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Volume II, Issue III

CODISSIA Defence Innovation and Atal Incubation Centre

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

Special points of interest:

- Trident steps for Oxygen Need
- Requirement from 5 BRD
- Startup India Challenges
- Indigenization & Business Opportunities at CDIIC

Introduction

CDIIC – "CODISSIA Defence Innovation and Atal Incubation Centre", a not-for-rofit 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 startups 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!

CODISSIA Member Industry M/s Trident Pneumatics Pvt. Ltd., Coimbatore, steps in to meet Oxygen Needs



Union Health Minister **Dr. Harsh Vardhan** Reviewed #CoVID Management Preparedness at RML Hospital, New Delhi on 7/5/2021 (The Product supplied by M/S Trident Pneumatics Pvt Ltd. With support of DRDO)

As per the Posted On: 28 APR 2021 by PIB Delhi, DRDO to set up 500 Medical Oxygen Plants within three months under PM CARES Fund. The Medical Oxygen Plant (MOP) technology, developed by DRDO for On-Board Oxygen Generation for LCA, Tejas by DEBEL, DRDO will now help in fighting the current crisis of oxygen for COVID-19 patients. The oxygen plant is designed for a capacity of 1,000 litres per minute (LPM). The system can cater to 190 patients at a flow rate of 5 LPM and charge 195 cylinders per day. Transfer of Technology has been done to M/s Tata Advanced Systems Limited, Bengaluru and M/s Trident Pneumatics Pvt. Ltd., Coimbatore, who will be producing 380 plants for installation across various hospitals in the country. I 20 plants of 500 LPM capacity will be produced by industries working with Indian Institute of Petroleum, Dehradun, belonging to CSIR. The DRDO has initiated fabrication of 380 numbers of Medical Oxygen Plants with release of Supply Orders for 332 numbers on M/s Tata Advanced Systems Limited, Bengaluru and 48 numbers on M/s Trident Pneumatics Pvt. Ltd., Coimbatore with a target of producing I 25 plants per month under PM CARES Fund. With this it is expected that 500 Medical Oxygen Plants will be installed within three months.

Raksha Mantri Shri Rajnath Singh has appreciated DRDO for using the MOP technology to generate much needed oxygen for COVID-19 patients which will help in overcoming the present crisis. Secretary Department of Defence R&D & Chairman DRDO Dr G Satheesh Reddy has assured the support of DRDO for use of the technology by hospitals and other health agencies. Source: https://pib.gov.in/Pressreleaseshare.aspx?PRID=1715960

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CDIIC — Newsletter



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 I: 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, SQAO, 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 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.makeinindiadefence.gov.in/pages/indigenisation

DGQA FACILITATION CELL AT CODISSIA, COIMBATORE



Active participations from member firms—more than 180 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 40 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.

INDUSTRIAL FACILITY: 5 BRD, IAF TECHNICAL SPECIFICATION FOR PROCUREMENT OF MACHINES

5 BRD, IAF has plans to procure following machines for sulur facility, CODISSIA Members industries capable of supplying the following machinery may contact Kayakalp5@iaf.in for more details

SI. No.	Description & Technical Specification of Machine				
	Spot and Stitch Welding Machine				
	Rated Capacity	:	16 KVA, Max short circuit current 8000A		
01.	Voltage	:	3 Phase 415 V, 50 Hz		
	Туре	:	Water Cooled		
	Maximum Welding Thickness	:	≥ 2 + 2 mm		
	Air Plasma Cutter				
	Input Voltage	:	240 V		
02.	Output Current	:	15-30 A		
	Power Supply Type	:	Inverter IGBT		
	Capacity	:	Up to 16 mm		
				_	
	Universal Hardness Testing Machine				
	Range	:	Up to 60 Kg or more		
03.	Scale	:	Testing in all common hardness scale like Brinel, Vickers, Anoop, Rockwell etc		
00.	Test Cycle	:	Automatic and manual		
	Power Supply	:	100 V to 240 V, Single Phase, 50/60 Hz		
	Test force accuracy	:	< 1 %		
	Electric Muffle Furnace 1300°C				
	Temperature Range	:	100°C – 1300°C		
	Heating element	:	Silicon carbide rods		
	Thermocouple	:	R Type		
04.	Insulation	:	Ceramic fibber blanket		
	Temperature Controller	:	PID controller with SCR power control with digital display of temperature and emergency turn off		
	Power Supply	÷	3 Phase 440 V 50 Hz		
	Dimension	:	1000 mm X 1000 mm X 1000 mm		
	Door Size	:	600 mm X 600 mm (Minimum)		

	Computerized Engraving Machine (Laser Markin	na)			
	Power Output	: <u>9/</u>	20 Watt		
	Power consumption		< 500 Watt	1	
	Power Requirement		200 V AC/50 Hz	1	
	Working Area		200 X 200 mm or above		
	Marking Depth		0.01 – 0.5 mm , Depending on Material	1	
	Line Width		≥ 0.015 mm	1	
	Character size range		>0.2 X 0.2 mm	1	
05.	Marking Speed		10000 – 12000 mm/s	01	
	Support Format	:	Should be compatible with all computerized file format such as PLT, DFX, BMP, JPG, CAD, DWG, PCX etc		
	Laser Wave Length	:	1064 mm		
	Laser Module life	:	≥ 1,00,000 Hrs	1	
	Accuracy / Cooling medium	:	± 0.01 mm / Air cooled	1	
	Rotary Device	:	For holding up to 80 mm Dia	1	
	Any other details as considered necessary	:	Industrial computer, Servo stabilizer or UPS if required to be supplied along with the machine.		
	T			r	
	TIG Welding Plant	1	T		
	Input Voltage	:	415 Volts, 3 Phase, 50 Hz	4	
	Current Range		3-200A DC / 5-200A AC		
06.	Open Circuit Voltage	:	45 V	01	
	Operating voltage	:	0-35 V		
	Adjustment dia of tungsten electrode		0-3.2 mm		
	Frequency	:	50 Hz / 60 Hz	1	
	Gas pre flow	·	0.2 – 2 sec		
	Sand Blasting Machine			<u> </u>	
	Dimension (LXBXH) Excluding stand height	:	1000 mm X 1000 mm X 1200 mm		
	Blast Cabinet height from ground	:	1000 mm	1	
	Blast nozzle	:	Tungsten carbide	1	
	Blast nozzle orifice	:	8 mm or better		
	Dust collector fan motor	:	3 Phase, 1.5 HP		
	Collection of dust	:	Filter bags		
	Construction	:	The construction of machine has to be rugged, powerful and vibration free.	1	
07	Special Features		Blast Cabinet: Closed loop system that should allow the operator to blast and recycle the abrasive (sand) Cabinet: Cabinet shall be a closed chamber provided with transparent viewing arrangement while in operation. Side door: The size of the side door is 600 X 600 mm or more. Dust Collector: Long flexible hose and collection nozzle for effective extraction and collection of sand particles.	01	
	Standard Accessories	:	As applicable (List to be attached with Quote)		
	Compressor	:	Compressor of suitable capacity fitted with electric motor 3 HP RPM/1435 Max working pressure 12 KGf/cm ²		

The Atal Innovation Mission









ZOOTOPIA-2021 is an attempt to involve the creative minds of our nation in the exercise to bridge the gap between multi-disciplinary fields of architecture, design and zoo management. The aim is to generate awareness about conservation of wild animals, their habitat, all aspects of captive animal welfare and zoo ecosystem in the development sector. It is an open design competition which aligns with our Hon'ble Prime Minister's vision of an Atmanirbhar Bharat by promoting the indigenous talents of the country and providing the young students a national-level platform to showcase their creativity.

This program shall involve and encourage students and young creative minds from the field of architecture/ planning/ design to work innovatively towards a vision of transforming Indian zoos as per global standards and with an aim to bridge the gap between nature and mankind, by generating awareness about animal welfare and zoos.

- The challenge is open to students (in teams) from the field of architecture, design, planning, architectural conservation, interior design, urban design, museum design, etc.
- Team size may vary from 3 to a maximum of 5 members. May form a multidisciplinary team (but not mandatory). The competition is open to Indian nationals and studying in India.

Other criteria -

- Participants can be currently enrolled students of Bachelor's degree such as B.Arch. / B.Plan / B.Des. OR
- Graduated B.Arch/ B.Plan/ B.Des not before April 2019 OR presently pursuing Master's degree such as M.Arch/ M.Plan/ M.Des/ OR Master's in Environmental/ Animal and Social Science

Students registered/ currently enrolled in a course under Council of Architecture, IUDI, ITPI, ISOLA, etc.

The Ministry of Environment, Forest and Climate Change (MoEFCC) is the nodal agency in the administrative structure of the Central Government for the planning, promotion, co-ordination and overseeing the implementation of India's environmental and forestry policies and programmes.

Central Zoo Authority - a statutory body under the Ministry of Environment Forest and Climate Change, Government of India under the provision of the Wildlife (Protection) Act. The main objective of Central Zoo Authority (CZA) is to complement and strengthen the national effort in conservation of the rich biodiversity of the country, particularly the fauna. Currently there are 152 zoos and 8 rescue centres recognised by the Central Zoo Authority.

Contact details - aim[dot]challenges[at]gov[dot]in

The participants must submit the following -

- A single AI sheet in IPEG format (120 DPI Resolution). The file size must not exceed 5 MB
- I min video / process explaining the proposal in MP4 format. The file size must not exceed 20 MB. The Design Proposal must include the following required drawings (but are not limited to):
- O Concept plan that illustrates the idea behind the design idea.
- O Detailed floor plans (Ground floor and first floor) to demonstrate the interior spatial layouts and program (1:200)
- O Elevations and sections must demonstrate materials, texture and the color (1:200)
- O Three-dimensional representation explaining the design which can display the major spatial arrangement of the proposal. Specifically, a perspective of the interior space.
- O The design proposal must include interpretative strategies that can be both digital and non-digital.
- O Detailed drawings that can illustrate the innovative details and cohesive features of the design.
- O Summary: Comprising of the above (only in English language; max 500 words)
- O Estimate of proposal is required (broad costing not detailed).

I minute video must include a walkthrough or perspectives and montages which can showcase the design proposal.

 $Guidelines: \underline{https://aim.gov.in/pdf/Application_Guidelines_Zootopia_final_version.pdf} \ , \ Link \ to \ apply: \underline{http://aim.app2.aim.gov.in/zoo/documents} \ .$

#startupindia



HUL GRAND WATER SAVING CHALLENGE

In support of the Prime Minister's Swachh Bharat Mission (SBM) and the UN SDGs, Hindustan Unilever Ltd. (HUL) in association with Invest India, Startup India, and AGNIi are launching the Grand Water Saving Challenge.

Run by Toilet Board Coalition (TBC), the Challenge aims to address the need for an efficient flush system in public toilets to ensure optimum usage of water while ensuring a clean and hygienic toilet. The World Economic Forum's Healthy Cities and Communities initiative which catalyzed this Innovation Challenge aims to improve people's well-being holistically by enabling them to live longer and fuller lives in their local environments.

The Grand Water Saving Challenge is a national hackathon inviting Technologists, Inventors, and start-ups from the field of Water and Sanitation to participate. Winners of the challenge will receive a cash prize of Rs. 5 Lakh in addition to an opportunity to install and pilot the invention at a Suvidha centre, developed by HUL.

WEF's Healthy Cities and Communities Initiatives: https://www.weforum.org/projects/accelerating-consumer-health-and-well-being

HUL's Suvidha Centre: https://www.hul.co.in/news/news-and-features/2019/how-suvidha-is-making-mumbais-slums-more-habitable.html

Program Details

DETAILED ELIGIBILITY CRITERIA

- a. The challenge is open to Startups that are registered with DPIIT (Department for Promotion of Industry & Internal Trade)
- b. The Challenge is also open to academic institutions that may not be registered as above.
- c. Employees of the Company, its Affiliates, distributors, appointed agency/entity holding the Challenge, their families and immediate relatives are not eligible to participate in the program.
- d. The Challenge is valid for Indian nationals residing in India who are eighteen years of age or above and who are not legally ineligible to participate for any reason whatsoever.

PROBLEM STATEMENT – Water / SANITATION / SOCIAL IMPACT

An innovative water saving flush system designed for squat latrines to ensure clean and hygienic toilets for all

Community and public toilets remain one of the most challenging shared spaces in terms of cleanliness, hygiene, and operations and maintenance. Water supply to these is often limited and the burden of wastewater and fecal sludge management & treatment is high as well. There is a need for a better flush system that uses less water while ensuring a clean and hygienic toilet. The participants of this challenge need to design (stage I) and prototype (stage2) a flush system on a squat toilet pan (can be made from ceramic or recycled plastic) that uses no more than 2.5 liters of water to clean the pan surface of any visible fecal residues evaluated using actual or simulated human feces

Incentives

Fiscal Incentives

Ist Prize – Rs. 5,00,000; 2nd Prize – Rs. 2,50,000

Timeline

- 22 MAR, 2021— Application Start Date
- 25 MAY, 2021 Application End Date
- 15 JUL, 2021— Application Result Date

Link to registers: https://www.startupindia.gov.in/content/sih/en/ams-application/challenge.html?applicationId=6050cc03e4b03f92cbc8c95e

Startup India Seed Fund Scheme

Financial assistance to startups for proof of concept, prototype development, product trials, market entry, and commercialization

An Initiative To Spur Entrepreneurship Across India

The Need for Startup India Seed Fund Scheme

Easy availability of capital is essential for entrepreneurs at the early stages of growth of an enterprise.

Funding from angel investors and venture capital firms becomes available to startups only after the proof of concept has been provided. Similarly, banks provide loans only to asset-backed applicants.

It is essential to provide seed funding to startups with an innovative idea to conduct proof of concept trials.

Objective Of The Scheme

Startup India Seed Fund Scheme (SISFS) aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry and commercialization.

This would enable these startups to graduate to a level where they will be able to raise investments from angel investors or venture capitalists or seek loans from commercial banks or financial institutions.

How Start-up India Seed Fund Will Operate





Features Of Startup India Seed Fund Scheme

- Year-round 'Call for Applications' for Incubators and Startups
- Sector-agnostic
- No mandatory physical incubation
- PAN-India startup programme
- Startups can apply to 3 incubators simultaneously

Eligibility Criteria

For Startups

- A startup, recognized by DPIIT, incorporated not more than 2 years ago at the time of application.
- To get DPIIT-recognized, please visit https://www.startupindia.gov.in/content/sih/en/startupgov/startup-recognition-page.html
- The startup must have a business idea to develop a product or a service with a market fit, viable commercialization, and scope of scaling.
- The startup should be using technology in its core product or service, or business model, or distribution model, or methodology to solve the problem being targeted.
- Preference would be given to startups creating innovative solutions in sectors such as social impact, waste management, water management, financial inclusion, education, agriculture, food processing, biotechnology, healthcare, energy, mobility, defence, space, railways, oil and gas, textiles, etc.
- Startup should not have received more than Rs 10 lakh of monetary support under any other Central or
 State Government scheme. This does not include prize money from competitions and grand challenges, subsidized working space, founder monthly allowance, access to labs, or access to prototyping facility.
- Shareholding by Indian promoters in the startup should be at least 51% at the time of application to the incubator for the scheme, as per Companies Act, 2013 and SEBI (ICDR) Regulations, 2018.
- A startup applicant can avail seed support in the form of grant and debt/convertible debentures each once as per the guidelines of the scheme.
- Link to Apply: https://seedfund.startupindia.gov.in/about

Technology Development Fund Scheme (TDF) is a program of Ministry of Defence (MoD) executed by DRDO

Technology Development Fund (TDF) has been established to promote self-reliance in Defence Technology as a part of the **'Make in India'** initiative. It is a programme of MoD (Ministry of Defence) executed by DRDO meeting the requirements of Tri-Services, Defence Production and DRDO.

The scheme encourages participation of public/private industries especially MSMEs so as to create an eco-system for enhancing cutting edge technology capability for defence application by inculcating R&D culture in industry.

DRDO was formed in 1958 from the amalgamation of the then already functioning Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO). DRDO was then a small organisation with 10 establishments or laboratories. Over the years, it has grown multi-directionally in terms of the variety of subject disciplines, number of laboratories, achievements and stature. Today, DRDO is a network of more than 50 laboratories which are deeply engaged in developing defence technologies covering various disciplines, like aeronautics, armaments, electronics, combat vehicles, engineering systems, instrumentation, missiles, advanced computing and simulation, special materials, naval systems, life sciences, training, information systems and agriculture. Presently, the Organisation is backed by over 5000 scientists and about 25,000 other scientific, technical and supporting personnel. Several major projects for the development of missiles, armaments, light combat aircrafts, radars, electronic warfare systems etc are on hand and significant achievements have already been made in several such technologies.

Invest India:

Invest India (https://www.investindia.gov.in) is the Supporting Agency engaged by DRDO to support implementation of Technology Development Fund (TDF) Scheme.

Invest India, set up in 2009, is a non-profit venture under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India. As the **national investment promotion and facilitation agency**, Invest India focuses on sector-specific investor targeting and development of new partnerships to enable sustainable investments in India. In addition to a core team that focuses on sustainable investments, Invest India also partners with substantial investment promotion agencies and multilateral organizations. Invest India also actively works with several Indian states to build capacity as well as bring in global best practices in investment targeting, promotion and facilitation areas. Invest India also implements several key government projects/ initiatives on startups and innovation

Upcoming project: - Development of Robotic Solution for disposal of misfire ammunition (IA.18.02.04)



The drill has existed since induction of the guns system. However, over a time due to the poor quality of ammunition, confidence of the user on this drill has reduced due to increment in No of accidents.

There is a need to innovate a robotic solution which can safely dispose-off the misfired ammunition without risk to human lives.

Page 10 CDIIC — Newsletter

I. Public Limited Company, Private Limited Company, Partnership Firm, Limited Liability Partnership, One Person Company, Sole Proprietorship registered as per applicable Indian Laws.

- 2. The industry has to be owned and controlled by Indian Citizen.
- 3. The Industry with excess of 49% foreign investment will not be eligible.
- **4.**Industry shall also possess or be in the process of acquiring license/ development of products if the product/ technology under project requires license as per DIPP's licensing policy.
- 5.Company/ Organization which have been debarred/ banned/ blacklisted or the business dealings with whom have been "suspended" / "put on hold" by the Ministry of Defence will not be eligible.

6.Industry may apply in individual or Association of Persons (AOP) i.e. consortium of Indian Companies consisting of two or more than two undertaking joint and several liability.

Feasibility Studies for each project shall be carried out with the involvement of all important stakeholders (Industry, Subject Experts, Industry Associations, etc.). The aim of this study is to identify the projects, which can be undertaken.

Process:

Feasibility study includes preliminary assessment of capability of industry to undertake the project, estimated cost and time for development, estimated cost of the component bearing the technology, etc.

Formulation of Specifications

Based on the feasibility study, Qualitative and Quantitative specifications specifying the key parameters of the required technology will be drafted.

Issue of Expression of Interest (EoI) and soliciting response

Project requirement will be posted on web-portal for soliciting EoI responses through online Mode.

Eol will consist of brief technical requirement, all evaluation criteria, sub-criteria, etc including respective weight-ages accorded to each of them for assessing responses from Eol recipients.

Industry shall have the choice to respond either in their individual capacity as EoI recipients or as an AoP (i.e. Consortium) of Indian Companies/ Organization/Academia.

Selection of Development Agency

Assessment of EoI responses will be undertaken as per shared criteria. Evaluation criteria relates to the indigenous research, design and development capabilities including past experience, other relevant parameters and performance of EoI recipients as may be required. In case of AoP i.e. consortium, the assessment shall be carried out with specific reference only to the roles and responsibilities of Individual members as mentioned in their AoP Agreements.

Project Definition Document (PDD) will be issued to the selected industry (Development Agency). Development Agency shall then be required to submit Detailed Project Requirement (DPR) including Cost Estimates against the PDD. DPR shall be examined with specific reference to project milestones as described in the PDD against the evaluation criteria shared with Development Agencies.

Development Agency (ies) selected post the examination of their DPRs will be issued a Project Sanction Order along with an Agreement.

Upon signing the Agreement, the successful applicant will be issued a grant letter.

Funding process:

Link for More details: https://tdf.drdo.gov.in/funding_details/index/35

- 1. The funding will be through provision of grants to Industry
- 2. The project cost up to INR 10 Cr will be considered for funding subject to maximum of 90% of the total project cost in general.
- 3.Up to 100% funding may be considered on case to case basis.
- 4. Industry may work in collaboration with academia or research institutions.
- 5. The work involvement of academia cannot exceed 40% of the total projects cost.
- **6.**The funding is linked with Milestones.
- 7. Fund will be released either advance against the bank guarantee of the same amount as collateral or reimbursement basis on completion of Milestone.
- 8. Subsequent instalments will be release on successful completion of Milestone.

Statement of Problem: https://tdf.drdo.gov.in/funding_details/download_document/102



IDEX

An ecosystem to foster innovation & technology development in. Defence and Aerospace by engaging innovators & entrepreneurs to deliver technologically advanced solutions for modernizing Indian Military.

iDEX will engage Industries including MSMEs, start-ups, individual innovators, R& D institutes and academia and provide them grants/funding and other support to carry out R&D development which has good potential for future adoption for Indian defence and aerospace needs.

One of the first aims of India as a nation since Independence has been to achieve self - reliance in the field of defence and defence production. India is the world's largest defence equipment importer and is expected to spend around USD 220 Billion in the coming decade to modernize its armed forces. In the recent years, the government of India has initiated various schemes like Make In India, Startup India, Atal Innovation Mission (AIM)4, etc. to encourage innovation and entrepreneurship in the Indian commercial ecosystem.

This has also made increasingly evident that achieving the goal of self - sufficiency for the Indian military will require a means to incorporate innovation rapidly in the weapons procurement process.

Ministry of Defence aims to create an ecosystem which fosters innovation and encourages technology development in Defence by engaging R&D institutes, academia, industries, start- ups and even individual innovators.

OPEN CHALLENGE

India is witnessing the rise of the next generation of Engineers, capable of developing technologies in autonomous systems, intelligent machines, advanced materials, predictive algorithms, or even rocket engines, for the most sophisticated applications in defence and aerospace domains. Through the iDEX Open Challenge, we are casting the net wider, creating opportunities for innovators to propose ways for harnessing their technology capabilities to strengthen our nation's military superiority. If you think you have an idea, technology or a product that has use in defence and aerospace, then iDEX Open Challenge is the right opportunity for you to grab. Innovators, Startups and MSMEs can now engage directly with the military through the iDEX Open Challenge to showcase their technologies, facilitated by DIO and Partner Incubators. Selected applicants are offered a chance to pitch to the iDEX grand jury and qualify for grants and investments, organised periodically throughout the year.

In case if you find any problem in submitting the application form, kindly write us on email id idexdio@ddpmod.gov.i

Links to DISC open challenge: https://idex.gov.in/disc-category/5

To Apply: https://idex.gov.in/form/application-form-open-challenge

CDIIC — Newsletter

CDIIC—DIO DEFENCE INNOVATION HUB (DIH) - OPPORTUNITES

CDIIC is closely working with Defence Innovation Organization (DIO) and all Defence Public Sector Undertakings (DPSUs) to facilitate the Atmanirbhar bharat/ Make in India initiative by the government. CDIIC is now receiving latest indigenization requirements from DPSUs and circulating it with the regional industries. The CDIIC team requests firms to review the requirements listed below and communicate the selected products to us (info@cdiic.in) at the earliest.

Indigenization Tenders

S .No	e-Published Date	Closing Date	Opening Date	Title and Ref.No./Tender ID	Organisation Chain
1.	05-May-2021 02:00 PM	14-Jun-2021 12:00 PM	15-Jun-2021 12:15 PM	[NIT FOR INDIGENOUS DEVEL- OPMENT FOR LDP] [BRD/ EOI/03/21-22] [2021_IAF_440560_1]	Indian Air Force HQ MC NAGPUR - IAF BRD AF STN PUNE - IAF
2.	05-May-2021 01:00 PM	14-Jun-2021 12:00 PM	15-Jun-2021 12:20 PM	[EOI FOR INDIGENOUS DEVEL- OPMENT FOR HRDF AND TA- CAN] [9BRD/EOI/02/2021-22] [2021_IAF_440544_1]	Indian Air Force HQ MC NAGPUR - IAF BRD AF STN PUNE - IAF
3.	03-May-2021 03:00 PM	17-May-2021 10:00 AM	18-May-2021 10:30 AM	[Online Invitation of Bids for Tx-Rx Unit with indigenous amplifier for SSR] [CABS/22ATT013/21-22] [2021_DRDO_440000_1]	Department of Defence Research and Develop- ment Defence Re- search and Develop- ment Organisa- tion DFMM Office of DG(Aero) CABS
4.	30-Apr-2021 03:15 PM	19-May-2021 10:00 AM	20-May-2021 10:30 AM	[PROCUREMNT OFINDIGENOUS SPARES] [20-21/HQMC/SOR/ DPM09/CPI/1201] [2021_IAF_439558_1]	Indian Air Force HQ MC NAGPUR - IAF ED AF STN KANPUR - IAF
5.	30-Apr-2021 03:00 PM	19-May-2021 10:00 AM	20-May-2021 10:30 AM	[PROCUREMENT OF INDIGE- NOUS SPARES] [20-21/HQMC/ SOR/DPM09/CPI/1102] [2021_IAF_439539_1]	Indian Air Force HQ MC NAGPUR - IAF ED AF STN KANPUR - IAF
6.	27-Apr-2021 12:00 PM	14-May-2021 06:00 PM	07-Jun-2021 10:00 AM	[INDIGENISATION OF GROUND SUPPORT EQUIPMENT VIZ PNEUMATIC TEST EQUIPMENT AND LOADING GEAR FOR CLUB MISSILE] [439/KL/03/20-21] [2021_NAVY_438628_1]	IHQ of MOD (Navy) WESTERN NAVAL COMMAND - NAVY SO (KARANJA) - NAVY TUNIR - NAVY
7.	26-Apr-2021 05:45 PM	08-May-2021 06:00 PM	10-May-2021 12:00 PM	[REPAIRS REPLACEMENT TO CAR INDIGO BA NO 09B 103790A] [3005/Q/04/E3] [2021_MES_438629_1]	E-IN-C BRANCH - MILI- TARY ENGINEER SER- VICES ADG (PROJECTS) CHENNAI AND CE (FY) HYDERA- BAD - MES GE (I) FY AVADI - MES
8.	21-Apr-2021 09:00 AM	19-May-2021 12:00 PM	21-May-2021 01:00 PM	[INDIGENOUS DEVELOPMENT of Mobile Portable Cabin to Accommodate test Benches for testing R-73 E Missile.] [BRD/ INDG/02/2021-22] [2021_IAF_437478_1]	Indian Air Force HQ MC NAGPUR - IAF BRD AF STN PUNE - IAF

Tender on Forging requirements

S.No	e-Published Date	Closing Date	Opening Date	Title and Ref.No./Tender ID	Organisation Chain
1.	06-May-2021 05:00 PM	02-Jun-2021 10:00 AM	03-Jun-2021 10:30 AM	[ALUMINUM ALLOY FOR- GINGS] [DRDL/23/60P/20/061 4/CMM-III] [2021_DRDO_440942_1]	Department of Defence Research and Develop- ment Defence Re- search and Develop- ment Organisa- tion DFMM Office of DG (MSS) DRDL
2.	05-May-2021 01:00 PM	20-May-2021 10:00 AM	21-May-2021 10:30 AM	[RAW MATERIALS (RING FOR- GINGS)] [RCI/CMM/TPD/ LIM/9000003587] [2021_DRDO_440535_1]	Department of Defence Research and Develop- ment Defence Re- search and Develop- ment Organisa- tion DFMM Office of DG (MSS) RCI
3.	18-Mar-2021 02:00 PM	17-May-2021 10:00 AM	18-May-2021 10:30 AM	[Development and supply of bulk head frame part 2 forg- ing] [21ATT264/DMRL/G-I] [2021_DRDO_431493_1]	Department of Defence Research and Develop- ment Defence Re- search and Develop- ment Organisa- tion DFMM Office of DG (NS and M) DMRL
4.	18-Mar-2021 09:00 AM	17-May-2021 10:00 AM	18-May-2021 10:30 AM	[Development and supply of bulk head frame part 1 forg- ing] [21ATT263/DMRL/G-1] [2021_DRDO_431376_1]	Department of Defence Research and Develop- ment Defence Re- search and Develop- ment Organisa- tion DFMM Office of DG (NS and M) DMRL

Tender on Automation requirements

S.No	e-Published Date	Closing Date	Opening Date	Title and Ref.No./Tender ID	Organisation Chain
1.	15-Apr-2021 04:00 PM	15-Jun-2021 12:00 PM	16-Jun-2021 01:00 PM	[INDIGENOUS DEVELOPMENT (INTEGRATION AND AUTOMA- TION) AND SUPPLY I-MATE TESTER-III FOR SU-30 MKI] [9BRD/INDG/01/2021-22] [2021_IAF_436407_1]	Indian Air Force HQ MC NAGPUR - IAF BRD AF STN PUNE - IAF
2.	28-Nov-2020 05:25 PM	20-May-2021 06:00 PM	22-May-2021 09:00 AM	[AUGMENTATION AND AUTOMA- TION SCADA FOR FMCC HARRIS BK AND GTE PUMP HOUSE AND PROVN OF SCADA TO AUGMENT WATER SUP PUMPING AND DISTR SYS UNDER GE SOUTH BANGA- LORE] [88524/E8] [2020_MES_399311_1]	E-IN-C BRANCH - MILI- TARY ENGINEER SER- VICES CE SC AND CE CHENNAI ZONE - MES

Tender on CNC requirements

S. No	e- Pub- lished Date	Clos- ing Date	Opening Date	Title and Ref.No./Tender ID	Organisation Chain
1.	06-May- 2021 05:00 PM	26-May- 2021 10:00 AM	27-May-2021 10:30 AM	[0.25 mm Dia. Brass EDM wire for CNC Wire cut machine] [ARDE/22ATT008/CMS-II][2021_DRDO_440843_1]	Department of Defence Research and Develop- ment Defence Research and Development Organi- sation DFMM Office of DG (ACE) ARDE
2.	04-May- 2021 06:00 PM	07-Jun- 2021 10:00 AM	08-Jun-2021 10:30 AM	[3D CNC Co-ordinate Measuring Machine] [22ATT030/DMRL/G-I][2021_DRDO_440366_1]	Department of Defence Research and Develop- ment Defence Research and Development Organi- sation DFMM Office of DG (NS and M) DMRL
3.	30-Apr- 2021 04:00 PM	17-May- 2021 10:00 AM	18-May-2021 10:30 AM	[EXTERNAL FABRICATION CHARGES FOR CNC MILLING OF COMPONENTS FOR PROJECT VSHORADS (FOR ONE YEAR).] [DRDL/25/74R/20/0581/CMM - IV] [2021_DRDO_439513_1]	Department of Defence Research and Develop- ment Defence Research and Development Organi- sation DFMM Office of DG (MSS) DRDL
4.	30-Apr- 2021 04:00 PM	17-May- 2021 10:00 AM	18-May-2021 10:30 AM	[EXTERNAL FABRICATION CHARGES FOR CNC TURNING OF COMPONENTS FOR PROJECT VSHORADS (FOR ONE YEAR).] [DRDL/25/74R/20/0580/CMM- IV] [2021_DRDO_439498_1]	Department of Defence Research and Develop- ment Defence Research and Development Organi- sation DFMM Office of DG (MSS) DRDL
5.	30-Apr- 2021 01:00 PM	27-May- 2021 12:30 PM	28-May-2021 01:00 PM	[Annual Maintenance Contract for CNC Milling Machines and CNC Turn Mill Centres for 2 years] [GTRE/MMG/BMR2/2033/21] [2021_DRDO_439442_1]	Department of Defence Research and Develop- ment Defence Research and Development Organi- sation DFMM Office of DG(Aero) GTRE
6.	23-Apr- 2021 04:00 PM	13-May- 2021 10:00 AM	14-May-2021 10:00 AM	[RFB/GFR/CNCPLASMA] [RFB/GFR/CNCPLASMA] [2021_NAVY_437954_1]	IHQ of MOD (Navy) WESTERN NAVAL COM- MAND - NAVY HQKNA - NAVY NSRY (KARWAR) - NAVY
7.	16-Apr- 2021 01:00 PM	12-May- 2021 12:30 PM	13-May-2021 01:00 PM	[Annual Maintenance Contract for CNC centres for 2 years] [GTRE/MMG/BMR2/2011/21][2021_DRDO_436606_1]	Department of Defence Research and Develop- ment Defence Research and Development Organi- sation DFMM Office of DG(Aero) GTRE

Trident pneumatics Pvt. Ltd in News

In an exclusive interview with simplicity, Nagrajan, MD, Trident pneumatics Pvt. Ltd., Coimbatore said, that the company has been operating in somayampalayam in Coimbatore district for the last 32 years. We manufacture the air filtration plant which is a purifying machine that removes possible toxins form the smoke emanating from factories. these are compressed air purifiers and the machines we manufacture are being used for a variety of important tasks. incusing purifying the air supplied to the ventilators, brakes on train engines and etc. we not only manufacture for domestic use but also export to countries like USA, Canada, Malaysia, Thailand and other few countries

A medical oxygen plant is a machine that produces oxygen by removing nitrogen from the air. the technology was developed by the defence Research and Development Organisation and is being used to deliver oxygen to pilots in tejas fighter aircrafts. With the demand for oxygen continuously increasing the country at present is planning to use these machines instead of oxygen cylinder, the machine can be used in large hospitals with 300 to 400 bed facilities as an alternative to oxygen cylinders to make the oxygen available to more patients, with an uninterrupted supply, the task of making these large machines that can run on electricity has been granted the work order to manufacture 48 machines which will help people in a dire situations and there in no word to describe that feeling of being able to help those in need.

Source: https://simplicity.in/coimbatore/english/news/82203/Coimbatore-based-Trident-Pneumatics-granted-order-by-the-Centre-for-manufacturing-medical-oxygen-plant-machines-to-provide-uninterrupted-oxygen-supply-for-Covid-19-

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Links of other News Publication

- https://www.hindustantimes.com/india-news/drdo-to-install-medical-oxygen-plants-in-delhi-equipment-arrives-at-aiims-rml-101620144401721.html
- https://simplicity.in/coimbatore/english/news/82203/
 Coimbatore-based-Trident-Pneumatics-granted-order-by-the-Centre-for-manufacturing-medical-oxygen-plant-machines-to-provide-uninterrupted-oxygen-supply-for-Covid-19-patients
- http://www.uniindia.com/drdo-oxygen-plants-at-aiims-rmlhospital-in-delhi-likely-to-get-functional-today/india/ news/238889.html
- https://www.indiatvnews.com/news/india/drdo-set-up-fiveoxygen-plants-delhi-weekend-coronavirus-pandemic-702479
- http://ddnews.gov.in/national/drdo-install-five-medical-oxygen-plants-delhi-haryana
- https://theprint.in/defence/tejas-aircraft-tech-comes-in-aid-of--oxygen-starved-indian-cities-this-is-how-it-works/647571/

Coimbatore firms step in to meet oxygen needs

M. SOUNDARIYA PREETHA
COIMBATORE

With the Government sanctioning procurement of portable oxygen concentrators and setting up of medical oxygen plants, with a technology developed by the Defence Research and Development Organisation, some of the companies in Coimbatore are expected to cater to these orders.

Trident Pneumatics, which is one of the companies to which DRDO has transferred the medical oxygen plant technology, will make 48 plants to be installed across the country. According to its Managing Director, K.S. Natarajan, the company had already received the technology and had installed 70 machines. It will now instal 48 plants. "There are a lot of challenges, but it will be done" he said.

According to an official

press release on Wednesday, Tata Advanced Systems, Bengaluru, and Trident Pneumatics, Coimbatore will produce 380 plants for installation at, hospitals across the country under the PM CARES Fund.

Another release said that the Prime Minister had sanctioned procurement of one lakh portable oxygen concentrators from the PM CARES Fund.

A. Prabhakharan, Chief Executive Officer of Ozone Engineers, said it was an ozone generator manufacturer and would now cater to the healthcare sector. It would supply oxygen plants to Maharashtra government soon. "We started making oxygen concentrators too and supply these now to the healthcare sector." One of the raw materials is procured from Korea or the U.S. and there is shortage in availability; he said.

CDIIC — Newsletter

IMPORTANT LINKS

Department of Defence Production— Facilities Available For Private Defence Industries:

Link: https://www.ddpmod.gov.in/test-facilities-available-private-defence-industries

Defence e Procurement Portal:

The eProcurement System of Ministry of Defence enables the Tenderers to download the Tender Schedule free of cost and then submit the bids online through this portal.

Link: https://defproc.gov.in/nicgep/app

Defence Export Promotion Cell:

Export Promotion cell under DDP, MoD has been formed to co-ordinate and follow-up on export related action including enquiries received from various countries and facilitate private sector and public sector companies for export promotion.

The functions for the Export Promotion Cell setup under DDP are as under:

- a) Coordinate and follow-up export activities including enquiries received from various countries.
- b) Regular interaction/ Coordination with the Defence Attaches (DA) of the potential buyer countries.
- c) Establish linkages between export promotion activities and exhibition.
- d) interaction with potential buyer countries and setting up meetings with the industry and follow-up after the exhibition.
- e) Facilitating development of promotional materials, audio-visual films, and timely dissemination of information to respective countries.
- f) Facilitate coordination between Private Industry and MOD for export promotion.
- g) Interaction with different chambers of commerce like FICCI, ASSOCHAM etc for export potential opportunities.

Link: https://www.defenceexim.gov.in/

CDIIC Activities

- 1. Purchase committee meeting (virtual) was held on 26.04.2021 from 05.00 to 06.00 pm
- 2. Steering committee / Sub committee meeting (virtual) was held on 21.04.2021 from 2.00pm
- 3. CDIIC Progress meeting (virtual) held with directors every working day at 12.00pm
- 4. Gedee Weiler Turn Mill Centre inspection meeting held on 22.04.2021
- 5. Tender notification for partition works released in CDIIC website on 29.04.2021
- 6. Incubatee funding investor meet with Dvizira and Garudan Startup was held on 09.04.2021
- 7. INS AGRANI visit on 09.04.2021 for new indigenization requirements
- 8. Mentoring session for Incubated startups

CDIIC has coordinated VIRTUAL Meeting with ADB (Army Design Bureau) Team on 23/04/2021

CDIIC has Identified a potential hardware testing company—Kalycito from Coimbatore, The company has proposed solution for problem definition statement 35 – "High Assurance Testing For Hardware" Stated in the ADB's CPDS-2020 Problem statement. The proposal is now under review with ADB, Indian Army.



CODISSIA Defence Innovation and Atal Incubation Centre

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

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