# Ministry of Defence (Department of Defence Production)

#### **Draft Notification**

New Delhi, the Aug, 2019
--------------------------

# Subject: 'Defence Testing Infrastructure Scheme' to Provide for Test Facilities in Defence and Aerospace Sectors

- 1. Under "Make in India", Government has accorded high priority to development of manufacturing base of Defence and Aerospace sectors in the country to reduce the dependence on imports. Towards this, Government has announced establishment of two Defence Industrial Corridors (DICs) in Uttar Pradesh and Tamil Nadu. Several initiatives have been taken to promote private sector participation in Defence industry i.e., simplification of Licence procedures, export permissions, Level playing field vis-à-vis Public Sector Undertakings, simplified Make-II Procedure, setting up of Defence investor cell and Defence innovation organization etc.
- 2. One of the main impediments for domestic defence production is lack of easily accessible state-of-the-art testing infrastructure. Defence Testing Infrastructure is often capital intensive requiring continuous upgradation and it is not economically viable for individual defence industrial units to set up in-house testing facilities.
- 3. To address the above mentioned critical gap DDP, MoD hereby notifies the Defence Testing Infrastructure Scheme (DTIS) with associated guidelines for its implementation.

# DEFENCE TESTING INFRASTRUCTURE SCHEME (DTIS) GUIDELINES

#### 1. Context

- 1.1 Under "Make in India", the Government has accorded high priority to development of manufacturing base of Defence and Aerospace sectors in the country to reduce dependence on imports. Towards this, Government has announced establishment of Defence Industrial Corridors (DICs) in Uttar Pradesh and Tamil Nadu.
- 1.2 One of the main impediments for domestic defence production is lack of easily accessible state-of-the-art testing infrastructure. Defence Testing Infrastructure is often capital intensive requiring continuous upgradation and it is not economically viable for individual defence industrial units to set up in-house testing facilities. The Scheme aims at setting up of Greenfield Defence Testing Infrastructure (required for defence and aerospace related production), as a common facility under private sector with Government assistance mainly in DICs.

#### 2. Objective

The objective of the proposed Scheme is to promote indigenous defence production, with special focus on participation of MSMEs and Start Ups by bridging gaps in defence testing infrastructure in the country. Setting up of Defence Testing Infrastructure will provide easy access and thus meet the testing needs of the domestic defence industry.

#### 3. **Scope**

3.1 The Scheme would provide financial assistance to private sector for setting up Testing and Certification facilities for manufacturers of defence equipment/systems. The

financial assistance will be from Central Government in the form of Grant-in-Aid for setting up of Greenfield Defence Testing Infrastructures (DTIs) in the following verticals:-

- (a) Testing facilities for Drones / Unmanned Aerial Vehicles (UAVs)/Remotely Piloted Aircrafts (RPAs)
- (b) EMI/EMC Testing for Radars, UAVs/RPAs and Electronic/Telecom equipment
- (c) Rubber Testing for Defence and Aerospace Sectors
- (d) Radiated Noise and Shock Testing
- (e) Electronic Warfare
- (f) Software Testing
- (g) Specialised Test Driving Tracks
- (h) Ship Motion Testing
- (i) Test Facilities for Aerospace Industry
- (j) Ballistic and Blast Testing Facilities
- (k) Environmental Test Facilities
- (I) Any other area in Defence manufacturing lacking testing infrastructure
- 3.2 The DICs in UP and TN may be given preference for setting up of DTIs, being the focus areas. These corridors have been selected as they are expected to support large number of industries involved in defence and aerospace manufacturing in the future. However, the Scheme is not limited to setting up DTIs in the DICs only.

#### 4. Eligible Agencies

- 4.1 Each DTI will be setup through a Special Purpose Vehicle (SPV), hereinafter referred to as the Implementation Agency, which may be promoted/constituted by private entities(Industry, Industry association, R&D/Academic institution etc).
- 4.2 The Implementation Agency under the Scheme shall be a Section 8 company registered under the Companies Act, 2013 for this purpose.

- 4.3 Only private entities registered in India will qualify for forming the Implementation Agency.
- 4.4 The Central Govt assistance for setting up DTIs will be in the form of Grant-in-Aid and will be limited to sum total of Rs 400 Cr. Assistance for individual DTI under the Scheme shall not exceed 75% of the project cost. The balance of the project cost will be borne by the Implementation Agency.
- 4.5 At least 7 private entities may constitute the Implementation Agency. However, contribution from any of the Implementation Agency constituents cannot exceed 25% of the share capital of the Implementation Agency.
- 4.6 All the constituents of SPV (Implementation Agency) shall have positive net worth and should not have been black listed by Central or State Government.
- 4.7 At least 5 of the 7 constituents of SPV (Implementation Agency) shall be in existence for more than three years.
- 4.8 The SPV (Implementation Agency) shall be responsible for obtaining statutory clearances required for testing of weapons and ammunition.

# 5. Role of the Implementation Agency

- 5.1 The Implementation Agency shall be responsible for setting up of DTI under the Scheme. The Implementation Agency shall be also responsible for operation and maintenance of assets created under the Scheme, in a self-sustainable manner, by way of collecting user charges.
- 5.2 Cost of land is not proposed to be funded under the Scheme. Land for DTIs would be arranged by the Implementation Agency. In case the Implementation Agency is not owner of the land, they should have lease for the land for <u>at least 30 years</u> from the date

of response to RFP. Land availability with Implementation Agency shall be essential condition for consideration of applicant's response.

- 5.3 The Implementation Agency will obtain all necessary statutory approval/clearances including those for environmental compliance and quality standards as applicable.
- 5.4 The respondent shall indicate the manner and modalities for operation and maintenance of the testing facility after its creation in its proposals for consideration of assistance, as a part of the DPR submitted in response to RFP issued by MoD/DDP.
- 5.5 The Implementation Agency shall be responsible for ensuring that procurement of all items, equipment and services, including works, are through a transparent and competitive bidding process. Appropriate performance guarantees should be built in the agreement to ensure timely and good quality delivery of goods and services procured.
- The Implementation Agency shall execute an undertaking for proper utilization of the grant and abide by the target dates, as may be specified in the conditions of the Grant. It shall not divert the Grant for any other purpose. In the event of failure to comply with the conditions or breach of the undertaking, it shall be liable to refund to President of India the entire amount of the Grant with interest @10% per annum thereon. The undertaking is to be submitted by the Implementation Agency in a format as specified in RFP.
- 5.7 The Implementation Agency shall also execute an undertaking that the said project is not being funded under any other scheme of the Government of India/State Government. The undertaking is to be submitted by the Implementation Agency in the prescribed format as may be specified in the RFP.

#### 6. Extent of Financial Assistance

- 6.1 The DTI Screening Committee (DTISC) constituted as per **Annexure** 'A' for approval of the projects will be the final authority to take decision on the proposals submitted by the Implementation Agency.
- 6.2 The total Central Govt assistance for setting up 06 to 08 DTIs will be in the form of Grant-in-Aid of Rs 400 Cr. The test facilities planned to be set up can be divided into three types, namely, Small, Medium and Large. The estimated cost of each type of facility is given in the table below:-

SI No	Type	<b>Estimated Cost</b>	Nos
(a)	Small	0<20 Cr	03
(b)	Medium	20-50 Cr	03
(c)	Large	>50 Cr	02

The number of test facilities under each type may be varied, if need arises.

- 6.3 Assistance for individual DTI under the Scheme shall not exceed 75% of the project cost. The remaining project cost will be borne by the Implementation Agency.
- 6.4 For the purpose of calculating the extent of contribution of the Implementation Agency under the Scheme, the cost of land or such other component as may be specified in EoI or RFP shall not be included in the project cost. The broad norms for funding of DTIs shall be as follows:-

(a) Land - to be provided by SPV

(b) Capex for building - 20% of Project Cost

(c) Test Equipment, Installation, Training - 80% of Project Cost

6.5 No recurring expenditure or any establishment cost will be funded by Central Government under the Scheme.

6.6 Studies related to identification of defence testing infrastructure gaps and mapping of facilities, impact study etc may be done by engaging professional help after obtaining approval of DTISC.

#### 7. Submission of Proposal

- 7.1 <u>Expression of Interest</u>. Expression of Interest (EoI) may be issued by DDP/DGQA to seek preliminary response from private entities willing to set up defence testing infrastructure. The EoI shall clearly indicate the Preliminary Qualitative Requirements (PQRs) of the testing infrastructure intended to be set up.
- Submission of Response to EOI. The proposal in response to EoI is to be meticulously formulated after conducting a detailed study based on the Preliminary Qualitative Requirements (PQRs). Measurable outcomes should be indicated in the proposal, e.g. expected reduction in testing costs and time if the testing infrastructure is set up. The Proposal in the prescribed format may be filed by a private entity intending to form an SPV. The format of the Preliminary Proposal will be as specified in the EoI.
- 7.3 <u>Request For Proposal</u>. The Staff Qualitative Requirements (SQRs) may be refined after receipt of responses to EoI. For selection of Implementation Agency for execution of each DTI project, Request For Proposal (RFP) may be issued to the shortlisted participants of the EoI who meet the specified criteria.
- 7.4 <u>Submission of Response to RFP</u>. The Final Proposal, in the prescribed format, alongwith Detailed Project Report (DPR) and associated documents shall be submitted by the respondents in response to the RFP. The format of the Final Proposal will be specified in the RFP. The respondents will prepare the DPR (as prescribed in RFP), covering the technical, financial and implementation aspects, timelines for completion of the project including those for achieving financial closure, and the monitoring mechanism proposed to be put in place. He shall also submit details of his associate with whom he intends to form SPV. Respondents would be required to form an

SPV within a time specified in RFP only in case he is selected under the scheme for setting Defence Testing Infrastructure. The format for DPR shall be such as may be prescribed in the RFP.

- 7.5 The proposal shall clearly indicate details related to the mode of Operation and Maintenance of the asset after its creation. It should also suggest the mechanism for operation and maintenance of the infrastructure proposed to be created on sustained basis by levying user charges/fees, etc.
- 7.6 The project proposal must be complete in all respects including the documents to be submitted as may be prescribed in RFP.

#### 8. Process of Scrutiny, Selection Criteria and Approval

- 8.1 The project proposals alongwith DPR submitted by the respondent in response to RFP shall be technically and financially evaluated by an independent agency as per evaluation criteria given in RFP. The evaluation will include confirming compliance to technical criteria, availability of land and financial viability etc. The Respondent requesting least Grant-in-Aid etc. will be selected.
- 8.2 The proposals of the respondents alongwith Project Monitoring Committee (PMC) evaluation report will be considered by the DTISC. While appraising the project, the PMC would look into justification, including the intended benefit in terms of addressing the specific bottleneck in defence testing infrastructure, and make recommendation to DTISC. The respondent shall provide details of the financing tie-ups for the projects which will be considered before approval of the project.
- 8.3 Immediately after registration of SPV (Implementing Agency), the respondent shall inform DDP/DGQA about names of SPV constituents share holding pattern of the SPV and whether they qualify the eligibility criteria. Hereafter, all correspondence shall be made by Government with SPV (Implementing Agency).

8.4 Respondent will be liable to forfeiture of earnest money deposit in case of non formation of SPV.

#### 9. Release of Funds

- 9.1 Disbursement shall be subject to the Implementation Agency achieving financial closure.
- 9.2 The funds shall ordinarily be released to the Implementation Agency for an approved project in installments as approved by the DTISC. However, the number of installments may be limited to 5 installments for each project.
- 9.3 The Implementation Agency shall submit a bond to be executed regarding utilisation of funds in the format as may be specified in RFP.
- 9.4 The Implementation Agency will submit a pre-receipt bill for the funds to be disbursed to it alongwith certificate that it has not indulged in corrupt practices in the format as may be specified in the RFP.
- 9.5 The funds will be kept in a separate Escrow Account of the Implementation Agency.
- 9.6 The first installment will be released against Bank Guarantee after approval for the project is accorded by the DTISC. The Implementation Agency shall submit the Utilisation Certificate (UC) for the amounts utilised as per format as may be specified in the RFP.
- 9.7 Release of further installments shall be subject to furnishing of complete Utilisation Certificate, Project Consultant (PC) report and the proof of matching contribution of the funds having been invested by the Implementation Agency from its own or other sources on pari-passu basis as per the approved cost sharing. Disbursing Advance Payment of subsequent installments may be done after recommendation of the DTISC and against submission of matching Bank Guarantee by the Implementation Agency.

9.8 Certification of the physical and financial progress by the PCwould be a prerequisite for release of further installments.

#### 10. **Evaluation and Monitoring**

- 10.1 The DTISC shall periodically review progress of the approved projects in the Scheme and will take necessary steps to ensure achievement of objectives of the Scheme.
- 10.2 <u>Project Monitoring Committee</u>. A Project Monitoring Committee (PMC) shall be constituted by MoD/DDP and it shall be responsible for timely and proper implementation of each DTI Project without time and cost overruns. The composition of the PMC is given at **Annexure 'A'**.
- 10.3 The PMC shall meet once in every quarter to review the progress report submitted by the PMA in a format as may be prescribed.
- 10.4 **Project Consultant (PC)**. Project monitoring shall be done by DDP/DGQA. A suitable Professional Consultant (PC) may be engaged to assist DDP/DGQA in technical and financial appraisal of the project. The PC will appraise the DPR submitted by the Implementation Agency with respect to technical feasibility, financial viability and optimal utilization of resources. The PC will undertake periodic monitoring of the projects including their physical progress, quality of execution of work, procurement of items/equipment and adherence to timelines, and submit reports to the Project Monitoring Committee (PMC).
- 10.5 The Implementation Agency would be required to maintain subsidiary accounts of the Government Grant and furnish to the PC a set of audited statement of accounts as per Companies Act. These audited statement of accounts shall be furnished after utilization of the Grant-in-Aid or whenever called for. The requirement for submission of the audited accounts/ statements shall be as specified in the RFP.

#### 11. Administrative Expenses

11.1 The administrative expenses of DDP/DGQA connected with the implementation of each DTI project including hiring of PC are not to exceed 3% of the funds available under the Scheme.

#### 12. Assets

- 12.1 The assets created by the Implementation Agency shall be owned by it after completion of the DTI project.
- 12.2 The assets acquired/created by the Implementation Agency out of government assistance under the Scheme shall not be disposed, encumbered or utilized for purposes other than those for which funds have been released.
- 12.3 A register of permanent and semi-permanent assets acquired wholly or partly out of the funds provided by the Central Govt under the Scheme should be maintained in the Form GFR 21.
- 12.4 In case of cancellation of any DTI project at any point of time, all assets and any unutilized grant shall vest with the Government of India.

#### 13. **Accreditation**

13.1 The Implementation Agency will mandatorily obtain certification/ accreditation from appropriate National/International Agencies.

#### 14. **Operation and Maintenance of Assets**

14.1 The Implementation Agency shall be responsible for Operation & Maintenance of assets created under the Scheme by way of collecting user charges.

14.2 The Implementation Agency shall ensure that the services at the facilities created under the Scheme are extended to the users on pay and use basis without discrimination.

#### 15. Recall of the Central Grant

15.1 The Government retains the right to curtail/recall the Central Grant alongwith applicable penal interest in case of unsatisfactory use of the Grant including compromise with the quality of work envisaged, or partial/incomplete implementation of the project.

#### 16. **Debarment**

- 16.1 The Implementation Agency or any of its constituents shall be debarred if:-
  - (a) It has been convicted of an offence under the Prevention of Corruption Act, 1988
  - (b) It has been convicted for an offence The Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
  - (c) Proceedings against any its constituents are running under Insolvency and Bankruptcy code (IBC).
  - (d) The constituents of SPV (Implementation Agency) are black listed by Government of India/ State Government.
- 16.2 The Implementation Agency or any of its constituents debarred under any of the sub-sections mentioned above or any successor of the Implementation Agency/its constituents shall not be eligible to participate in a procurement process of any procuring entity for a period not exceeding three years commencing from the date of debarment.

17. The Department of Defence Production may issue directions/clarification from time
to time for smooth implementation of the Scheme.

## **Composition of Monitoring Committees/Agencies**

## <u>Defence Testing Infrastructure Screening Committee(DTISC)</u>

1. Se	ecretary, DP, MoD	Chairman
2. Se	ecretary (Def Fin)	Member
3. Ac	ldl Secy (DP)	Member
4. Re	ep State Gov (TN & UP)	Member
5. Jo	int Secretary (NS)	Member
6. Jo	int Secretary (DIP)	Member
7. DO	GQA	Member
8. DO	GAQA	Member
9. AE	OGQA(WP)	Member
10. R€	ep Niti Aayog	Member
11. Ca	aptain QA	Member Secy

12. Any other member Co-opted by the Chairman, DTISC

# **Project Monitoring Committee (PMC)**

1.	Addl DGQA (WP)	Chairman
2.	Director DIP, DDP	Member
3.	Rep MoD(Fin)	Member
4.	Director from Min of MSME	Member
5.	Director DGAQA	Member
6.	Rep Niti Aayog	Member
7.	Rep SIDM	Member
8.	Rep Project Consultant (PC)	Member
9.	Capt QA	Member Secy
10. Any other member Co-opted by the Chairman, PMC		

## **Project Consultant (PC)**

Independent Project Consultant (PC)hired by DDP/DGQA for appraisal of proposals submitted by Implementation Agency and progress monitoring.

## EXPRESSION OF INTEREST 12575/DGQA/DTIS-EOI-1/2019-20

# INVITATION FOR EXPRESSION OF INTEREST FOR SETTING UP TESTING FACILITIES FOR DRONES UNDER DEFENCE TESTING INFRASTRUCTURE SCHEME

#### **Advertisement / Invitation for Expression of Interest**

- 1. Department of Defence Production (DDP)/DGQA invites Expression of Interests (EOIs) from reputed private entities (hereafter referred as 'Agency/Agencies') for setting up Testing Facilities for Drones under the Defence Testing Infrastructure Scheme (DTIS) of Government of India, Ministry of Defence (Department of Defence Production). The Notification and Guidelines for the Scheme have been published and are available on the websites "https://ddpmod.gov.in and "www.dgqadefence.gov.in".
- 2. The EOI has been uploaded on "<a href="https://eprocure.gov.in/cppp">https://eprocure.gov.in/cppp</a>", "<a href="https://ddpmod.gov.in">https://ddpmod.gov.in</a>" and GeM portal. Further details are as follows:-

SI	Particulars	Date	
(a)	Date of issuance / publishing of EOI document on	D (10 Aug 19)	
	various government portals.		
(b)	Last date for Submission of Queries	D+10 days	
(c)	Meeting prior to EOI Submission	D+15 days	
(d)	Last date and time for EOI Submission	D+28 days	
(e)	Compilation and analysis of EOI Response and	D+45 days	
	finalization of industries to whom RFP will be issued	Diao dayo	

#### **Scope of Testing Facilities**

3. The respondents are required to set up testing facilities. The Preliminary Qualitative Requirements (PQRs) for setting up these testing facilities are placed at 'Appendix A'. After taking into account the inputs received in response to the EOI, the test facilities list and their specifications would be firmed up. The facilities list and specifications may be issued as Staff Qualitative Requirements (SQRs) in the Request For Proposal (RFP) that will follow the EOI.

#### **Grant-in-Aid**

4. The total Central Govt assistance available for setting up 06 to 08 DTIs (including testing facilities for drones) under the Defence Testing Infrastructure Scheme (DTIS) in the form of Grant-in-Aid of Rs 400 Cr. These facilities will be set up to bridge the existing gaps of testing infrastructure in defence and aerospace sectors. The facilities may be divided into three types, namely, Small, Medium and Large. The estimated cost of each type of facility is given in the table below: -

SI No	Туре	Estimated Cost	Nos
(d)	Small	0<20 Cr	03
(e)	Medium	20-50 Cr	03
(f)	Large	>50 Cr	02

5. Central Govt assistance for setting up the testing facility for Drones under the Scheme shall not exceed 75% of the project cost. The balance of the project cost will be borne by the SPV.

#### **Eligibility Criteria**

6. The invitation of EOI is open to all private entities registered in India who fulfill the criteria as specified below: -

- (a) <u>Incorporation</u>. The Interested Agency should be an Indian entity in private sector (Industry, Industry association, R&D or Academic institution etc.) and should have been in existence for a period of at least 3 years on the date of application. The proof of registration of the Agency under the Companies Act 2013/Indian Trusts Act 1882/Societies Registration Act 1860 or any other statute shall be submitted along with the Preliminary Project Proposal in response to the EOI.
- (b) <u>Net Worth</u>. The interested Agency shall have positive net worth. The copies of Audited Account and Balance Sheet for preceding two years shall be submitted by the Agency along with the EOI response.
- (c) <u>Experience</u>. Interested Agencies shall submit a statement of work experience in the field of Drones or related field in Defence/ Aerospace testing in response to the EOI(Para (h) of **Appendix 'D'** refers).
- (d) The interested agency should not have been blacklisted by Central or State Government.

#### **Instructions to the Interested Agencies**

- 7. <u>Completeness of Response</u>. The Interested Agencies are requested to study the testing infrastructure requirements for drone as given at **Appendix 'A'** and prepare their <u>Preliminary Project Proposal</u> as per the format given in **Appendix 'B'**. The submission of the proposals shall be deemed to have been done after detailed study and examination of the EOI document with full understanding of its implications.
- 8. <u>EOI Proposal Preparation Costs &Related Issues</u>. The Agency shall be responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations and preparation of proposal. All materials submitted by the Agency shall become the property of DDP and may be returned

completely at its sole discretion.

- 9. This EOI does not commit DDP to award a contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award or for preparing response to this EOI.
- 10. <u>Meeting Prior to EOI Submission</u>. A meeting with the prospective Agencies is planned to be held on D+13 days at 1500 hrsatDQA(WP), Conference Hall,Room no 93, H Block, Krishna Menon Marg, New Delhi 110011.
- 11. The Agencies will have to ensure that their queries for discussions during the meeting reach on or before D+10 days to DDP/DGQA either by post to ADGQA(WP), 'H' Block, Krishna Menon Marg, PO Nirman Bhawan, New Delhi 110011; by Fax 011-26104619; or via email at <a href="mailto:dqawp@navy.gov.in">dqawp@navy.gov.in</a>. The clarifications sought are to be specific to the extent feasible.
- 12. <u>Submission of Responses</u>. The EOI response shall be submitted in a single sealed envelope and superscripted "EXPRESSION OF INTERESTFOR SETTING UP DRONE TESTING INFRASTRUCTURE". This envelope should contain two hard copies of EOI proposal marked as "First Copy" and "Second Copy" and one soft copy in the form of a non-rewriteable CD. CD media must be duly signed using a Permanent pen Marker and should bear the name of the Agency.
- 13. Envelope should indicate clearly the name, address, telephone number, Email ID and fax number of the Agency. Each copy of the EOI should be a complete document and should be bound as a volume. The document should be page numbered, must contain the list of contents with page numbers and shall be initialed by the Authorized Representative of the Agency. EOI document submitted by the Agency should be concise and contain only relevant information as required.
- 14. <u>Bid Submission Format</u>. The entire proposal shall be strictly as per the format

specified in this EOI and any deviation may result in the rejection of the EOI proposal. The Agency shall submit the EOI response in following formats:-

- (a) Appendix 'C'. Covering Letter with Correspondence Details.
- (b) Appendix 'B'. Preliminary Project Proposal.
- (c) Appendix 'D'. Details of the Agency's Operations and Business.

#### 15. Venue and Deadline for Submission of EOI Response.

(a) The EOI response must be received at the address specified below latest by 30 Aug19:-

ADGQA(WP)

Directorate of Quality Assurance (Warship Projects)

'H'Block, Krishna Menon Marg,

PO Nirman Bhawan, New Delhi-110011

- (b) The EOI response received by the DDP after the above deadline shall be rejected and returned unopened to the Agency. The bids submitted by telegram/fax/e-mail etc. **shall not be considered**. No correspondence will be entertained on this matter.
- (c) DDP shall not be responsible for any postal delay or non-receipt/non-delivery of the EOI response. No correspondence on the subject will be entertained.
- 16. <u>Amendment</u>. DDP reserves the right to modify and amend any of the above para, part, portion of this EOI before the last day of submission of responses by the agencies. Modification, amendment will be posted on <a href="https://ddpmod.gov.in">https://ddpmod.gov.in</a> website.
- 17. <u>Right to Terminate the Process</u>. DDP reserves the right to recall/ terminate the EOI at its discretion without assigning any reason. Further, this EOI does not constitute an

offer by DDP, and DDP makes no commitments, express or implied, that this process will result in a business transaction with anyone.

#### **Preliminary Qualitative Requirements**

- 1. Test Facilities for Flying and Performance Evaluation of drones: -
  - (a) Airstrip provisioning (Details of Airstrip, location etc. may be indicated)
  - (b) ATC with Range Control Centre to centrally control the flights
  - (c) Hangars for integration of UAVs& pre-flight checks for Ground Control Station and Support Vehicle Area
  - (d) DGCA clearance for flying (Regulatory requirement)
  - (e) Telemetry Station for Performance Evaluation (Max & min Speed, rate of climb, endurance, ceiling, glide performance, landing etc.)
  - (f) Evaluation of all-weather performance of Datalink Technology
  - (g) Performance evaluation of Payloads
  - (h) Any other tests related to drone flying
- 2. Test Facilities for Manufacturing / Research and Development: -
  - (a) Ground Control Systems(GCS)
  - (b) Auto Pilot and Flight Control System
  - (c) Avionics and Electronics Design and Qualification
  - (d) Airframe Structure testing & Fatigue evaluation
  - (e) Wind tunnel testing of aerodynamic structures
  - (f) Power plant checks including fuel system, transmission, cooling etc.
  - (g) Electrical Power Subsystems, battery storage, monitoring & indication
  - (h) Dynamic and endurance testing of rotors, drives & controls.
  - (i) Functional Hazard & Preliminary System Safety Assessment
  - (j) EMI/EMC Testing
  - (k) Environmental Testing
  - (I) Airworthiness Certification
  - (m) Testing of Payloads such as ESM, COMINT, radar, camera etc.
  - (n) Weapon integration
  - (o) Any other tests related to manufacturing of drones

<u>Note</u>: Cost of Airstrip/runway and ATC Tower is not to be included in the proposal. Civil cost of these will not be admissible under grants in aid. The agency shall provision these two services from existing facility.

# PRELIMINARY PROJECT PROPOSAL

<u>SI.</u>	<u>Index</u>		
1.	Name and complete address of the Interested Agency		
2.	Status of the Agency (whether Special Purpose Vehicle, Trade Body, Private		
	Limited, Public Limited etc.)		
3.	Preliminary Project Proposal as per Broad Scope of Work (Para 6 of EOI refers)		
4.	A. Type of Test Facility with Technical Specifications		
5.	B. Certification as per National/International Standards		
6.	C. Technical Feasibility with growth projections		
7.	Total estimated cost of the project		
8.	Proposed Financing pattern		
9.	If finance from other source(s) has been tied up including the loan/debt from		
	Financial Institutions, indicate details		
10.	Proposed location of DTI including Land details, if available		
11.	Estimated timeframe for Statutory clearances (Municipal / Environment etc)		
12.	Strategy for operation, maintenance and sustainability of the project		
13.	Details of deliverables accruing from the project (in both qualitative and		
	quantitative terms)		

#### **Covering Letter with Correspondence Details**

The Additional Director General Directorate of Quality Assurance (Warship Projects) 'H' Block,Krishna Menon Marg, DHQ PO, New Delhi-110011

Dear Sir,

1. We, the undersigned, are forwarding our Preliminary Project Proposal for setting up Testing Facilities for Drones under Defence Testing Infrastructure Scheme. Our correspondence details with regard to this EOI are as follows: -

SI	Information	Details
(a)	Name of the Contact Person	
(b)	Address of the Contact Person	
(c)	Name, designation and contact, address of the person to whom, all references shall be made, regarding this EOI.	
(d)	Telephone number of the Contact Person.	
(e)	Mobile number of the Contact Person	
(f)	Fax number of the Contact Person	
(g)	Email ID of the Contact Person	
(h)	Corporate website URL.	

- 2. We are hereby submitting our Expression of Interest in both printed format (2 copies) and as a soft copy in a CD. We understand you are not bound to accept any Proposal you receive.
- 3. We agree to abide by the conditions set forth in this EOI. We hereby declare that our proposal submitted in response to this EOI is made in good faith and the information contained is true and correct to the best of our knowledge and belief.

Applicant's/ Company's Name with seal Signature
Date

# **Details of the Agency's Operations and Business**

<u>SI</u>	Information Sought	Details to be Furnished
(a)	Name and address of the Agency	
(b)	Incorporation status of the Agency whether public limited / private limited/Society etc.	
(c)	Year of Establishment	
(d)	Date of registration	
(e)	ROC Reference No.	
(f)	Details of company registration/Society registration etc.	
(f)	Details of registration with appropriate authorities for service tax /GST	
(g)	Name, Address, email, Phone nos. and Mobile Number of Contact Person	
(h)	Brief Company Profile and Statement of Work Done/ Expertise in the field of Drones or related field in Defence/Aerospace	
(1)	Net Worth	
(J)	Audited account & Balance Sheet for last two financial years	Attach copies
(K)	Whether black listed by Central or State Government	