



**DEPARTMENT OF DEFENCE PRODUCTION (DDP) /
DIRECTORATE GENERAL OF QUALITY ASSURANCE (DGQA)
MINISTRY OF DEFENCE (MOD)
GOVERNMENT OF INDIA (GOI)**

EXPRESSION OF INTEREST (EOI)

FOR

**DEVELOPMENT OF DEFENCE TESTING INFRASTRUCTURE (DTI)
FOR COMMUNICATION SYSTEMS UNDER THE DEFENCE TESTING
INFRASTRUCTURE SCHEME (DTIS)**

Reference No. 12575/DQA(WP)/DTIS/EOI Communications

**DDP / DGQA
DQA (WP), Room 96, H Block, DHQ Zone, Krishna Menon Marg,
New Delhi-110011, India
Website: www.dgqadefence.gov.in
Phone: 011-23012080, 011-23013805**

JULY2021

DISCLAIMER

1. This Notice inviting Expression of Interest (EOI) is intended to provide interested parties (“**Applicants**”) with information on development of Defence Testing Infrastructure (DTI) for Communication System under Defence Testing Infrastructure Scheme (DTIS).
2. The information contained in this EOI document or subsequently provided to the Applicants, whether verbally or in documentary or any other form by or on behalf of Department of Defence Production (DDP) / Directorate General of Quality Assurance (DGQA) or any of its employees or advisors, is provided to the Applicants on the terms and conditions set out in this EOI document and such other terms and conditions subject to which such information is provided.
3. This EOI document is not an agreement and is neither an offer nor an invitation by DDP/DGQA to the prospective Applicants or any other person. The purpose of this EOI is to provide interested Applicants with information about development of DTI for Communication Systems, to gather information about all interested Applicants and to record any concerns of interested Applicants. The EOI shall not be used to either shortlist or disqualify Applicants. Any entity which has not submitted EOI shall also be allowed to participate in the Request for Proposal (“**RFP**”) stage according to terms and conditions that may be specified thereof.
4. DDP / DGQA, its employees and advisors does not make any representation or warranty as to the accuracy, reliability or completeness of the information in this EOI document and it is not possible for DDP / DGQA to consider particular needs of each Applicant who reads or uses this EOI document. This EOI document includes statements which reflect various assumptions and assessments arrived at by DDP / DGQA in relation to the project. Such assumptions, assessments and statements do not purport to contain all the information that each Applicant may require. Each prospective Applicant should conduct its own investigations & analyses and check the accuracy, reliability & completeness of the information provided in this EOI document and obtain independent advice from appropriate sources.
5. DDP / DGQA, its employees and advisors will not have any liability to any prospective Company / Firm / Joint Venture (JV) / Consortium or any other person under any laws (including without limitation the law of contract, tort), the principles of equity, restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this EOI document, any matter deemed to form part of this EOI document, the award of work, the information and any other information supplied by or on behalf of DDP / DGQA or their employees, any consultants or otherwise arising in any way from the selection process for the project. DDP / DGQA will also not be liable in any manner whether resulting from negligence or otherwise however caused arising from reliance of any Applicant upon any statements contained in this EOI document.
6. DDP / DGQA will not be responsible for any delay in receiving the Applications. The issuance of this EOI document does not imply that DDP / DGQA is bound to shortlist an Applicant and DDP / DGQA reserves the right to accept / reject any or all of Applications submitted in response to this EOI document at any stage without assigning any reasons whatsoever. DDP / DGQA also reserves the right to withhold or withdraw the process at any stage with intimation to all who submitted the Application.
7. Information provided in this EOI to Applicants is on a wide range of matters, some of which may depend upon interpretation of law. The information given in this EOI document is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. DDP / DGQA or its employees and advisors accept no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.
8. DDP / DGQA reserves the right to change / modify / amend any or all provisions of this EOI document. Such revisions to the EOI document / amended EOI document will be made available on the e-procurement portal & website of DDP / DGQA.

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DDP DGQA
DQA (WP), Room 96, H Block, DHQ Zone, Krishna Menon Marg
New Delhi-110011, India
Phone: 011-23012080, 011-23013805

Email: dtis-dqawp@navy.gov.in

Websites: "www.dgqadefence.gov.in", "<https://eprocure.gov.in/>" & "<https://ddpmod.gov.in>"

LETTER OF INVITATION

Place: New Delhi

Date: 19 July, 2021

Respected Sir / Madam,

1. The Government of India (GOI) has launched a new scheme called Defence Testing Infrastructure Scheme (DTIS) for setting up of Greenfield Defence Testing Infrastructure (required for defence and aerospace related production), as a common facility under private sector with Government assistance in the country. This scheme aims to provide a focussed, structured and significant thrust to indigenous defence manufacturing by providing state of the art testing facilities available to the defence development and production industry in the country.

2. In this regard, DDP / DGQA invites EOI Applications from reputed entities, registered and incorporated in India, for determining their interest in "*Development of Defence Testing Infrastructure (DTI) for Communication Systems (Antennas, Radio Frequencies (RF), Software Defined Radio (SDR) and Internet of Things (IoT)) under DTIS*". The EOI document has been published on the websites "<https://eprocure.gov.in/epublish>" & "<https://ddpmod.gov.in>" and can be downloaded from these respective websites (the "**Official Websites**").

3. The EOI document containing the details of project background & objective, document submission requirements and scope of work etc. is enclosed.

4. Interested Applicants are requested to submit their responses to EOI document, through email at dtis-dqawp@navy.gov.in as well as through hard copy in a closed envelope bearing the name & address of the Applicant, EOI name & date. The hard copies should be submitted to the below mentioned address in two sets (one marked as "ORIGINAL" and the other one marked as "COPY" in separate envelopes), on or before < at 1500hrs on 10.08. 2021>:

DQA (WP)
H Block, DHQ Zone, Krishna Menon Marg, New Delhi -110011
Phone: 011-23012080, 011-23013805
Email: dtis-dqawp@navy.gov.in

Both the "ORIGINAL" and "COPY" to be covered within a single envelope. In the event of discrepancy between them, the "ORIGINAL" shall prevail.

Development of DTI for Communication Systems (Antennas, RF, SDR & IoT) under DTIS

5. Some important dates for this EOI process are as follows:

(i)	Document download start date	20.07. 2021 at 0900 hrs
(ii)	Date of submission of Pre-application queries (if any)	27.07.2021 at 0900 hrs
(iii)	Pre-application meeting through VC	28.07.2021 at 1500 hrs
(iv)	Last date of submission of Applications	11.08. 2021 at 1500 hrs

6. All clarifications / corrigenda / addenda will be published only on the Official Websites mentioned above.

7. DDP / DGQA reserves the right to accept or reject any or all Applications without assigning any reason and no correspondence shall be entertained in this regard.



(Kuldip S Nehra)
Cdr QA-DTIS

Encl: EOI document

1. BACKGROUND & INTRODUCTION

1.1 The Directorate General of Quality Assurance (DGQA) (hereinafter referred to as the “**Employer**”) is under the Department of Defence Production (DDP), Ministry of Defence (MOD). The Employer was established more than 100 (hundred) years ago and provides Quality Assurance (QA) cover for the entire range of arms, ammunitions, equipment and stores supplied to the Armed Forces. Apart from the QA activities, the Employer is also responsible for import substitution and associates with Defence Research and Development Organisation (DRDO) in the development projects. It also ensures documentation, codification and standardisation of actions for minimizing the variety of components / equipment. The other services rendered are promotion of small-scale industries, post procurement services, defect investigations and technical consultancy to the users, Ministry and the production agencies. The establishments under this organisation are spread all over the country specifically where mainly the Ordnance Factory Boards (OFBs), Defence Public Sector undertakings (DPSUs) and industrial base exist.

1.2 Defence Testing Infrastructure Scheme (DTIS) Guidelines (enclosed at Appendix G)

1.2.1 Under “*Make in India*”, the GOI has accorded high priority to development of manufacturing base of aerospace and defence (A&D) sector in the country so as to reduce dependence on imports. Towards this, the Government has announced establishment of Defence Industrial Corridors (DICs) in Uttar Pradesh (U.P.) and Tamil Nadu (T.N.). Several other initiatives such as preference to procurement from Indian vendors under the Defence Procurement Procedure (DPP), simplification of Make procedure, introduction of simplified procedure for Make II sub-category, liberalization of the licensing regime & Foreign Direct Investment (FDI) policy by raising the cap on FDI in the defence sector, simplification of export procedure, streamlining of defence offset guidelines, innovations for Defence Excellence (iDEX) and Defence Investors Cell etc. have also been undertaken with an aim to provide an eco-system to foster innovation & technology development and encourage Indian industry to invest in the A&D sector.

1.2.2 Objective of DTIS: One of the main impediments for domestic defence production is lack of easily accessible state-of-the-art testing infrastructure. The defence testing infrastructure (DTI) 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 DTIS aims at setting up of Greenfield DTIs (required for A&D related production), as a common facility under private sector with Government assistance in DICs (priority area) and other industrial clusters. The proposed scheme plans to enhance defence manufacturing industry in India by creating DTIs and addressing quality and certification requirements for development and growth of the A&D industry in the country. The scheme will boost the indigenous defence production, with special focus on participation of MSMEs and Start Ups by bridging gaps in DTI in the country. Setting up of DTI will provide easy access and thus meet the testing needs of the domestic defence industry.

1.2.3 Scope of DTIS

- (a) The aim of DTIS is to setup 8 (eight) DTIs with a total grant-in-aid of INR 400 crore (Rupees Four Hundred crore) from the GOI;
- (b) Each DTI will be setup through a Special Purpose Vehicle (SPV) (the “**Special Purpose Vehicle (SPV) / Implementation Agency (IA)**”), which may be promoted/constituted by private entities (industrial / manufacturing entity, industry associations, R&D/academic institutions, existing testing establishment entities etc.) and Government or public entities (DPSUs, State Governments, Central Government agencies etc.);
- (c) The IA / SPV will be incorporated as a Section 8 company under the Companies Act 2013;

- (d) The scheme would provide financial assistance to the IA / SPV in the form of grant-in-aid for setting up testing and certification facilities for manufacturers of defence equipment/systems;
- (e) The financial assistance for each DTI facility will be limited to 75% (seventy five percent) of the project cost. The project cost for establishment of the DTI facility under DTIS (the “**Project Cost**”) shall exclude the cost of the land and the establishment cost.
- (f) The broad norms for funding of DTIs shall be as follows:
 - (i) **Land:** To be provided by IA / SPV. However, the Employer may make necessary arrangements towards acquiring the land required for the DTI facility on case to case basis depending upon exigencies and difficulties encountered by the IA / SPV or any other reason as may be deemed appropriate by the Employer.
 - (ii) **Capex for building:** <= 20% of Project Cost
 - (iii) **Test equipment, installation, training:** >= 80% of Project Cost
- (g) The test facilities planned to be set up have been divided into 3 (three) types, namely, Small, Medium and Large. The estimated Project Cost of each type of DTI facility is given in the table below:

S.No.	Type	Estimated Project Cost (INR)	Nos
1.	Small	< 20 crore	03
2.	Medium	20 – 50 crore	03
3.	Large	> 50 crore	02

- (h) The IA / SPV shall be responsible for operation and maintenance of assets created under the scheme by way of collecting user charges plus applicable GST.
- (i) The IA / SPV will be responsible for obtaining all necessary statutory approvals / clearances including those for environmental compliance and quality standards as applicable.

1.3 Testing Domains for setting up of Defence Testing Infrastructure (DTI) facilities under the Defence Testing Infrastructure Scheme (DTIS)

1.3.1 For the purposes of identifying the defence testing infrastructure (DTI) requirements that can be considered under DTIS for setting up of Greenfield DTIs (required for A&D related production), as a common facility, a gap assessment study was undertaken. The following eight (8) domains have been short listed where test facilities will be created under DTIS:

- (a) Unmanned Aircraft Systems (UAS)
- (b) Environmental tests
- (c) Electromagnetic Interference (EMI) and Electromagnetic Compatibility (EMC) tests
- (d) Mechanical tests
- (e) Communications (Antenna, Radio Frequencies (RF), Internet of Things (IoT) and Software Define Radio (SDR) tests)
- (f) Electronic Warfare
- (g) Defence Electronics - Electro-optics
- (h) Ammunitions

This document is specifically for seeking Expression of Interest (EOI) for *Development of Defence Testing Infrastructure (DTI) for Communication Systems under Defence Testing Infrastructure Scheme (DTIS)*.

1.4 DTI facility for Communication Systems

1.4.1 In broad terms, Communication Systems comprise of following three (3) domains:

- (a) **Antennas:** An antenna is a specialised transducer that converts RF fields into alternating current (AC) or vice versa;
- (b) **SDR and RF:** SDR and RF is any frequency within the electromagnetic spectrum associated with radio wave propagation; and
- (c) **IoT:** The network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or the external environment

A demand gap assessment study on Communication Systems testing requirements was carried out.

1.4.2 As per the gap assessment study, the total supply for testing for the Communication Systems in the country currently stands at INR 300 - 320 crore. However, the total current market for these tests is estimated to be approximately INR 430- 450 crore and this is expected to reach approximately INR 880 - 890 crore by the year 2030. This growth in demand for these testing requirements, is expected to be driven by increasing indigenisation in defence manufacturing. The estimated market size and growth rate was also validated through interaction with various stakeholders who are involved in manufacturing of Communication Systems in the country.

1.4.3 Based on the inputs from gap assessment study, the Employer intends to setup a DTI facility for Communication Systems (Antennas, RF, SDR and IoT) under DTIS. Major tests for the Communication Systems can be classified into generic and special to type. Generic tests are the ones which are common for all the systems (Antenna, RF, SDR and IoT) and special to type are specific to particular type of systems. The following certifications and standards would be required to be adhered to by the envisioned DTI test facility for Communication Systems (Antennas, RF, SDR, IoT etc):

- (a) MIL standards
- (b) Software Communications Architecture (SCA) 2.2.2
- (c) Institute of Electrical and Electronics Engineers (IEEE) Standards
- (d) ISA/IEC 62443

Further details on the nature of tests to be undertaken by the proposed testing facility, are provided in Appendix E.

1.4.4 A location assessment was also carried out as part of the gap assessment study and preferred clusters in (1) National Capital Region (NCR); (2) Tamil Nadu (Chennai region); (3) Karnataka (Bangalore region); (4) Telangana (Hyderabad – Rangareddy region); and (5) Maharashtra (Mumbai – Pune – Nasik region) States were identified as suitable locations for setting up DTI facility for Communication Systems industries, testing facilities and future demand for the same. Based on the key clusters, assessment of the A&D or other applicable policies in the States and available infrastructure for establishment of the DTI facility was also undertaken. However, the Employer may make necessary arrangements towards acquiring the land required for the DTI facility for Communication Systems depending upon exigencies and difficulties encountered by the Applicants / Bidders or any other reason as may be deemed appropriate by the Employer.

2. OBJECTIVE

2.1 With aforesaid background, the Employer intends to (a) determine the interest of Applicants in undertaking development, operation and maintenance of testing facility for Communication

Systems under the DTIS(the “**Project**”);and (b) seek suggestions from Applicants on the Project scope or other parameters of the Project.

- 2.2 The purpose of issuing the EOI is to:
 - 2.2.1 disseminate information about the Project;
 - 2.2.2 gather information about all interested firms; and
 - 2.2.3 record concerns of the interested firms to participate as IA/SPV for the Project under DTIS
- 2.3 The EOI shall not be used to either shortlist or disqualify Applicants. Any entity which has not submitted an EOI shall also be allowed to participate in the RFP stage according to terms and conditions that may be specified thereof.

3. INSTRUCTION TO APPLICANTS

3.1 Introduction

- 3.1.1 This notice is issued only to elicit an EOI from parties interested in the Project and does not constitute any binding/commitment from the Employer to invite any or all the Applicants in the subsequent bidding process.
- 3.1.2 The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Employer or any other costs incurred in connection with or relating to its Application. All such costs and expenses shall remain with the Applicant and the Employer shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the EOI process.
- 3.1.3 The Applicants are expected to examine all instructions, forms and other details in the EOI document carefully. Failure to furnish complete information as mentioned in the EOI document or submission of an Application not substantially responsive to the EOI document in every respect will be at the Applicant’s risk and shall result in rejection of the Application.
- 3.1.4 The Applicants are advised to avoid last moment rush to submit Applications and they should submit their Applications on or before the last date of submission of Application.

3.2 Pre-application Meeting

- 3.2.1 A Pre-application meeting shall be held through Video Conferencing (VC) as per the date and time mentioned in the Letter of Invitation. The Applicants willing to attend the Pre-application meeting should inform the Employer beforehand through email. The representatives attending the Pre-application meeting must submit their queries and an authority letter, through email, duly signed by the authorized signatory of his / her organization permitting the representatives to attend the Pre-application meeting on behalf of the respective Applicant. On receipt of authority letter, the link for the VC will be sent to the Applicants.
- 3.2.2 During the course of Pre-application meeting, the Applicants will be free to seek clarifications and make suggestions for consideration by the Employer.

3.3 Clarifications and Addendum / Corrigendum

- 3.3.1 The Applicant may request a clarification on any clause of the EOI document up, before the last date of submission of pre-application queries as indicated in the Letter of Invitation. Any request for clarification must be sent in writing, or by e-mail (PDF and word file) to the Employer’s email ID mentioned below. No request for clarification shall be entertained if such request is received by the Employer after the deadline for submitting clarifications.

Name: Capt. QA-DTIS, DQA (WP)

Email: dtis-dqawp@navy.gov.in

3.3.2 At any time before the submission of Applications, the Employer may amend the EOI document by issuing an addendum / corrigendum (amendment). The amendment / clarification, if any, to the document will be made available on the Official Websites mentioned in the Letter of Invitation. All Applicants participating in the EOI process shall be deemed to have kept them informed and updated about each such amendment / clarification, which is posted on the Official Websites from time to time. To give reasonable time to the Applicants to consider an amendment, the Employer may, if the amendment is substantial, extend the deadline for the submission of Applications.

3.4 Prerequisites to be fulfilled by the Applicants

The Applicant shall meet the following mentioned prerequisites:

- 3.4.1 The Applicant shall be a JV / Consortium of minimum five (5) constituent members. However, contribution from each constituent member cannot exceed forty percent (40%) of the share capital of the IA / SPV. The Applicant shall propose a lead member of the JV / Consortium and the JV / Consortium members should not be an Associate¹ of any other JV / Consortium members of the Applicant or any other Applicant. The lead member shall submit a Letter of Intent as per Appendix B which shall be duly signed by the authorised signatory of each constituent member or the constituent members may provide the similar Letter of Intent on their respective letterheads.
- 3.4.2 Each constituent member of the Applicant should be an Indian entity, either in private sector (Industrial / Manufacturing entity (including MSME, Start-ups, Proprietorship firms etc.), or an Industry association, R&D or Academic institution or existing testing establishment entities etc. or Government or public sector (DPSUs, State Governments, Central Government agencies etc) entities. Out of five (5) constituent members, at least three (3) constituent members should be in existence for a period of at least three (3) years as on last date of submission of Application. Further, at least one (1) constituent member of the Applicant should have experience in the production / R&D / testing for the A&D Communication Systems sector for a period of at least three (3) years.
- 3.4.3 Each constituent member of the Applicant shall have positive (+ve) net worth as on last date of submission of Application. However, exception to this criterion may be considered for those constituent members who have been recognized as Start-ups by Department for Promotion of Industry & Internal Trade (DPITT). The Applicant shall submit documentary evidence to the extent as per the GOI notifications in this regard in order to avail the benefits of the same.
- 3.4.4 None of the constituent member of the Applicant should have been blacklisted by Central or State Government as on last date of submission of Application.

3.5 Submission of EOI Applications

The EOI Application, complete in all respects, should be submitted as per sequence mentioned below. The Applicants are further advised to number all the pages and prepare a table of contents in the beginning of the Application referring the page numbers of the indexed items:

- (a) Cover Letter as per **Appendix A**;

¹“Associate” means, in relation to either Party {and / or JV / Consortium Members}, a person who controls, is controlled by, or is under the common control with such Party {or JV / Consortium Member} (as used in this definition, the expression “control” means, with respect to a person which is a company or corporation,

(a) the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person; or

(b) holding more than 50% (fifty percent) of the voting rights of such person by virtue of an agreement; or

(c) the power to govern the policy decisions of such person under statute or an agreement; or

(d) to appoint or remove the majority of the members of the board of directors; or

(e) to cast the majority of votes at a meeting of the board of directors;

and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person by operation of law or by contract or otherwise

- (b) Letter of Intent as per **Appendix B**;
- (c) Organization details as per **Appendix C** along with profile, accomplishments, experience in A&D sector (specifically in A&D Communication Systems), any other documents etc. for each constituent member;
- (d) Financial Information as per **Appendix D** for each constituent member duly certified by the Statutory Auditor / Chartered Accountant, for the last three (3) FYs ending 31st March of the previous FY;
- (e) Preliminary Project Proposal as per **Appendix F**. Measurable outcomes should also be indicated in the proposal, e.g. expected reduction in testing costs and time if the testing infrastructure is set up; and
- (f) Any comment(s) or issue(s) of concern regarding implementation of DTI for Communication Systems under DTIS

The original and copy of the Application shall be typed or written in indelible ink (in the case of copy, photocopies are also acceptable) and all the pages of the original and copy shall be signed by a person or persons duly authorized to sign on behalf of the Applicant, pursuant to Appendix A.

3.6 Evaluation Process

- 3.6.1 Subsequent to the EOI process, the Employer shall invite open competitive Bids by issuing RFP document including contract agreement.
- 3.6.2 The Applicant may note that at the RFP stage they shall be required to meet the minimum pre-qualification criteria mentioned in the RFP document.
- 3.6.3 The Bids/ RFP submitted by the Bidders will be evaluated against all the pre-qualification criteria in order to check whether the Bidders meet the minimum eligibility to participate in the subsequent Technical and Financial Bid evaluation processes.
- 3.6.4 The Bidders shall submit all necessary details that would help in the evaluation of Bids.
- 3.6.5 The Bidder shall be required to submit a Joint Bidding Agreement / Memorandum of Understanding (MoU) between the constituent members, indicating clearly, amongst other things, the proposed distribution of responsibilities both financial as well as technical for execution of the Project. A Power of Attorney authorising the lead member as the representation of the JV / Consortium, duly signed by the authorized signatories of all the constituent members shall also be required to be submitted.

3.7 No Legal Relationship

No binding legal relationship will exist between any of the Applicants and the Employer until execution of a contractual agreement. The participation in the EOI process does not qualify for any contractual obligation from the Employer. The issuance of RFP to the Bidders does not qualify for any contractual obligations from the Employer.



(Kuldip S Nehra)

Cdr QA-DTIS

Dated: 19 Jul 21

APPENDIX A- COVER LETTER

(To be submitted on the letter head of lead member of the Applicant)

To,

.....
DQA (WP) / DDP DGQA
H Block, DHQ Zone,
Krishna Menon Marg,
New Delhi-110011

Reference: Expression of Interest for Project “**Project Title**”

Dear Sir,

1. This is to notify you that(insert name of Applicant)intend to submit an Application in response to the EOI for the Project “**Project title**”.
2. Primary and Secondary contacts for our company are: -

	Primary Contact	Secondary Contact
Name:		
Designation:		
Company Name:		
Address:		
Phone		
Mobile:		
Fax:		
E-Mail:		

3. We confirm that the information contained in this Application or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered are true, accurate, verifiable and complete. The Application includes all information necessary to ensure that the statements therein do not in whole or in part mislead[Employer].
4. It is hereby confirmed that we are entitled to act on behalf of our corporation/company/firm/organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this _____ Day of _____ 2021

Duly authorized to sign the EOI Application for and on behalf of

Sincerely,
Signature (in capacity of)
Name
Designation
Company Seal
Place _____
Date_____

APPENDIX B- LETTER OF INTENT

(To be submitted on the letterhead of proposed lead member of the Applicant and shall be jointly signed by all Constituent Members or each Constituent Member may also submit this Appendix on its letterhead)

Date:

To,

.....
DQA (WP) / DDP DGQA
H Block, DHQ Zone,
Krishna Menon Marg,
New Delhi -110011

Dear Sir,

This is with reference to the Letter of Invitation dated inviting Expression of Interest (EOI) for the Project “**Project Title**”.

We hereby propose the following constitution of the JV / Consortium and confirm that we have read and understood the terms and conditions laid down in the EOI document.

No.	Name of constituent member of JV / Consortium	Proposed Percentage Share	Role	Responsibility
(i)	Proposed Lead Member (Name & Address)			
(ii)	Proposed Member 2 (Name & Address)			
(iii)	Proposed Member 3 (Name & Address)			
(iv)	Proposed Member 4 (Name & Address)			
(v)	Proposed Member 5 (Name & Address)			

We have agreed that (*insert member's name*) will act as the lead member of our JV / Consortium for the purpose of submission of EOI Application.

We have agreed that (*insert individual's name*) will act as our representative / will act as the representative of the JV / Consortium on its behalf and has been duly authorized to submit the Application. Further, the authorised signatory is vested with requisite powers to furnish such letter and authenticate the same. All actions / representations of the lead member / authorised signatory shall be legally binding on the JV / Consortium.

Development of DTI for Communication Systems (Antennas, RF, SDR & IoT) under DTIS

We hereby declare that none of the proposed constituent members of the JV / Consortium have been blacklisted by any Central or State Government as on the last date of submission of Application. Any such discovery relating to blacklisting is brought to knowledge of the Employer at any stage of the EOI / RFP / Contract would be punishable under existing law and would lead to rescinding or termination.

Thanking you,

Yours faithfully,

(Signature, name and designation of the authorised signatory)

For and on behalf of (Lead Member).....

(Signature, name and designation of the authorised signatory)

For and on behalf of (Member 2).....

(Signature, name and designation of the authorised signatory)

For and on behalf of (Member 3).....

(Signature, name and designation of the authorised signatory)

For and on behalf of (Member 4).....

(Signature, name and designation of the authorised signatory)

For and on behalf of (Member 5).....

APPENDIX C - ORGANIZATION DETAIL

(To be submitted on the letter head of each Constituent Member of the JV / Consortium)

Details of the Organization	
Name	
Nature of the legal status in India	
Nature of business in India	
Date of Incorporation	
PAN No.	
Date of Commencement of Business	
GST Registration No.	
Address of the Headquarter	
Address of the Registered Office in India	
Details of the Contact Person (including Address, Phone, Fax and Email)	
Shareholding of the company including ultimate shareholding	
Other relevant information	

Note: Please attach relevant documents such as profile, accomplishments, experience in A&D sector(specifically in Communication Systems), any other documents etc.

Signature (in capacity of)

Name

Designation

Company Seal

Place _____

Date _____

APPENDIX D - FINANCIAL INFORMATION

(To be submitted on the letter head of Chartered Accountant / Statutory Auditor for each Constituent Member)

Financial Information	FY 2017-18	FY 2018-19	FY 2019-20
Total Turnover (in INR crore)			
Net worth (in INR crore)			

Signature by the Statutory Auditor / Chartered Accountant

Name:

Designation:

Company Seal:

Place _____

Date _____

Notes:

1. Net Worth shall mean (Subscribed and Paid-up Equity + Reserves) less (aggregate value of the accumulated losses + deferred expenditure + miscellaneous expenditure not written off + reserves not available for distribution to equity shareholders) but does not include reserves created out of revaluation of assets, write-back of depreciation and amalgamation
2. Turnover means the gross amount of revenue recognised in the profit and loss account from the sale, supply, or distribution of goods or on account of services rendered, or both, by a company during a financial year

APPENDIX E- PRELIMINARY QUALITATIVE REQUIREMENTS

The following tests are proposed to be undertaken at the DTI facility of Communication Systems (Antennas, RF, SDR & IoT) across different stages viz Research & Development (R&D), Manufacturing, Acceptance and Maintenance, Repair & Operations (MRO), as applicable, including but not limited to:

- (a) Wireless (RF) transmitter test
- (b) Antenna test
- (c) Receiver test
- (d) Antenna Characterization test
- (e) Smart Power test
- (f) Signal Integrity test
- (g) Power Integrity test
- (h) Usability test
- (i) Security test
- (j) Performance test
- (k) Connectivity test
- (l) Pilot test
- (m) Regulatory test
- (n) Upgrade test
- (o) Specific absorption test
- (p) Passive component test
- (q) Microwave component test
- (r) Beamforming system design and test
- (s) Anechoic chamber
- (t) Simulation of RF to test interference
- (u) Environment tests
- (v) EMI / EMC tests

APPENDIX F- PRELIMINARY PROJECT PROPOSAL

Applicant to provide information on their proposal for setting up of the DTI facility under the DTIS and shall include but not limited to the following information:

S#	Description
1.	Type of tests proposed to be undertaken with detailed test specifications / parameters and standards to which these tests shall comply. Specify all the tests that the DTI facility shall cover including but not limited to those specified in Appendix E
2.	Size and capacity of testing facility for undertaking the proposed tests and the multiple defence platforms or domains it can cater to
3.	Type of key machineries and equipment to be installed for performing the desired tests and meeting the demand along with their respective numbers (quantity), range, capacity, specifications
4.	Certification as per National / International Standards proposed to be undertaken
5.	Technical Feasibility with growth projections
6.	Total estimated cost of the Project along with breakup of civil works, cost of various equipment and allied infrastructure
7.	Proposed Financing pattern
8.	Proposed location of DTI including land details, if available
9.	Estimated time period for setting up the testing facility along with timelines for key activities / milestones, statutory clearances (Municipal / Environment etc), etc
10.	Strategy for operation, maintenance and sustainability of the Project
11.	Details of deliverables accruing from the Project (in both qualitative and quantitative terms) for e.g. service level parameters / key performance indicators (KPIs)
12.	Measurable outcomes e.g. expected reduction in testing costs and time

APPENDIX G- DTIS

DEPARTMENT OF DEFENCE PRODUCTION
DTIS CELL / DGQA

12575/DGQA/DQA(WP)/DTIS Guidelines

14 May 20

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**

2.1 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

(l) 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) and State Government agencies.

4.2 The Implementation Agency under the Scheme shall be a Section 8 company registered under the Companies Act, 2013.

4.3 Only private entities registered in India and State Government agencies 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 5 private entities and state government agencies may constitute the Implementation Agency. However, contribution from any of the Implementation Agency constituents cannot exceed 40% of the share capital of the Implementation Agency.

4.6 All the constituents of SPV (Implementation Agency) shall have positive net worth. This condition is relaxed for companies registered with Startup India. Any company black listed by Central or State Government will not be eligible to be part of SPV.

4.7 At least three constituents of the SPV should be in existence for more than three years and no relaxation will be provided in this regard.

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 plus applicable GST.

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 at least 30 years 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.

5.6 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. 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. 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 not exceeding Rs 400 Cr. The extant GFR provisions will be followed for setting up the DTIs. 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	Estimated Cost	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 **Expression of Interest**. 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.

7.2 **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 **Request For Proposal**. 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 **Submission of Response to RFP**. 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 PC would be a pre-requisite 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 **Project Monitoring Committee**. 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 Project Consultant in a format as may be prescribed.

10.4 **Project Consultant (PC)**. Project monitoring shall be done by DDP/DGQA. A suitable Project Consultant (PC) may be engaged to assist DDP/DGQA in technical and financial appraisal of all projects under the Scheme. 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 In case of unsatisfactory use of the Grant by the SPV including compromise with the quality of work envisaged, or partial/incomplete implementation of the project, the Central Govt shall cancel the project and for the purpose of recovery of Grant in Aid retains the rights to the following, but not limited to:-

- (a) disposing of all assets acquired by the SPV for the DTI project and vested with the Central Govt.
- (b) recall unspent amount of grant lying in the escrow account and
- (c) encashment of Bank Guarantee.

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

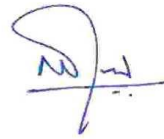
(b) It has been convicted for an offence under the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

(c) Proceedings against any of 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.



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for ADGQA(WP)

Copy to:-

All Concerned Ministries / Departments of Government of India.
All Concerned State Governments.
Niti Aayog.
All Concerned Industry Associations.
Internal Circulation
MoD DDP website
DGQA website

Annexure 'A'

Composition of Monitoring Committees/Agencies

Defence Testing Infrastructure Screening Committee(DTISC)

- | | |
|--|-------------|
| 1. Secretary, DP, MoD | Chairman |
| 2. Secretary (Def Fin) | Member |
| 3. Addl Secy (DP) | Member |
| 4. Rep State Gov (TN & UP) | Member |
| 5. Joint Secretary (NS) | Member |
| 6. Joint Secretary (DIP) | Member |
| 7. DGQA | Member |
| 8. DGAQA | Member |
| 9. ADGQA(WP) | Member |
| 10. Rep Niti Aayog | Member |
| 11. Captain 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. Director from Min of MSME | Member |
| 4. Director DGAQA | Member |
| 5. Rep Niti Aayog | Member |
| 6. Rep SIDM | Member |
| 7. Rep Project Consultant (PC) | Member |
| 8. Capt QA | Member Secy |
| 9. 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.

DEPARTMENT OF DEFENCE PRODUCTION
DTIS CELL / DGQA

12575/DGQA/DQA(WP)/DTIS Guidelines

24 Jul 20

AMENDMENT 1 TO GUIDELINES OF
DEFENCE TESTING INFRASTRUCTURE SCHEME (DTIS)

1. Refer to Defence Testing Infrastructure Scheme (DTIS) guidelines issued vide DQA(WP) letter no 12575/DGQA/DQA(WP)/DTIS Guidelines dated 14 May 20.
2. In order to make Central Government agencies also eligible to form SPVs for setting up Test Facilities under the Scheme, the following amendments are incorporated into the DTIS guidelines.
3. Para 4.1, 4.3, 4.5 of the DTIS guidelines giving the Eligible Agencies are amended to read '**State Government / Central Government agencies**' in lieu of '**State Government agencies**'.
4. These amendments come into force with immediate effect.



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for ADGQA(WP)

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