thanked all the industry partners and MoU partner CDIIC for the overwhelming response and enthusiasm shown reassuring the gathering about IAF’s commitment for development of MSMEs

# CDIIC — Newsletter

## CDIIC Success Stories

**Product #1:** Indigenous development of **Mirror assembly of PC-7** aircraft for **5BRD, Indian Air force**, by SEYAL TECHNOLOGIES PVT LTD, Coimbatore



PC7 AIRCRAFT MIRROR ASSEMBLY – CDIIC with Seyal Technologies has successfully developed and Indigenized Mirror assembly. The company has successfully received PO from 5 BRD for rupees 7.5 Lakhs and delivered the product to 5BRD, Airforce by March 2021.

**Product #2:** Indigenous development of **FRIEND OR FOE – IR COMBACT IDENTIFIER** for **Indian Air force** by Garudan Unmanned Systems Pvt Ltd, Coimbatore



FRI-END OR FOE – IR COMBACT IDENTIFIER – CDIIC incubated startup, Garudan Unmanned Systems Pvt Ltd, has successfully developed and Indigenized Friend or FOE Finder – IR Combat Identifier which helps in identification of own forces in the battlefield. This product was listed in IDEX, DISC 3 Problem statement. This product has been successfully tested by Indian Air force during the year of 2019-2020 in different environments and geographies. The startup has successfully received a Supply order (number WAC/3972/1/P4) for 2312 Quantities. As an import substitution component, the developed product will have import cost saving up to 6 Cr.

**Product #3:** Indigenous Development Of The Prototype – **Stainless Steel X2CrNiMoN** on NC-NC basis for **BDL** by **ASHWABHA ENGINEERING WORKS**



INDIGENOUS DEVELOPMENT OF THE PROTOTYPE – STAINLESS STEEL X2CrNiMoN on NC-NC basis for Bharat Dynamics Limited (**BDL**)– CDIIC member industry – Ashwabha Engineering Works, Coimbatore has **successfully received Sanction Order** for prototype development of Stainless Steel XwCrNiMoN (The Product has been listed in Srijan Defence portal) from BDL and Indigenization work is under progress

**Product #4:** Repair / Indigenously Development Of Pressure Switch - **NAY (Naval Aircraft Yard) Kochi & Vizag** by **PRICOL ENGINEERING INDUSTRIES LIMITED** , Coimbatore



CDIIC member industry PRICOL ENGINEERING INDUSTRIES LIMITED has successfully repaired 2 pressure switches from Vizag and 4 out of 6 pressure switches received from Indian Navy, Kochi & coordinated by A&EHU, Indian Navy

**Product #5:** Indigenous development of Rapriz Sensor for **A&EHU, Indian Navy, Suler** by **PRICOL ENGINEERING INDUSTRIES LIMITED** , Coimbatore



**Rapriz Sensor – A&EHU, Indian Navy Suler For Indigenization:** PRICOL ENGINEERING INDUSTRIES LIMITED have successfully indigenized RAPRIZ sensor (RAPRIZ-A-100-2) pertaining to MiG-29K Aircraft from NAY (Goa) through A&EHU Suler for indigenization.

**Product #6:** Indigenous development Of Actuators for Ships for [NSRY](#) by Elger Controls (I) Pvt Ltd, Coimbatore (**Indigenization/Development Completed** )

INDIGENIZATION and DEVELOPMENT of Actuators for Ships — CDIIC is happy to inform you that our member industry Elger Controls (I) Pvt Ltd from Coimbatore has successfully developed Actuators for ships and the product will be commercialized soon.

**Product #7:** Successful repair and refurbishing of Vintage Gauges for [A&EHU, Indian Navy](#) by Haldi Hi-Tech Engineering & Khayzen System India Pvt Ltd, Coimbatore



CODISSIA member industries Khayzen systems Indian Pvt Ltd and Haldi Hi-Tech Engineering has Successfully repaired and refurbished Vintage gauges and complex Air Indicators. The products are now under testing and the industries are now working with A&EHU team to take up similar challenging products for indigenization and developments.

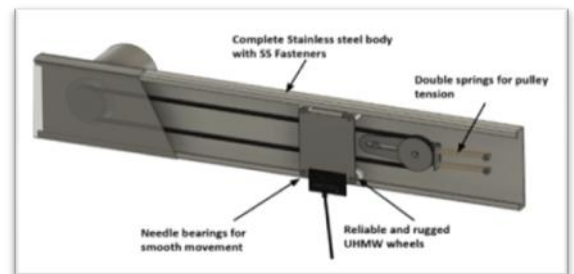
**Product #8:** Indigenous development of Aircraft Engine Trolleys for [Indian Air force](#) by K-Tex Automations , Coimbatore



**INDIGENIZATION OF Aircraft Engine Trolleys:** CDIIC along with member industry Ktex Automation, Coimbatore has developed improved version of Trolleys for 43 Wing, Indian Air force, Sulur. The Product is yet to get commercialized.

**Product #9:** Indigenous development of Single Blade ship Window Wiper for [Indian Navy](#) by Thunder Auto LLP, Coimbatore (**Indigenization Completed** )

**INDIGENIZATION OF SINGLE BLADE SHIP WINDOW WIPER – INDIAN NAVY:** CDIIC along with member industry Thunder Auto LLP, Coimbatore has developed improved version of Single blade Ship window wiper for Indian Navy. The Product working demo was shown to C-in-C, Southern Naval Command and waiting for customer fitment and trails.



**Product #10:** Indigenous development Of Sea King Helicopter Floorboard for [A&EHU, Indian Navy](#) by Kovaii Fine coats Pvt Ltd, Coimbatore (**Indigenization Completed** )

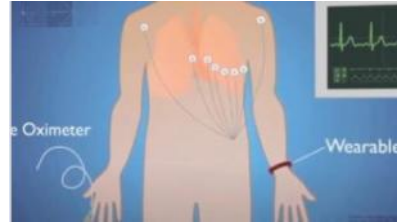
**SEA KING HELICOPTER FLOORBOARD – A&EHU, INDIAN NAVY:** CDIIC along with member industry Kovaii Fine coats Pvt Ltd, has successfully indigenized Sea King Helicopter floorboard from A&EHU, Indian Navy. The Product Proto was shown to C-in-C, Sothern Naval Command and waiting for customer fitment and trails.





# CDIIC — Newsletter

## CDIIC Start-up Success Stories



CDIIC Incubatee **Mr. Rajaguru Nathan**, is the **Winners for DISC 4 Airforce challenge** “Remote Real Time In Flight Health Monitoring of Aircrew” and won a grant money of Rupees **88 lakhs from IDEX DIO**.



**Ajay Kumar**  
Defence Secretary, Government of India  
1d

Indigenous "Friend or Foe" detection system being inducted by Indian Air Force reduces cost to one-hundredth from its imported substitute.

Designed and developed by Nandha Kumar's Coimbatore based Garudan Unmanned Systems, this is a great example of how our startups are changing erstwhile import dependence into an opportunity and in the process giving huge cost savings as well.

Thank you **Nandha Kumar** and team.

S.No	Product	USD	INR
1	VAANVILI C1 EQUIVALENT IMPORTED PRODUCT		285.00
2		320.00	28,800.00
			<b>Difference</b>

Like Comment Share

You, Dr. Ruchi Saxena and 461 others



CDIIC incubated start-up company **Avatar Aviation & Aerospace Pvt. Ltd.** has successfully developed Oxygen concentrator (OXOGEN) product with flow capacity of 1-10 LPM and Oxygen concentration level of 96%. The product was successfully demonstrated to the CDIIC Directors and clinical trials are under ways. The incubated start-up is now working on 20 LPM model for one of its customers and got few tractions



**Garudan** have successfully developed & Indigenized Friend or FOE Finder – IR Combat Identifier which helps in identification of own forces in the battlefield.

This product was listed **in IDEX, DISC 3 Problem statement**.

This product has been successfully tested & Approved by Indian Air force in the year 2019 in different environments and geographical locations. The startup have successfully received a Supply order (number WAC/3972/1/P4) for 2312 Quantities. As an import substitution component, the developed product will have **import cost saving up to 6 Cr.**

Appreciated by Dr.Ajay Kumar, Defence Secretary , Govt of INDIA

[https://www.linkedin.com/posts/ajay-kumar-a539157\\_indigenous-friend-or-foe-detection-system-activity-6774254564896985088-lahK](https://www.linkedin.com/posts/ajay-kumar-a539157_indigenous-friend-or-foe-detection-system-activity-6774254564896985088-lahK)

## Business Opportunities at A&EHU Indian Navy

**Aircraft and Engine Holding Unit (A&EHU)**, Indian Navy is looking for vendors for the listed consumables and product. On selection of products, CDIC will arrange a vendor meet at INS Agrani tentatively on 27th September 2021 to get more details. Members / Startups may express their interest to [info@cdiic.in](mailto:info@cdiic.in) on the selected products.

(A)	S6125-50522-50	PISTON ASSY	3	NO	FC	QP
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### 7. BDS REQUIRED FOR REPAIR OF AVIONICS COOLING PACK (PT NO: 4467C000) - SKG

SER	PART NO.	DESCRIPTION	QTY	CAT A/D SAMPLES (YES/NO)	FC/ NON FC	CATEGORY
(A)	204755-2-3(4467C250)	COOLING TURBINE ASSY	4	NO	NON FC	PMT

### 8. BDS REQUIRED FOR REPAIR OF PRIMARY MANIFOLD (PT. NO.: HP6101002C10-1)

SER	PART NO.	DESCRIPTION	QTY	CAT A/D SAMPLES (YES/NO)	FC/ NON FC	CATEGORY
(A)	HP610902	ELEMENT FILTER	10	YES	FC	CONSUMABLE
(B)	HP610105	TUBE CONNECTOR	10	NO	FC	CONSUMABLE
(C)	HP610505	INPUT PLUG AND FILTER ASSY	10	YES	FC	CONSUMABLE
(D)	HP610504	PLUG ASSY RETURN	10	YES	FC	CONSUMABLE

(R)	MS20426AD3-6	RIVET	60	YES	NON FC	CONSUMABLE
(S)	BL-5296	GASKET	10	YES	NON FC	CONSUMABLE
(T)	MS20426AD4-10	RIVET	30	YES	NON FC	CONSUMABLE
(U)	41086-2-1	RIVET	10	YES	NON FC	CONSUMABLE
(V)	MS29561-008	PACKING	40	YES	NON FC	CONSUMABLE
(W)	MS29561-010	PACKING	30	YES	NON FC	CONSUMABLE
(X)	MS21919DG6	CLAMP	40	YES	NON FC	CONSUMABLE
(Y)	MS21919DG16	CLAMP	60	YES	NON FC	CONSUMABLE
(Z)	AS5418-4	CLIP	130	YES	NON FC	CONSUMABLE
(AA)	AS5418-16	CLIP	70	YES	NON FC	CONSUMABLE
(AB)	MS28775-011	RING RETAINER	10	YES	NON FC	CONSUMABLE
(AC)	MS28775-026	SEALING RING	10	YES	NON FC	CONSUMABLE
(AD)	MS28775-128	SEAL JOINT	10	YES	NON FC	CONSUMABLE
(AE)	MS21083N3	NUT	40	YES	NON FC	CONSUMABLE

### 5. BDS REQUIRED FOR SERVO UNIT AUXILIARY (PT NO.: WD01-73-90087-14) - SKG

SER	PART NO.	DESCRIPTION	QTY	CAT A/D SAMPLES (YES/NO)	FC/ NON FC	CATEGORY
(A)	S6165-61650	FILTER ASSY ORIFICE	10	YES	FC	CONSUMABLE
(B)	S6165-61600-1	ROD SHOULDERED	10	YES	FC	CONSUMABLE
(C)	S6165-61610	RETAINER SLOP ELIMINATOR	10	YES	FC	CONSUMABLE
(D)	S1223-114	SEAL CHANNEL	80	YES	FC	CONSUMABLE
(E)	S6165-61665	FITTING ASSY	40	NO	FC	CONSUMABLE
(F)	S6165-61592	HOUSING PEDAL DAMPER FILTER	10	NO	FC	CONSUMABLE
(G)	MS28932C02-00	FELT	20	YES	FC	CONSUMABLE
(H)	MS28932C02-05	FELT	80	YES	FC	CONSUMABLE
(J)	MS24665-151	PIN COTTER	370	YES	FC	CONSUMABLE
(K)	MS28775-114	PACKING 'O' RING	20	YES	FC	CONSUMABLE
(L)	S6165-61593	POWER PISTON	30	YES	FC	CONSUMABLE

### 6. BDS REQUIRED FOR REPAIR OF TAIL STRUT (PT NO: S6125-50520-55/ 56) - SKG

SER	PART NO.	DESCRIPTION	QTY	CAT A/D SAMPLES (YES/NO)	FC/ NON FC	CATEGORY
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(C)	MILD STEEL	WIRE ROPE	5/32 INCH	NO	NON FC	CONSUMABLE
(D)	MILD STEEL	SHEET	NA	NO	NON FC	CONSUMABLE
(E)	AL ALLOY - 2024-T351	ROD	6 INCH	NO	NON FC	CONSUMABLE
(F)	AL ALLOY - 2024-T351	ROD	1 INCH	NO	NON FC	CONSUMABLE
(G)	AL ALLOY - 2024-T351	HOLLOW TUBE	1 INCH	NO	NON FC	CONSUMABLE
(H)	AL ALLOY - 2024-T351	SHEET	NA	NO	NON FC	CONSUMABLE
(I)	CM STEEL - AISI4130	ROD	1 INCH	NO	NON FC	CONSUMABLE
(J)	CM STEEL - AISI4130	HOLLOW TUBE	1 INCH	NO	NON FC	CONSUMABLE
(K)	CM STEEL - AISI4130	HOLLOW TUBE	1 INCH	NO	NON FC	CONSUMABLE
(L)	CM STEEL - AISI4130	SHEET	NA	NO	NON FC	CONSUMABLE
(M)	AL ALLOY - 6061-T6	HOLLOW TUBE	1 INCH	NO	NON FC	CONSUMABLE
(N)	AL ALLOY - 6061-T6	HOLLOW TUBE	1.25 INCH	NO	NON FC	CONSUMABLE
(O)	AL ALLOY - 6061-T6	HOLLOW TUBE	1.5 INCH	NO	NON FC	CONSUMABLE
(P)	AL ALLOY - 6061-T6	HOLLOW TUBE	1.75 INCH	NO	NON FC	CONSUMABLE
(Q)	AL ALLOY - 6061-T6	ROD	5/8 INCH	NO	NON FC	CONSUMABLE
(R)	AL ALLOY - 6061-T6	ROD	1 INCH	NO	NON FC	CONSUMABLE
(S)	AL ALLOY - 6061-T6	ROD	1.25 INCH	NO	NON FC	CONSUMABLE
(T)	AL ALLOY - 6061-T6	ROD	1.25 INCH	NO	NON FC	CONSUMABLE
(U)	AL ALLOY - 6061-T6	PLATE	NA	NO	NON FC	CONSUMABLE

4. BDS REQUIRED FOR RESCUE HOIST (PT NO.: WD 5073-0000-501702) - SKG

SER	PART NO.	DESCRIPTION	QTY	CAT A/D SAMPLES (YES/NO)	FC/ NON FC	PMT/ CONS
(A)	BL-5497-1	TUBE	10	YES	NON FC	CONSUMABLE
(B)	MS3240-6	SLEEVE RUBBER	10	YES	NON FC	CONSUMABLE
(C)	MS24547-1	SWITCH MICRO	10	YES	NON FC	CONSUMABLE
(D)	BL-11373-1	WINDOW, OIL LEVEL	10	YES	NON FC	CONSUMABLE
(E)	BL-4675-2	CLUTCH PACK ASSY	10	NO	NON FC	CONSUMABLE
(F)	212125	RECEPTACLE	90	YES	NON FC	CONSUMABLE
(G)	MS24665-153	PIN COTTER	40	YES	NON FC	CONSUMABLE
(H)	AS5418-4	CLIP	130	YES	NON FC	CONSUMABLE
(I)	ADS432-224	SEAL	10	YES	NON FC	CONSUMABLE
(J)	ADS431-326B	SEAL	10	YES	NON FC	CONSUMABLE
(K)	MS28775-015	O RING	10	YES	NON FC	CONSUMABLE
(L)	225245	SEAL FACE TYPE	10	NO	NON FC	CONSUMABLE
(M)	MF89-390630BCS701	HYD MOTOR	10	YES	NON FC	PERMANENT
(N)	MS9021-022	PACKING	10	YES	NON FC	CONSUMABLE
(O)	41139-23-1	SEAL OIL	10	YES	NON FC	CONSUMABLE

BREAK DOWN SPARES REQUIRED FOR TURNAROUND OF SEA KING MAIN GEAR BOX PUMP

1. PUMP ASSY, P/N 66WAP200, (PRIMARY & AUXILIARY)

SER	PART NO.	DESCRIPTION	QTY	CAT A/D SAMPLES (YES/NO)	FC/ NON FC	CATEGORY
(A)	940997	GASKET SPECIAL	30	YES	FC	CONSUMABLE
(B)	P1030	NUT SELF LOCKING	30	YES	FC	CONSUMABLE
(C)	6414-4	RING SEAL	30	YES	FC	CONSUMABLE
(D)	6000-4	RING DOUBLEL	30	YES	FC	CONSUMABLE
(E)	5979-44	RETAINER WASHER	30	YES	FC	CONSUMABLE
(F)	5981-44	RING MATING	30	YES	FC	CONSUMABLE
(G)	4680-212	PACKING 'O' RING	30	YES	FC	CONSUMABLE
(H)	67B1003-7	SPRING SEAL	30	YES	FC	CONSUMABLE
(I)	4680-214	PACKING 'O' RING	30	YES	FC	CONSUMABLE
(J)	67A1183-4	RETAINER WASHER	30	YES	FC	CONSUMABLE
(K)	3052-211	PACKING 'O' RING	30	NO	FC	CONSUMABLE
(L)	NY67A1005	RING MATING	30	YES	FC	CONSUMABLE

2. SPARES FOR UTILITY PUMP HYDRAULIC, P/N 66WAC400 / 66WAD400

SER	PART NO.	DESCRIPTION	QTY	CAT A/D SAMPLES (YES/NO)	FC/ NON FC	PMT/ CONS
(A)	6000-6	RING DOUBLEL	20	YES	FC	CONSUMABLE
(B)	MS16624-50	RING RETAINING	20	YES	FC	CONSUMABLE
(C)	2296	FELT GASKET	20	YES	FC	CONSUMABLE
(D)	P147	GASKET	20	YES	FC	CONSUMABLE
(E)	AS568-214	PACKING 'O' RING	20	YES	FC	CONSUMABLE
(F)	P1030	NUT SELF LOCKING	20	YES	FC	CONSUMABLE
(G)	67A640	SCREEN FILTER	20	NO	FC	CONSUMABLE
(H)	938666	SPACER FLOW	20	NO	FC	CONSUMABLE
(I)	6414-6	RING SEAL	20	YES	FC	CONSUMABLE

3. MULTIPURPOSE CONSUMABLES/ METALS REQUIRED FOR CONVERSION OF SEA KING 42B TO 42C

SER	MATERIAL / GRADE	TYPE	OUTER DIAMETER	CAT A/D SAMPLES (YES/NO)	FC/ NON FC	PMT/ CONS
(A)	ENGG. STEEL - EN8	ROD	8 MM	NO	NON FC	CONSUMABLE
(B)	ENGG. STEEL - EN8	ROD	1 INCH	NO	NON FC	CONSUMABLE



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SER	PT. NO	DESCRIPTION	QTY	CAT A/D SAMPLES (YES/NO)	FC/NON FC	CATEGORY
1	060-0026-00	VERTICAL GYRO (KVG 350)	2	No	NON FC	PERMANENT
2	066-04035-01101	WEATHER RADAR INDICATOR (KMD550/850 MFD)	5	No	NON FC	PERMANENT
3	071-00159-0111	CONFIGURATION MODULE (CM2000)	3	No	NON FC	PERMANENT
4	071-01549-0200	12" VERTICAL ANTENNA PLATE	3	No	NON FC	PERMANENT
5	071-01550-0101	RDR 2100 ART	3	No	NON FC	PERMANENT
6	SSD120-42NE	ALTITUDE ENCODER	3	No	NON FC	PERMANENT
7	TRM890-1A	RADOME	3	No	NON FC	PERMANENT
8	6026-22-55SY	CONNECTOR FOR VERTICAL GYRO	2	No	NON FC	CONSUMABLE
9	8631-15SHZ	CONNECTOR FOR ALTITUDE ENCODER	2	No	NON FC	CONSUMABLE
10	8631-37SHZ	CONNECTOR FOR WEATHER RADAR INDICATOR	4	No	NON FC	CONSUMABLE
11	8631-50SHZ	CONNECTOR FOR RDR 2100 ART	2	No	NON FC	CONSUMABLE
12	8631-9SHZ	CONNECTOR FOR CONFIGURATION MODULE	2	No	NON FC	CONSUMABLE
13	C49-13	HARNES ASSY	96	No	NON FC	PERMANENT
14	A691-4	MIC-TEL AMPLIFIER	12	No	NON FC	PERMANENT
15	NVG740150-501-2	NVIS ADAPTATION KIT MK 42C-2	3	No	NON FC	PERMANENT
16	1245ZMK173P	INDICATOR MAGNETIC	5	No	NON FC	PERMANENT
17	CA3100KE10SL3P	RECEPTACLE	10	No	NON FC	CONSUMABLE
18	CA3106KEL10SL3S	CONNECTOR	10	No	NON FC	CONSUMABLE
19	DDS1396-9-6-2Y	PIN ASSY PIP	80	No	NON FC	CONSUMABLE
20	1536-010-15	CIRCUIT BREAKER	3	No	NON FC	CONSUMABLE
21	1TL1-2	SWITCH	3	No	NON FC	CONSUMABLE
22	1TL1-3D	SWITCH	3	No	NON FC	CONSUMABLE
23	1TL1-5	SWITCH	3	No	NON FC	CONSUMABLE
24	244-16	RECEPTACLE	18	No	NON FC	CONSUMABLE
25	2TC2-5	5A CIRCUIT BREAKER	4	No	NON FC	CONSUMABLE
26	2TL1-1E	SWITCH	3	No	NON FC	CONSUMABLE
27	A102-1-2D	BOLT	5	No	NON FC	CONSUMABLE
28	A113-1C	BOLT	24	No	NON FC	CONSUMABLE
29	A212-2D	BOLT	5	No	NON FC	CONSUMABLE
30	A217A20	SCREW	48	No	NON FC	CONSUMABLE
31	A217D20	SCREW	6	No	NON FC	CONSUMABLE
32	A217D24	SCREW	12	No	NON FC	CONSUMABLE
33	AN320-4	NUT	9	No	NON FC	CONSUMABLE
34	AN3C-12A	BOLT	384	No	NON FC	CONSUMABLE

35	AN4-11A	BOLT	6	No	NON FC	CONSUMABLE
36	AN960PD416L	WASHER	6	No	NON FC	CONSUMABLE
37	AS8600A	NUT	20	No	NON FC	CONSUMABLE
38	AS8609D	ANCHOR NUT	30	No	NON FC	CONSUMABLE
39	C5162YMK3	PUSH SWITCH	6	No	NON FC	CONSUMABLE
40	D101-00	SOLDER SLEEVE	130	No	NON FC	CONSUMABLE
41	D20419-16	SCREW LOCK ASSY.	12	No	NON FC	CONSUMABLE
42	DA20961	BACK SHELL	6	No	NON FC	CONSUMABLE
43	DAMA15S	CONNECTOR	6	No	NON FC	CONSUMABLE
44	JAIN040F251AA	VOLUME CONTROL	3	No	NON FC	CONSUMABLE
45	M400-1526	RELAY	3	No	NON FC	CONSUMABLE
46	MS20365-425	NUT	48	No	NON FC	CONSUMABLE
47	MS21059-L6	ANCHOR NUT	12	No	NON FC	CONSUMABLE
48	S300A1B0	BASE RELAY	6	No	NON FC	CONSUMABLE
49	S500A1A0	RELAY BASE	12	No	NON FC	CONSUMABLE
50	SP126C	WASHER	13	No	NON FC	CONSUMABLE
51	TA1S10	TIE ANCHOR	1	No	NON FC	CONSUMABLE
52	WD4282-13215-103	KNOB	3	No	NON FC	CONSUMABLE
53	WES0131-14	RELAY	3	No	NON FC	CONSUMABLE
54	WES0136TS5B	BLOCK TERMINAL	3	No	NON FC	CONSUMABLE
55	L165-12SWG	DURA AL SHEET(6X4 FEET)	3	No	NON FC	CONSUMABLE
56	L165-16SWG	DURA AL SHEET(6X4 FEET)	6	No	NON FC	CONSUMABLE
57	L165-18SWG	DURA AL SHEET(6X4 FEET)	6	No	NON FC	CONSUMABLE
58	L165-20SWG	DURA AL SHEET(6X4 FEET)	6	No	NON FC	CONSUMABLE
59	AGS4719-405	RIVET	600	No	NON FC	CONSUMABLE
60	AGS4719-407	RIVET	600	No	NON FC	CONSUMABLE
61	AGS4719-409	RIVET	600	No	NON FC	CONSUMABLE
62	AGS4719-505	RIVET	300	No	NON FC	CONSUMABLE
63	AGS4719-507	RIVET	300	No	NON FC	CONSUMABLE
64	AGS4719-509	RIVET	300	No	NON FC	CONSUMABLE
65	SP85-405	RIVET	600	No	NON FC	CONSUMABLE
66	SP85-406	RIVET	600	No	NON FC	CONSUMABLE
67	SP85-505	RIVET	300	No	NON FC	CONSUMABLE
68	SP85-509	RIVET	300	No	NON FC	CONSUMABLE
69	SP85-513	RIVET	300	No	NON FC	CONSUMABLE
70	SP80-406	RIVET	300	No	NON FC	CONSUMABLE
71	SP80-409	RIVET	300	No	NON FC	CONSUMABLE
72	SP80-513	RIVET	300	No	NON FC	CONSUMABLE
73	SP71-403	RIVET	150	No	NON FC	CONSUMABLE
74	SP71-405	RIVET	150	No	NON FC	CONSUMABLE



# CDIIC — Newsletter

Ser	Higher Assy Part No	Higher Assy Description	BDS Part Number	CAT A/D SAMPLES (YES/NO)	BDS Description	Qty	FC/NON FC	CATEGORY
1	7-5PIN 14	UNIT	8004-124	YES	CAPACITOR 1MF 35V	10	NON FC	CONSUMABLE
2	300AG431	UNIT	1000PF,400V	YES	CAPACITOR	5	NON FC	CONSUMABLE
3	7-5PIN 14	UNIT	8004-131	YES	CAPACITOR 22MFD 35V	20	NON FC	CONSUMABLE
4	300AG431	UNIT	300AB 496 ISSUE B	YES	VARIABLE INDUCTOR	6	NON FC	CONSUMABLE
5	300AG431	UNIT	7106-18	YES	VARIABLE INDUCTOR	7	NON FC	CONSUMABLE
6	300AG431	UNIT	PT9787A	YES	POWER TRANSISTER MOUNTED WITH HEAT SINK	6	NON FC	CONSUMABLE
7	306-AD-507	AMPLIFIER	3300PF	YES	CAPACITOR	13	NON FC	CONSUMABLE
8	306DC52/2	INDICATOR DUAL TORQUE	477-468-007	YES	MECHANICAL FRONT END ASSEMBLY	2	NON FC	CONSUMABLE
9	300AG431	UNIT	PT9787A	YES	POWER TRANSISTER MOUNTED WITH HEAT SINK	3	NON FC	CONSUMABLE
10	306DC52/2	INDICATOR DUAL TORQUE	477-468-007	YES	MECHANICAL FRONT END ASSEMBLY	2	NON FC	CONSUMABLE
11	300AG431	UNIT	7106-18	YES	VARIABLE INDUCTOR	12	NON FC	CONSUMABLE
12	024082	BLOWER	476258	YES	TERMINAL	20	NON FC	CONSUMABLE
13	024082	BLOWER	14713-1	YES	STATOR ASSEMBLY	16	NON FC	CONSUMABLE
14	024082	BLOWER	12007-1	YES	BEARING BALL	32	NON FC	CONSUMABLE
15	024082	BLOWER	14713-1	YES	STATOR ASSEMBLY	3	NON FC	CONSUMABLE
16	32B50-19B	INVERTOR	1533217-1	YES	ARMATURE MOTOR GENERATOR	9	NON FC	CONSUMABLE
17	32B50-19B	INVERTOR	1530020	YES	BEARING BALL	16	NON FC	CONSUMABLE
18	32B50-19B	INVERTOR	1633218	YES	FAN, ASSY	1	NON FC	CONSUMABLE
19	32B50-19B	INVERTOR	4893-1A	YES	VOLTAGE AND FREQUENCY REGULATOR	3	NON FC	CONSUMABLE
20	INMOD22	MOD KIT	AHO-A2	YES	WHEEL ASSY COMPLETE WITH BEARING PT NO AHO-12	4	NON FC	CONSUMABLE
21	INMOD22	MOD KIT	AHO-2	YES	MOTOR	5	NON FC	CONSUMABLE
22	INMOD22	MOD KIT	AHO-6	YES	BALL BEARING	10	NON FC	CONSUMABLE
23	INMOD22	MOD KIT	AHO-50	YES	FILAMENT FOR ANTI COLLISION LIGHT	5	NON FC	CONSUMABLE
24	INMOD22	MOD KIT	AHO-A1	YES	HOUSING ASSY COMPLETE WITH DRIVER SHAFT AND BEARING	2	NON FC	CONSUMABLE
25	C44TS4	UNIT, IGNITION	CX263977	YES	BUFFER	5	FC	CONSUMABLE
26	C44TS4	UNIT, IGNITION	80409267	YES	CAPACITOR	14	FC	CONSUMABLE
27	C44TS4	UNIT, IGNITION	CX138370	YES	SPRING	15	FC	CONSUMABLE
28	C44TS4	UNIT, IGNITION	CV 148897	YES	WASHER SEALING FRONT AND BACK	23	FC	CONSUMABLE

19	21B29-6C	PANEL ASSY	1639566	YES	ELECTRICAL COMPONENT SUB ASSY ENCAPSULATED	8	NON FC	CONSUMABLE
20	21B29-6C	PANEL ASSY	1541948-27	YES	CAPACITOR, FIXED ELECTROLYTIC, 12 $\mu$ F +75% -10%, 75WVDC	20	NON FC	CONSUMABLE
11	21B29-6C	PANEL ASSY	95-272272	YES	CAPACITOR, FIXED ELECTROLYTIC, 2.7 $\mu$ F $\pm$ 10%, 75WVDC	20	NON FC	CONSUMABLE
12	21B29-6C	PANEL ASSY	95-332242	YES	CAPACITOR, FIXED ELECTROLYTIC, 3.3 $\mu$ F $\pm$ 10%, 35 WVDC	20	NON FC	CONSUMABLE
13	21B29-6C	PANEL ASSY	1541948-18	YES	CAPACITOR, FIXED ELECTROLYTIC, 33 $\mu$ F +75% -10%, 50WVDC	20	NON FC	CONSUMABLE
14	21B29-6C	PANEL ASSY	95-391242	YES	CAPACITOR, FIXED ELECTROLYTIC, 39 $\mu$ F $\pm$ 10%, 35WVDC	20	NON FC	CONSUMABLE
15	21B29-6C	PANEL ASSY	95-472242	YES	CAPACITOR, FIXED ELECTROLYTIC, 4.7 $\mu$ F $\pm$ 10%, 35 WVDC	20	NON FC	CONSUMABLE
16	21B29-6C	PANEL ASSY	95-101272	YES	CAPACITOR, FIXED ELECTROLYTIC, 10 $\mu$ F $\pm$ 10%, 75WVDC	20	NON FC	CONSUMABLE
17	21B29-6C	PANEL ASSY	1588093	YES	ELECTRICAL COMPONENT SUB ASSY	4	NON FC	PERMANENT
18	21B29-6C	PANEL ASSY	1539566	YES	ELECTRICAL COMPONENT SUB ASSY ENCAPSULATED	4	NON FC	CONSUMABLE
19	98AA1-522	FAN	608ZZ(NMB)	YES	BEARING SKF MAKE	10	NON FC	CONSUMABLE
20	98AA1-522	FAN	38SS1518G33	YES	MOTOR BEARING	10	NON FC	CONSUMABLE
21	70AA6-511	FAN	NMB SSR 1960	YES	BEARING NON DRIVING END	6	NON FC	CONSUMABLE
22	70AA6-511	FAN	B094680-00	YES	STATOR CASING ASSY 42B	1	NON FC	CONSUMABLE
23	28B-135-151	GENERATOR ASSY NO1	JM205PPC3F857658Q	YES	BALL BEARING	11	NON FC	CONSUMABLE
24	28B-135-151	GENERATOR ASSY NO1	1587269-7	YES	DRIVE SHAFT ASSY	1	NON FC	PERMANENT
25	28B-135-151	GENERATOR ASSY NO1	690625-524	YES	NUT	30	NON FC	CONSUMABLE
26	28B-135-151	GENERATOR ASSY NO1	1111791	YES	PLATE	2	NON FC	CONSUMABLE
27	WD4281-22021-043	CAUTION PANEL	MS3122E20-41P	YES	CONNECTOR	5	NON FC	CONSUMABLE
28	9840-1C	TRANSFORMER RECTIFIER	1593614-1	YES	BLOWER VALVE	7	NON FC	CONSUMABLE
29	9840-1C	TRANSFORMER RECTIFIER	1594549-1	YES	CAPACITOR ASSY	2	NON FC	CONSUMABLE
30	9840-1C	TRANSFORMER RECTIFIER	89-22412	YES	CAPACITOR FIXED	10	NON FC	CONSUMABLE
31	9840-1C	TRANSFORMER RECTIFIER	1549062-1	YES	INSULATOR	20	NON FC	CONSUMABLE
32	NDN5783	INDICATOR, ATTITUDE 3	116271/115	YES	KNOB	5	FC	CONSUMABLE
33	NDN5783	INDICATOR, ATTITUDE 3	139022-02	YES	TACHO GENERATOR	14	FC	PERMANENT
34	NDN5783	INDICATOR, ATTITUDE 3	140188-02	YES	INDICATOR POWER FAILURE WARNING	4	FC	CONSUMABLE
35	NDN5783	INDICATOR, ATTITUDE 3	145943-03	YES	LAMP HOLDER ASSY	2	FC	CONSUMABLE
36	NDN5783	INDICATOR, ATTITUDE 3	145943-04	YES	HOLDER ASSY LAMP	4	FC	CONSUMABLE
37	SB145-61049	HOVER, INDICATOR	201003-0101	YES	HORIZONTAL, VERTICAL BAR MOVEMENT	4	FC	CONSUMABLE
38	224611-0100	INDICATOR COMPASS MASTER	21373-0	YES	SERVO MOTOR TACHO GENERATOR	23	FC	PERMANENT
39	NDN3305	REPETER UNIT PLATFORM	6481900	YES	ACCELEROMETER VERTICAL	13	FC	PERMANENT
40	224611-0100	INDICATOR COMPASS MASTER	7814-85	YES	CONNECTOR	9	FC	CONSUMABLE
41	LB0801-10-025	INDICATOR, RATE OF CLIMB	86-26360-0080	YES	CASE AND GEAR ASSY	2	FC	CONSUMABLE
42	LB0801-10-025	INDICATOR, RATE OF CLIMB	86-26360-0080	YES	CASE ASSEMBLY	15	FC	CONSUMABLE



34	L80801-10-025	INDICATOR RATE OF CLIMB	85-25360-0100	YES	SLEEVE AND SHIELD ASSEMBLY	2	FC	CONSUMABLE
35	224611-0100	INDICATOR COMPASS MASTER	9636-123	YES	SYNCHRO	4	FC	PERMANENT
36	NDN1058	CONTROLLER ALLTITUDE	NDN1058-19	YES	CLUTCH ASSY, INDICATOR	4	FC	CONSUMABLE
37	NDN3305	REPETER UNIT PLATFORM	NDN3305/60	YES	TRANSFORMER, POTTED	3	FC	CONSUMABLE
38	NDN3305	REPETER UNIT PLATFORM	NDN3305/61	YES	MOTOR AMPLIFIER TRAY ASSY	3	FC	PERMANENT
39	NDN3305	REPETER UNIT PLATFORM	NDN3305-46	YES	TRANSFORMER BLOCK ASSY	2	FC	PERMANENT
40	NDN3305	REPETER UNIT PLATFORM	NDN5640	YES	LINEAR ACCELDMETER	2	FC	PERMANENT
71	NDN9222-01	INDICATOR, ATTITUDE	NDN5755-260	YES	WEDGE, LIGHT	1	FC	CONSUMABLE
72	NDN5783	INDICATOR, ATTITUDE 3	NDN5783-23	YES	HOUSING ASSY	2	FC	CONSUMABLE
73	NDN5783	INDICATOR, ATTITUDE 3	NDN5783-3	YES	BEZEL ASSY	2	FC	CONSUMABLE
74	NDN9222-01	INDICATOR, ATTITUDE	NDN7251-06	YES	VERTICAL POINTER	5	FC	CONSUMABLE
75	NDN9222-01	INDICATOR, ATTITUDE	NDN9222/5	YES	METER MECH VERT FAILURE WARNING	2	FC	CONSUMABLE
76	HG9050-G10	RADALT TX RX	962568-4	YES	AMPLIFIER	6	FC	PERMANENT
77	HG9050G10	RADALT TX RX	10059044-101	YES	FREQUENCY CONVERTOR	2	FC	CONSUMABLE
78	B693-28	BOX, STATION	A7-07-1131	YES	SWITCH	1	NON FC	CONSUMABLE
79	B693-19	BOX STATION	A7-07-1129	YES	RESISTOR	2	NON FC	CONSUMABLE
80	622-6323-001	VIUHF TxRx	284-0931-260	YES	FUSE 8A	2	NON FC	CONSUMABLE
81	622-6323-001	VIUHF TxRx	641-4324-003	YES	MODULE A4	1	NON FC	PERMANENT
82	622-6323-001	VIUHF TxRx	641-4325-003	YES	MODULE	1	NON FC	PERMANENT

## StartupTN—TANSEED

StartupTN x HEADSTART

# TANSEED

Edition 2 is here!

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**DEADLINE EXTENDED!**  
20 September 2021

To the Uninformed, We are delighted to announce that the **Tamil Nadu Startup and Innovation Mission**, branded as “**StartupTN**”, has been established as a section 8 company under the MSME Department by the Government of Tamil Nadu in March 2021. Our sole mandate is to implement the “**Tamil Nadu Startup and Innovation Policy 2018-23**” and to offer support through its various schemes and programs, thereby creating an enabling ecosystem for startups in the state.

One of the schemes envisaged in the Tamil Nadu Startup and Innovation Policy is the much-needed seed fund to support early-stage startups. We launched the First Edition of **TANSEED (Tamil Nadu Startup Seed Grant Fund)** this year during January-February 2021, as a Grand Challenge, in association with “**Headstart Network Foundation**” and had supported Ten Promising Startups with a seed grant of Rs. 10 Lakh each. Read more [here](#).

Following its success, We have launched the Second Edition of **TANSEED 2021** supporting up to 20 Startups with a seed grant of INR 10 Lakh each.

**Link to apply:** <https://startuptn.in/events/tanseed-20-by-startuptn/>

**Last date to apply:** 20th September 2021

All participants will be required to register in the StartupTN portal to access the application form. Startups registered and willing to register in Tamil Nadu are eligible to apply. For more details and updates, please visit the website or email back to us to [support@startuptn.in](mailto:support@startuptn.in)

## Technology Development Fund | New Project Opportunities Opened

Technology Development Fund Scheme (TDF); Invest India the national Investment Promotion and Facilitation agency and is assisting DRDO in the the implementation of the TDF Scheme. It gives us immense pleasure in presenting the new project opportunities under the Technology Development Fund . We request you to check out the latest projects open for applications:

Project Name: **Development of Composite Flex seal for Large Aerospace Vehicles**

Link: <<https://tdf.drdo.gov.in/node/5956>>

Last Date: 9-Sep-21

Project Name: **Design and Development of a Unified Common Launcher for Air to Air Missile (AAM)**

Link: <<https://tdf.drdo.gov.in/node/5955>>

Last Date: 9-Sep-21

Project Name: **Electric Motor for Pumpjet Propulsion Aggregate**

Link: <<https://tdf.drdo.gov.in/node/5954>>

Last Date: 9-Sep-21

Project Name: **Encoders**, Link: <<https://tdf.drdo.gov.in/project/encoders-0>>

Last Date: 12-Sep-21

Project Name: **Direct Drive Frameless BLDC motor**

Link: <<https://tdf.drdo.gov.in/node/5962>>

Last Date: 20-Sep-21

Project Name: **BLDC Motor & Quadrature Incremental Encoder**

Link: <<https://tdf.drdo.gov.in/node/5960>>

Last Date: 20-Sep-21

Project Name: **Buoyant Cable Antenna for IN platforms**

Link: <<https://tdf.drdo.gov.in/node/5966>>

Last Date: 27-Sep-21

Project Name: **SSPA for Radar**

Link: <<https://tdf.drdo.gov.in/node/5965>>

Last Date: 27-Sep-21

Project Name: **Wireless Aircraft Flight Data Recorder**

Link: <<https://tdf.drdo.gov.in/project/wireless-aircraft-flight-data-recorder-0>>

Last Date: 27-Sep-21

You can click on any of the above projects for applying online or you can visit <https://tdf.drdo.gov.in/project/ongoing> to know more about the ongoing projects.

Apply now for an opportunity to get funding of upto Rs.10 Crore\*, to know more about the scheme visit: <https://tdf.drdo.gov.in/scheme>

Please note that you need to be registered as an "Industry" and logged in to be able to participate in the projects.

Feel free to reach out to us in case of any queries or concerns. ([tdf@investindia.org.in](mailto:tdf@investindia.org.in) )

Regards,  
Team TDF

\*Funding will only be provided to the shortlisted industries.

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## PROBLEM STATEMENT – Indian Navy

The Indian Navy, has given us a set of 10 problem statements which need technical solutions. An excel sheet with the received details is attached. This could be an opportunity for your organization to leverage its capabilities and bid for supplying solutions for these problems. You may reach out to [info@cdiic.in](mailto:info@cdiic.in), & Capt Sandip Sabnis at [dapp@navy.gov.in](mailto:dapp@navy.gov.in) for more details

SL. No.	Part No.	Description	Technical Specifications with Operating Parameters	Fleet deficiency	Assistance Required
1	2.027.163-02	Microwave Landing System Receiver	27V, 115V 400 Hz	12	Repair feasibility / Indigenisation
2	IKSH-1K	Head Up Display	24-29.4 V DC, 108-119V AC, 380-420 Hz, 0.0-5.5 V AC, 380-420 Hz, Time of operation > 10 hrs, Warm up time < 2min, Image refreshing > 50 Hz, Night Illumination, Temp 40-60 deg C, linear G-loads upto 10g	11	Repair feasibility
3	PGL-21K	Integral Drive Vane	Shaft rev/min - 11384-18612, Power Capacity 30 KVA for rev > 12288, 400 Hz, 120/208 V, p.f. 0.85, Temp - 50 to 140 deg C, Oil Temp - 40 to 160 deg C	18	Repair feasibility
4	BKDU-130	Onboard Oxygen Generation System	Air Flow (on ground-30Kg/H, 20 Kg/H at an altitude of 12-20 Km) Compressed Air Pressure at inlet Main mode - 1-10 kPa, Short Time - .08 kPa, Compressed Air Temp at inlet Main mode - 40-70 deg C, Short Time - 40-95 deg C, Power Consumption - 180W, Voltage 18-31 V DC	16	Repair feasibility
5	BS-29K	Couplant Unit	WCS, Nominal 27 V DC, 200/115 V AC 400 Hz, Power consumption DC - 450W, AC - 250VA Time of readiness for operation < 30 sec, Max continuous ops upto 6 hrs	4	Repair feasibility
6	BOM	Optical Mechanical Unit	<b>OLS</b> Angular Dimensions of operating areas, By Azimuth - 90 to 90 deg, By Elevation - 15 to 60 deg, Scan time 0.5 - 2.5 sec, Range Measurement freq > 5 Hz, AC Voltage - 115 V 400 Hz, 500W DC voltage 27 V, 300W	18	Repair feasibility/ Indigenisation
7	KSA-33M	Aircraft Accessory Gearbox	Operating Temp - 60C to + 120C. Vibration rates frequency of 120 to 160Hz: 45mm/s, max. Lub Oil - Turbonycoil 210A AIR 3514/A, Maximum permissible temperature of oil - 185C. Oil consumption - 0.2 lit/h, max. Max continuous - 7.3 hours	11, TB O 10 yrs	Repair/O/H/ feasibility
8	BSOI-1K	Data Acquisition and Processing Unit	DRPU, 27V AC, Power 150W, Warm up time < 1 min from 60 (-) 40 deg C, < 15 min from - 40- (-) 55 deg C	4	Repair feasibility/ Indigenisation
9	B1-BZ2M	Transceiver	Freq Range 2.00000-29.9999 MHz, Receive Mode Freq band from 2 to 30 MHz, Peak input signal 0.5V, Peak out signal 1.4V, Bandwidth at minus 6db-not less than 20 khz Transmit Mode Freq band of drive voltage from 2 to 30 MHz, Maximum voltage of drive voltage 5V, Drive voltage control band - > 30 dB, Bandwidth at minus 6dB-not less than 20 khz, Input signal level - 100 mV, input signal frequency - 0.5 MHz, Power supply voltage +5V, +15V, minus 15V, Power Consumption not more than 11VA, Weight of the subunit not more than 0.5kg	11	Repair feasibility/ Indigenisation
10	BARK-42	Engine Control and Monitoring Unit	Overall Dimension in mm max 280x240x255, Mass 10Kg max. Continuous Ops time 10.1 +/- 0.1 hours, Two DC power supply sources 24.0 to 29.4V, Power consumption 40W	5	Repair feasibility/ Indigenisation

**Defence India Start-up Challenge (DISC) -5**

Defence Minister **Shri Rajnath Singh** on Thursday (19/08/21) launched the 5th edition of the Defence India Start-up Challenge (DISC) under Innovations for Defence Excellence - Defence Innovation Organisation (iDEX-DIO) meant to achieve self-reliance and foster innovation and technology development in the defence and aerospace sectors. “Thirty-five problem statements – 13 from the Services and 22 from Defence Public Sector Undertakings (DPSUs) – were unveiled under DISC 5.0. Defence Minister listed out measures taken by the Ministry to promote innovation, such as including iDEX as a procurement avenue under the Defence Acquisition Procedure 2020, earmarking Rs 1,000 crore for domestic procurement through iDEX for financial year 2021-2022 and approving a budget of Rs 498.8 crore for the next five years to support over 300 start-ups and foster innovation in defence and aerospace sectors.

Visit Link for more details: <https://idex.gov.in/>

## **TITLES OF CHALLENGES SHORTLISTED BY RESPECTIVE DEFENCE AGENCIES (DPSUS) & ARMED FORCES**

### **Indian Army**

#### **Challenge #1: Situational Awareness for Mechanised Columns.**

The Battlefield Situational Awareness presently available to commanders at all levels in mobile formation is on adhoc basis whereas in the current technologically advanced modern warfare scenario, there is a need of integrated network system which will enable faster decision making by commanders in a dynamic tank battle. In a fast, fluid and mobile battle the need for situational awareness of commanders are crucial towards command and control of all his elements.

Link: <https://idex.gov.in/challenges-cpt/496>





## Challenge #2: Augmented Reality / Virtual Reality based Sortie Preparation Aid for Helicopter Pilots.

Virtual Reality technology should be employed to train aviators in flight procedures on ground. Army helicopter pilots need in various regular training procedures related to flying Actual Flying of use of simulators flight can meet their training requirements. However, with the prohibitive cost of actual flying and very Limited access to flight simulators there is a need for a cost-effective means to train the pilots. Aviators need to practice flight procedures on ground to optimize the learning value of the live sortie missions flown by them. Employment of Virtual Reality technology will enhance the level of preparedness prior to undertaking a live sortie msn. Virtual Reality technology can also be employed for simulating bad weather conditions as well as for practicing flythrough in the turn expected during the sortie.



Link: <https://idex.gov.in/challenges-cpt/497>

## Challenge #3: Artificial Intelligence based Radio Frequency Spectrum Management.

Probable Interface/ jamming faced by Equipment/ Systems operating in the TBA due to heavily congested Electro Magnetic Spectrum Space. The increase in spectrum usage multiplies manifold in a dynamic battlefield where units and sub units are on the move and are entering or existing a given area. New units from reserve or neighboring formations also. get inducted or de-inducted as per progress of the battle. The no of wireless emitters including



Link: <https://idex.gov.in/challenges-cpt/498>

## Challenge #4: Precision Guided Kit for 81 mm Mortar Ammunition.

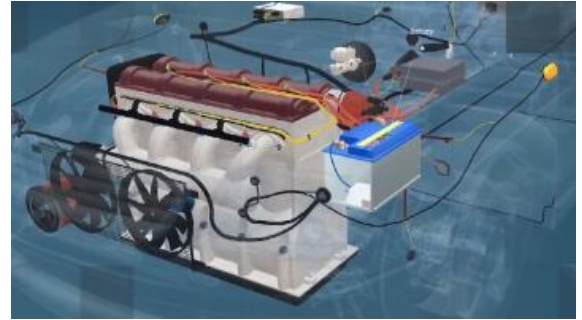
Infantry Battalions are authorized 81mm Mortar as Battalion support weapon to provide close fire support to assaulting Infantry once the artillery fire is lifted. With modernization of equipment profile the requirement to increase the accuracy of 81mm Mortar ammunition, various upgrades are being considered worldwide. Keeping in mind the dispersion in the fall of bomb of 81mm Mortar at the object/target end, there is requirement to develop capability to increase the accuracy of the 81mm Mortar ammunition by precision guidance for accurate engagement and reduced collateral damage. With the Precision Guided Kit the Circular Error Probability (CEP) of < 10 m can be achieved whereas the same for the unguided projectile is approx. 70m. Therefore, limited quantity of the overall authorization of 81mm Mortar ammunition upgraded with a Precision Guided Kit to engage high value targets in the area of influence of an Infantry Battalion.



Link: <https://idex.gov.in/challenges-cpt/499>

### Challenge #5: Silent Overwatch for Infantry Combat Vehicles using Fuel Cell / Alternate Fuel

ICV BMP-2 deployed in High Altitude Areas (HAAs) presently have lead acid secondary batteries which are used to supply power to radio Surveillance equipment in the engine switched off mode. Prevalent low temperatures at High Altitude Area results in low charge holding and faster discharging of 24V secondary batteries of ICVs. The situation becomes critical operationally when there is a need for silent watch (main engine switched off while surveillance devices & radio sets are on). Link: <https://idex.gov.in/challenges-cpt/500>



## Indian Airforce

### Challenge #6: Development of Part Task Trainer for Mirage 2000 Upgrade aircraft

The proposal is to develop a part task trainer for Mirage 2000 upgrade aircraft. The part task trainer should have an accurate replica of the Mirage 2000 upgrade aircraft stick and throttle. The MFDs, Head Up Display (HUD), Function Selector and Display Unit (FSDU) and other displays can be replicated on LCD/TFT/OLED display panels with touch screen albeit with correct visual representation. The pilots should be able to undertake basic flying and be able to accurately simulate all existing modes and functions of the aircraft. The cockpit controls, buttons, levers, switches etc are required to be replicated for reasonably accurate form. Link: <https://idex.gov.in/challenges-cpt/501>



### Challenge #7: Development of Wide Band HF Modem for Networked secure voice, data & Video Communication.

Development of all band High Frequency (HF) digital modem for video interaction targeting data rate capabilities in excess of 48Kbps, ultimate data rate being 512kbps. The developed modem to be compliant with STANAG and MIL-STD-188-110D standards Link: <https://idex.gov.in/challenges-cpt/502>



### Challenge #8: Infusion of Augmented reality in Technical Type training and Usage of Smart glasses to assist Technicians.

1. Technicians undertake maintenance activities which mandates them to refer to multiple publications, diagrams and animations to correctly diagnose and perform the intended activity. In the present form, there are limitations in terms of physically visualizing the systems / subsystems and simultaneously referring to multiple documents. 2. Smart glasses can deliver critical information wrt wiring assemblies, troubleshooting procedures, diagrams, checklists, 3D walkthroughs, animations and other reference materials in the technicians' line of sight, while allowing them to keep their hands free to carry out the task. Further voice command driven reference images and instructional videos during workflow, allows new technicians to train quickly on job. Link: <https://idex.gov.in/challenges-cpt/503>



**Smart AR Glasses for Engineers and Technicians while Carrying out Maintenance Activity.**



## Indian Navy

### Challenge #9: Non-lethal Devices for stopping Vessels at Sea.

1. There may be a need to stop vessels at sea without resorting to the use of force. This would be useful during peacetime operation such as for VBSS (visit Board, search, Seizure) operations or to stop a boat that is heading towards friendly forces (at sea or in harbor/ anchorage) where the intent of the boat cannot be ascertained.
2. The vessels so stopped should not suffer any permanent, damage but the speed of the vessel should be slowed down, or ideally the vessels brought to a halt altogether.
3. The word vessel is used in its broadest sense and could cover vessels from small, high speed boats to larger ships.
4. Boat stopping devices are commercially available which use a pneumatically launched rope with a drogue (sea anchor) which can get entangled with the boats propellers and slow down the boat due to the resultant drag. The rope has to be 'fired' across the bow of the boat for it to be effectively ensnared. Such a device has limitations such as inability to be used when a boat is heading directly towards the ship which is using the device as in such a case, the rope would lie parallel to the boat path and is unlikely to get ensnared.



5. For large vessels, a mechanical device such as this may be impractical. A chemical solution may be attempted where a viscous gel – like structure is formed around the vessels propeller thus hindering movement. Such gel should dissipate (or dissolve in sea water) after a certain amount of time.

6. The solution may be separate or a combined solution may be provided. The means of delivery of the device should also form a part of the proposed solution.

Link: <https://idex.gov.in/challenges-cpt/504>

### Challenge #10: Enhancing Underwater Domain Awareness (UDA) by the use of Artificial Intelligence/ machine Learning or other Novel Techniques.

1. Comprehensive Underwater Domain Awareness (UDA) requires fusing data from disparate sources.
2. Voluminous data that may be obtained from disparate sensors such as sonars and sonobuoys (at the theatre level) needs to be fused for sense-making.
3. Presence of background noise and non-submarine Contact (which may also be biological in origin) can complicate the detection problem.
4. Use of suitable trained AI/ML models that can help in detection of submarines would greatly aid in enhancing UDA.
5. The solution need not be limited to AI/ML alone and could also target other aspects that enhance UDA such as better signal processing and decision support if they improve the existing capability even where AI/ML techniques are not used.



Link: <https://idex.gov.in/challenges-cpt/505>

### Challenge #11: Miniaturisation for implementation on mini and micro drones and drone

1. Distributed aperture radar for maritime ISR including imagery/SAR imagery.
2. Passive EW measures for overwhelming enemy AD/deception of enemy missiles.
3. Home on radiation based navigation system.
4. Navigation aids for ops in GNSS denied environment.

Link: <https://idex.gov.in/challenges-cpt/506>



### Challenge #12: Private 5g Network for Machine to Machine Communication for Indian Navy

Development of a private 5G in box kind of solution with user defined security features, which can coexist with commercial 5G operations without inference. The solution should endeavor to follow 5G standards. The solution should aid in the following :-

- Enhanced mobile Broadband(eMBB) towards providing a portable solution delivering higher quality And rich content to multiple users with full mobility.
- Help in large scale machine -to-machine communications from wide-spread sensor networks and multiple connected devices.



Link: <https://idex.gov.in/challenges-cpt/507>

### Challenge #13: Development of inertial energy storage system for naval applications

IESS aims to harness energy from high inertia flywheels. They are also known as flywheel UPS.

Design and development of a compact IESS with a power Electronic convertor based ride through mechanism to ensure uninterrupted power supply to the load/equipment during partial power failure. Link: <https://idex.gov.in/challenges-cpt/508>

## Hindustan Aeronautics Ltd (HAL)

### Challenge #14: Image recognition and target tracking and non-cooperative collision avoidance systems for UAVs

Recognition & Tracking of the target(s) based on the images from sensors such as CCD, FLIR, SAR/ISAR video from Radar, EO systems. AI based image recognition & tracking and non-cooperative collision avoidance system for UAVs. Link: <https://idex.gov.in/challenges-cpt/509>



### Challenge #15: Miniaturization of electronics modules by use of low power industrial devices and ruggedized hardware and software components.

Future avionics for UAV and Fixed Wing/Rotary wing applications require light weight, small size and lesser powered computers. For this purpose, miniaturization of electronic modules using FPGA/SOC is required. Link: <https://idex.gov.in/challenges-cpt/510>





### Challenge #16: Development of a bore-sighting / alignment system for SU -30 MKI aircraft sensors, tray and weapon adaptors.

This system shall perform Bore-sighting / alignment of sensors, tray and weapon adaptors without need of Reference / Harmonization Board and three-point levelling of an aircraft. The current system requires three-point levelling of aircraft & placement of Reference board and have certain limitation like human error, large manpower and time requirement. These limitation leads to occurrence of large amount of snags and additional flying efforts for acceptance and delivery of aircraft to customer. It also affects fleet readiness. Hence a system which is quick, accurate, and reliable and demand less man power is required.



Link: <https://idex.gov.in/challenges-cpt/511>

### Challenge #17: Development of Artificial Intelligence based training modules for technicians for operation and maintenance of SU – 30 MKI aircraft.

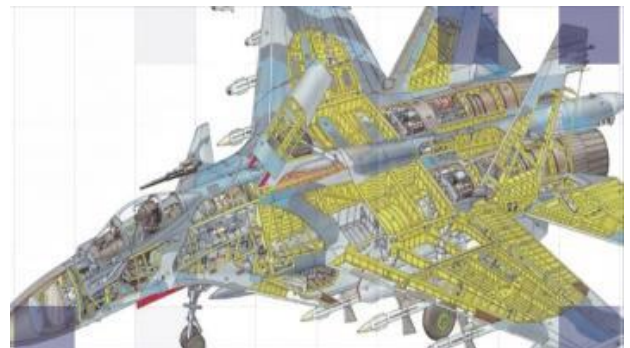
The proposed system shall be based on Virtual Reality/Augmented Reality and AI for generation of simulated scenarios and analysis of the responses. The training is envisaged at 3 levels. Level-1 will be based on the basics & 3D models elaboration of the desired system. Level-2 will be on the known scenarios and known responses. Level-3 will be on the randomly generated scenarios and their comparative analysis with respect to the actual. Each scenario consists of Faults of the system and its corrective action.



Link: <https://idex.gov.in/challenges-cpt/512>

### Challenge #18: Development of Structural Health Monitoring (SHM) system for SU-30 MKI aircraft – Stabilizer using photonic system

During exploitation and overhaul of Su-30MKI aircraft, number of cracks are reported from IAF bases and HAL (NK) respectively. At present, visual inspection with/ without magnifying glass and dye penetrant methods are used to identify cracks/ defects on the structure. Sometimes it is difficult to locate the cracks/ defects in inaccessible locations. In few of the cases, the location of the cracks/ defects is accessible only after dismantling of assemblies. In view of the above, an advanced and effective non-contact structural health monitoring system is required to identify cracks/ defects without dismantling of aircraft structure. Link: <https://idex.gov.in/challenges-cpt/513>



### Challenge #19: Design and Development of Spark plug part no SP 87PA of AL-3 IFP aero engine.

The spark plug is connected to high voltage generated by an ignition coil. As current flows from the coil, a voltage develops between the central and side electrodes. Initially no current can flow because the fuel and air in the gap is an insulator, but as the voltage rises further it begins to change the structure of the gases between electrodes. Once the voltage exceeds the dielectric strength of the gases, the gases become ionized. The ionized gas becomes a conductor and allows current to flow across the gap in the form of spark. This spark plug should have form fit condition to be assembled in main combustion chamber of the AL-3 IFP engine with minimum life of 1000 flying hrs. Maximum weight of the part is 0.28 kg max. Link: <https://idex.gov.in/challenges-cpt/514>

### Challenge #20: Development of Software module for audio data compression and decompression compatible with ADSP21060 and ARM (Cortex 7 series) processors

At present compression ratio of 4:1 is used in SSFDRs, if a software module compatible with processors is developed it will provide a technology to store larger duration of data in lesser memory space and further audio data download time will also reduced significantly by the technology developed. Link: <https://idex.gov.in/challenges-cpt/515>

### Challenge #21: Adaptive Data Rate Modem for Wireless Mobile Ad-Hoc Network

Wireless communication channels are characterized by various fading conditions like Gaussian, Rayleigh, Rician etc. Adaptive Data rate burst modem is required to keep the data rate at optimal level for fading conditions. Adaptive Data rate modem also facilitates the implementation of adaptive range scheme for increasing the geographical range of the network.

The scope of the project is development of Adaptive modulation and demodulation techniques with built-in Error Control Coding to support for variable data rates based on the channel conditions and signal strength. Link: <https://idex.gov.in/challenges-cpt/516>

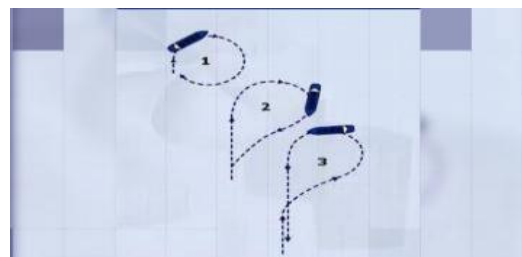


### Challenge #22: FM CW Real Time RADALT Tester

The purpose of the system is to test the Radio altimeter for its altitude range profile along with the different pitch & roll conditions for selected terrain. Presently fixed delay line is being used for bench testing and no test equipment is available for testing variable altitude along with different pitch & roll conditions for selected terrain. The test equipment shall simulate the terrain reflected signal spectrum (echo spectrum) with respect to the FMCW signal transmitted from the RAM incorporating the altitude delay, spectrum as per pitch & roll condition and terrain attenuation. The simulated echo is fed to the RAM receiver for processing and display the height programmed in order to verify the functionality of the RAM. Link: <https://idex.gov.in/challenges-cpt/517>

### Challenge #23: Motion Pattern Classification on online/active data

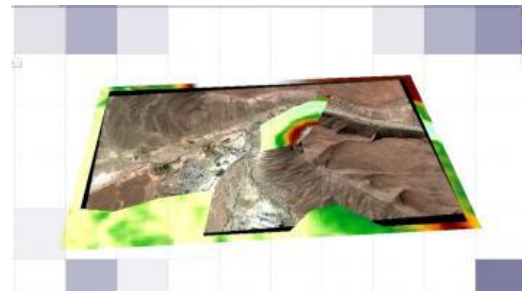
The detection of ship patterns on offline data is possible by applying the mathematical algorithms. However, the problem statement is to detect online ship/vessel manoeuvring patterns in sea such as Zig-Zag, Loop, Parallel movement & sudden stop in mid sea for Radar/AIS track data. Link: <https://idex.gov.in/challenges-cpt/518>



### Challenge #24: Find out the overlapping percentage of two 3D objects and display of combined geometry

The solution should provide the overlapping percentage of the defined geometry and also should give the combined geometry of 3D objects after removing the overlapped area.

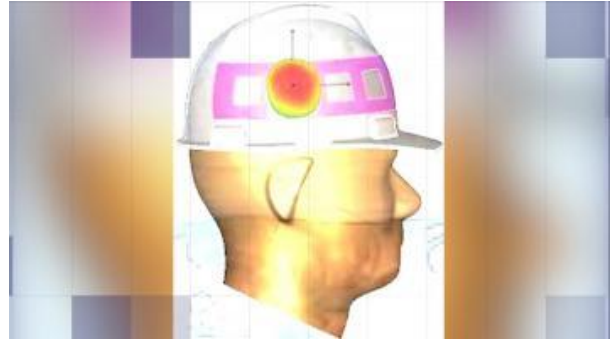
Link: <https://idex.gov.in/challenges-cpt/519>





### Challenge #25: Helmet mount Conformable antenna.

Conformable antennas are new area of development in antenna field. It will allow proper use of space available for strategic projects. Achieving conformable shape without any degradation in electrical and radiation property of antenna is a challenge covering UWB frequency ranges. Link: <https://idex.gov.in/challenges-cpt/520>



## Mazagon Dock Shipbuilders Limited (MDL)

### Challenge #26: Robotic Arm for inspection, cleaning and painting of tanks on ships to save on time, cost and avoid accidents.

Ships use fuel, oils, sludge, sewage, water and other fluids, which are stored in tanks. When stored in tanks, these fluids tend to stick inside the tanks forming layers of semi-solid substance. Moreover, many impurities of these fluids settle down and stick to the surface of the tanks. It is therefore imperative that the tanks are cleaned on a regular basis on ships. Generally, tanks cleaning on the ship is done during dry dock and whenever the inspection of the tanks is due. Cleaning is done for inspection or if there is any work to be done inside the tanks such as cracks, leaks, etc. Tank cleaning inspection and repairs is a necessary procedure performed on board ships. This process, when carried out by humans, tends to be hazardous, sometimes leading to explosion and accidents. In spite of all the necessary safety precautions and enclosed space entry procedures, accidents still occur while inspecting, cleaning and repairing tanks on board ships. Link: <https://idex.gov.in/challenges-cpt/521>



## Mishra Dhatu Nigam Limited (MIDHANI)

### Challenge #27: Development of fast & economical cutting machines for Metal Bars above dia 400mm.

Cutting of large size ingots/semis (> 400 mm dia.) of metals is an integral part of manufacturing process of special alloys. This is presently carried out through electric discharge sawing (EDS) or Band Saw machines. Cutting of high strength alloys like super alloys, Special steels & titanium alloys is very time-consuming process often making it a bottleneck in the process line. Link: <https://idex.gov.in/challenges-cpt/522>



### Challenge #28: Development of Automation and Data capturing in a quality control lab.

MIDHANI is manufacturing of various alloys (super alloys, titanium alloys& special steel) and in various product forms. Further, to supply materials to strategic sectors, lot of testing and certification is to be carried out and records are to be maintained for longer periods. As of now testing process is largely manual starting from sample collection, preparation, testing and generation of reports. Handling large numbers of samples and multiple tests makes it difficult. Hence automation in testing process such as identification marking and centralized processing of data captured in individual tests are very essential. :Link: <https://idex.gov.in/challenges-cpt/523>

### Challenge #29: Development of NDT technique for quality assessment of cast ingot

Till date there is no NDT technique available for quality assessment of large cast ingots / large semis for identification of defects such as voids, inclusions, internal cracks etc. This leads to rejections at much later stages incurring additional process costs and delays in delivery. Link:

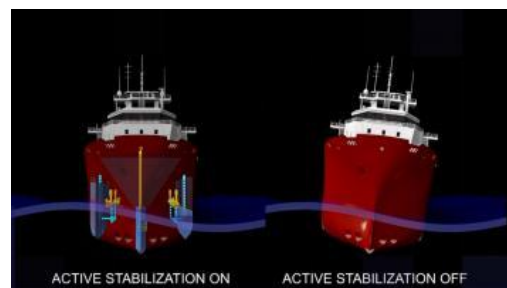
<https://idex.gov.in/challenges-cpt/524>



## Garden Reach Shipbuilders & Engineers Ltd (GRSE)

### Challenge #30: Design of Active Roll Stabilization System for Naval Ships.

Normally warships are fitted with Fin Stabilizers which creates roll stabilization due to hydrodynamic lift, hence these are not very effective when ships are moving at lower speeds. In addition to above limitation, it creates additional and unwanted drag leading to larger fuel consumption. In order to overcome this, active roll stabilization as above is envisaged. Similar technology is available in market mainly from foreign vendors, therefore it offers an opportunity to develop indigenous technology to fulfill this gap in naval design/construction domain . Link: <https://idex.gov.in/challenges-cpt/525>



### Challenge #31: Development of an AI enabled Robot to carry out Phased Array Ultrasonic Inspection on curved/ straight ship Hull structure.

The AI enabled Robot shall be able to:

- Navigate on the curved/ straight hull surface without human intervention while following the weld seam/ butt. Also be able to navigate through cross weld joints (merging point of seams and butts) while carrying out UT.
- Conduct phased array ultrasonic test on Seam and butt weld joints while traversing on the hull structure.
- Verify the integrity of weld joint as per naval standards.

The thickness of plates on which AI enabled robotic UT is envisaged in the range of 3.15 mm to 25 mm primarily. The result of UT shall be governed by the weld quality specified in naval standards. The AI should be able to generate inspection report specifying whether the quality of weld joint is accepted or not. Link: <https://idex.gov.in/challenges-cpt/526>

### Challenge #32: Low Insulation observed on parallel DC Supply.

Low insulation is observed on 24V DC supply source DB due to many parallel path circuits required on board. Due to this low insulation, the control PCB cards are damaged frequently. The desirable Insulation value should be 1 Mega Ohm. In a DB, If any circuit is operating in low insulation, the visual/audio information of the same should be available on the source end so that user can isolate only that circuit for DI/DR. Link: <https://idex.gov.in/challenges-cpt/527>





### Challenge #33: Low Insulation of Galley Equipment observed during operation on board ships.

The insulation value of galley equipment's is observed in Kilo ohm during operation on board the ship. However, it is desired to have this insulation value in Mega ohm during operation.

Note: During operation of the Galley equipment the insulation value at switchboard feeder section drops from 10 Mohm to 3 Kohm. Link: <https://idex.gov.in/challenges-cpt/528>

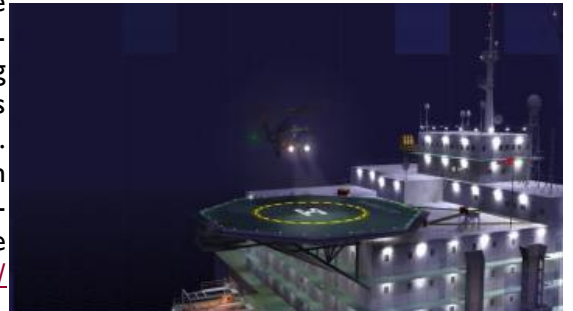
## Hindustan Shipyard Limited (HSL)

### Challenge #34: Control of EMI/EMC and reduction of Radar Cross Section on Naval ships.

On the ships fitted with high power emitters on the decks, the radiated emissions could seep through the bridge windows into the bridge wherein the sensitive and sophisticated electronic navigation, communication equipment and control systems are installed and would cause malfunctioning of these equipment. Therefore there is a need to provide EMI/EMC shielding for the bridge window glasses without losing the visibility requirements. Link: <https://idex.gov.in/challenges-cpt/529>

### Challenge #35: Development of NVG compatible Lighting and helo visual landing aids for use onboard ships

Naval ships that operate helicopter need visual landing aids that enable the pilots for safe operation of the helicopters. In addition, for operation at night, standard and night vision goggle (NVG) compatible lighting and landing aids are required to ensure secrecy of flight operations without compromising safety. Presently these systems are imported. With a large number of ships with helicopters being built for Indian Navy and Coast Guard, indigenous availability of few, if not all components of the helicopter deck lighting and visual landing aids will reduce dependence on foreign manufacturers. Link: <https://idex.gov.in/challenges-cpt/530>



- **Link for Detailed Description of Challenges:** <https://idex.gov.in/sites/all/themes/idex/images/Details%20-%20Challenges%20-%20DISC%205.pdf>
- **Last Date for Proposal Submission: 8th October, 2021 5:00 PM**
- **Grants upto : Up to Rs.1.5 Crores**
- **Link to Apply:** <https://idex.gov.in/form/application-form-defence-india-d>
- **Category : Startup / MSME / Individual Innovator**

**For Any assistance contact [info@cdiic.in](mailto:info@cdiic.in)**

## The Atal Innovation Mission



Atal Innovation Mission (AIM) is Government of India's flagship initiative to create and promote a culture of innovation and entrepreneurship across the length and breadth of our country. AIM's objective is to develop new programmes and policies for fostering innovation in different sectors of the economy, provide platforms and collaboration opportunities for different stakeholders, and create an umbrella structure to oversee the innovation & entrepreneurship ecosystem of the country.

## India-Sweden Healthcare Innovation Challenge

The India-Sweden Healthcare Innovation Centre is a tripartite collaboration between the Swedish Trade Commissioner's Office, All India Institute of Medical Sciences, New Delhi (AIIMS Delhi) and All India Institute of Medical Sciences, Jodhpur (AIIMS Jodhpur), with active participation from ICMR, Ministry of Health and Family Welfare - India, Ministry of Health and Social Affairs - Sweden, Startup India, AstraZeneca and Nasscom.

The India-Sweden Healthcare Innovation Centre acts as a growth catalyst for startups through clinical validation, cross country mentorship, networking, funding access and international expansion. Join us to address these healthcare challenges for creating greater impact across the country and beyond.

### DETAILED ELIGIBILITY CRITERIA

This Innovation Challenge is open to startups, students, individuals, entrepreneurs and SMEs who are solving healthcare challenges in India through innovative technologies and business models.

### THEMES FOR CHALLENGES

- Med-Tech
- Tele-Medicine
- Patient Awareness
- Disease Management
- Digital Tools/ Platforms
- Internet of Things
- Disease Prevention
- Patient Follow-up
- Point of Care Devices
- Point of Care Devices
- Early Diagnosis
- Education & Digital Learning
- Home Healthcare
- Machine Learning
- Treatment

### Timeline



Link to Apply: <https://www.startupindia.gov.in/content/sih/en/ams-application/challenge.html?applicationId=610cd893e4b0aee5ceaf7565>





## गुणता आश्वासन महानिदेशालय DIRECTORATE GENERAL OF QUALITY ASSURANCE

### DGQA FACILITATION CELL AT CODISSIA

To empower the CODISSIA Members/ regional MSMEs/Entrepreneurs to register under the Directorate General Quality Assurance (DGQA) for Indigenization of components, spares and guide them in certification/supply to the Armed forces, a DGQA Facilitation Centre has been established at CODISSIA. This cell will be operational on two days a week (as per the availability of the Nodal officer) during which CDIIC will coordinate sessions with the DGQA representative, for clarification of doubts and details of further processing. The cell will enable vendors to participate in Tenders issued by Procurement Agencies in MoD (Ministry of Defence), which includes Ordnance Factories (OFs) under Ordnance Factory Board (OFB) and Defence Public Sector Undertakings (DPSUs). (Meetings only on prior appointments)

### STANDARD OPERATING PROCEDURE (SOP) FOR PERFORMING ACTIVITIES WITH RESPECT TO VENDOR REGISTRATION AND INDIGENISATION EFFORTS

- **Stage 1:** List of items for indigenisation will be shared with all Regional MSMEs
- **Stage 2:** Individual companies, based on their core competency, will identify product (s) which they can indigenize and intimate the same to CDIIC / Nodal Officer, DGQA.
- **Stage 3:** Upon selection of product (s) by individual companies, on-site assessment to determine the capabilities and potential of the firm will be conducted.
- **Stage 4:** Upon satisfactory on-site verification, the company will be required to register with Directorate General Quality Assurance (DGQA). The Procedure for the same will be explained by the Nodal Officer, DGQA.
- **Stage 5:** Upon successful DGQA Vendor Registration, the firm will be required to submit a project proposal, which will be forwarded to the concerned procurement agency for approval.
- **Stage 6:** The project proposal will include detailed procedures with respect to design and development, production and validation of prototype being indigenized

**Dr. T. K. Varadarajan, SQAQ, SQAE (ME), Aruvankadu,** DGQA has been nominated by the DG, DGQA, as the nodal officer for the DGQA Facilitation Cell at CODISSIA, [Meetings on prior registration only.] . Interested members kindly drop a mail to [info@cdiic.in](mailto:info@cdiic.in) to register your participation in the DGQA Facilitation Cell at CODISSIA. • DGQA Facilitation Cell at CODISSIA will be operational 2 days per week (as per the availability of Nodal officer). Nodal officer will also be available at the cell on demand /necessity basis. Link: <https://www.makeinindia.defence.gov.in/pages/indigenisation>

### DGQA FACILITATION CELL AT CODISSIA, COIMBATORE



Active participations from member firms— more than 280 member firms have shown interest in this cell and have had meeting(s) with Dr. T. K. Varadarajan, Nodal Officer, DGQA Facilitation Cell, CODISSIA, Coimbatore, out of which we have identified 250 firms who have expressed their willingness in production of item(s) from the updated list of indigenisation, as available on the Defence of Defence Production (DDP).

CDIIC is now in the process of sending mails to the concerned DPSU(s)/defence force(s) to intimate the selection of items from their list. Apart from this, we are also receiving several general enquiries from members as well as non-member industries including start-ups regarding the operations of the DGQA Facilitation Cell.

## CDIIC Activities

1. Start of Phase 2 partition works at CDIIC incubation facility at Hall C
2. Phase I partition work completed at CDIIC incubation facility at Hall C
3. Interaction with 5 BRD and PSG Step team for DTIS proposal for EMI/EMC facility on 03/09/2021
4. Coordination with DIO Team on 57 products identified for Indigenization
5. Compliance verification of New startups to be incubated
6. Organized 5 BRD, Indian Airforce Vendor meeting on 27 Aug 2021, 35 industries/Startup participated
7. Proposal submitted to Army Design Bureau (ADB), Details: Compendium Problem Definition Statement 2020 -Problem Statement Number 32 on 20 Aug 2021
8. CDIIC Technical Committee Meeting was conducted on 6 Aug 21 to finalize Machinery purchase.
9. CDIIC Incubated startups has successfully submitted 5 proposals to TANSEED Funds
10. 3 Startups from CDIIC has been shortlisted for DISC Open Challenge, Complete proposal has been submitted to respective IDEX Partner incubators
11. Consolidation of indigenization efforts from CDIIC—CODISSIA and Communicated same to DIO on 06/08/2021 for necessary actions
12. Machinery Purchase Discussion with CDIIC Directors & Technical Subcommittee was held on 29.07.2021

### CDIIC Directors

**Mr. M.V. Ramesh Babu**, Director,  
**Mr. V. Thirugnanam**, Director,  
**Mr. M.KarthiKeyan**, Director  
**Mr. V. Sundaram**, Addl. Director  
**Mr. R. Ramamurthy**, Addl. Director  
**Mr. E. K.Ponnuswamy**, Addl. Director  
**Mr. G. Devaraj**, Addl. Director  
**Mr. R. Sasidaran**, Addl. Directors

### Technical Sub-Committee Members

**Mr. K. Thangakrishnan**, K-Tex Automation  
**Mr. N. Rajendran**, Bestomech Industries  
**Mr. K. Ramesh**, Sri Mahaganapathy Engineering  
**Mr. K. Jeyachandran**, Kasthuri Machine Builders  
**Mr.K. Dhinesh Kumar**, Amirthalakshmi CNC

13. CDIIC - 1st Board Meeting (FY 2021 - 22) was conducted on 9th July 2021
14. TIDCO Chairman Visited CDIIC—CODISSIA on 09.08.2021 to discuss on Defence initiative taken by CODISSIA and CDIIC
15. Daily CDIIC progress Review meetings and Technical Sub-committee meetings are conducted on demand basis
16. Rear Admiral Deepak Bansal, VSM, ACNS (Air Materials), Indian Navy, Visited CDIIC on 5th July 2021 for an Interaction with Industry and Academia.

## Up Coming events

1. CDIIC new incubatee MOU exchange & DISC 5 Road Show in association with DIO has been planned on 26/09/2021
2. CDIIC coordinated Vendor Interaction program with A&EHU Indian Navy at INS Agrani on 27/09/2021



## CODISSIA Defence Innovation and Atal Incubation Centre

“Supported by Atal Innovation Mission, NITI Aayog & Defence Innovation Organisation, MOD”

**CODISSIA** | Huzur Road | Coimbatore - 641018

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