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INTEGRATED HEADQUARTERS OF MINISTRY OF DEFENCE (NAVY)
DIRECTORATE OF NAVAL ARCHITECTURE

INVITATION FOR EXPRESSION OF INTEREST (EOI)

DEVELOPMENT OF 'MARINE GRADE ALUMINIUM ALLOY PLATES'
(6.3 - 30 mm)

Reference : **Defence Acquisition Procedure 2020 (DAP 2020)**

Introduction

1. Indian Navy has been focusing on developing indigenous platforms, equipment and systems/sub-systems/components towards achieving enhanced self-reliance. This Expression of Interest (EOI) invites responses from eligible Indian Companies for indigenous development of Marine Grade Aluminium Alloy Plates (6.3 – 30 mm) for Indian Navy. The present proposal for development of marine grade aluminium alloy plates under Make-II category is termed as 'Project Marine Grade Aluminium Alloy Plates (6.3 to 30 mm)'. **This project is designed in order to standardise and indigenise the aluminium plates.** The Ministry of Defence (MoD), Govt of India, shall **own the Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)** and the information regarding the project will be shared strictly on 'Need to Know' basis. This prototype development of Marine Grade Aluminium Alloy Plates (6.3 – 30 mm) has been approved as 'Make-II' category project. Subsequent procurement will be under the '**Buy (Indian-IDDMM)**' category. The project is reserved for MSMEs as stipulated in Para 12 of Chapter III of DAP 2020. In case no MSME responds, then the proposal of other firms will be considered for evaluation.

Objective

2. The objective of this EOI is to seek responses from eligible Indian industries and to shortlist potential companies. Responses to EOI will be evaluated as per the assessment criteria given in the EOI. Project shall be progressed ahead even if only one EOI respondent is found meeting eligibility criteria.

Layout

3. The EOI has been covered under the following parts:-

- (a) Part I : General Information
- (b) Part II : Technical Requirements
- (c) Part III : Critical Technology Areas
- (d) Part IV : Eligibility Criteria
- (e) Part V : Assessment Parameters

- (f) Part VI : Evaluation Criteria of Assessment Parameters
- (g) Part VII : Documents to be submitted by EOI Respondents
- (j) Part VIII : Queries and Clarifications
- (k) Part IX : Miscellaneous

Appendices:

- Appendix 'A'** : Indigenous Content Aspects.
- Appendix 'B'** : IPR of Government.
- Appendix 'C'** : Financial and Commercial Assessment Criteria
- Appendix 'D'** : Preliminary Staff Qualitative Requirements (PSQR)
- Appendix 'E'** : Commercial Assessment Criteria for Start-ups
- Appendix 'F'** : Technical Capability Assessment Criteria
- Appendix 'G'** : Information Performa
- Appendix 'H'** : Certificate
- Appendix 'J'** : Dimensions of Marine Grade Al Alloy Plates (6.3 -30 mm)
- Appendix 'K'** : Trial Methodology

PART I: GENERAL INFORMATION

4. The project, i.e. indigenous development of '**Marine Grade Aluminium Alloy Plates (6.3 – 30 mm)**' has been approved under the 'Make-II' category for the prototype development and for subsequent procurement of 30 tonnes of **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)** under the 'Buy (Indian-IDDM)' category as per DAP 2020. Details of the stages involved in the development process are enumerated in Chapter III of DAP 2020. The progress of the project will be monitored by the Project Facilitation Team (PFT) of Indian Navy/MoD constituted for this purpose. PFT will act as interface between India Navy and Industry during the design and development stage of the project. **No reimbursement of development cost is permissible under Make-II scheme.**

5. The quantities are appended as under:-

(a) Quantity for **Prototype Development Phase** is 3.5 tons (dimension will be length of 3.5m, width of 1.2m and thickness of 6.3 & 30mm).

(b) Quantity in **Procurement Phase** under Buy(Indian-IDDM) is as under:-

<u>Sr</u>	<u>L(m)</u>	<u>W(m)</u>	<u>Thk (mm)</u>	<u>No of Plates</u>	<u>Weight in Tons</u>
1	3.50	1.20	6.3	140	10.00
2	3.50	1.20	7.0	75	5.95
3	3.50	1.20	8.0	132	11.98
4	3.50	1.20	15.0	12	2.04
5	3.50	1.20	30.0	2	0.68
Total				361	30.65 tons

6. **Eligibility to Respond to an EoI.** The eligibility criteria will be *iaw* Para 20 of Chapter 1 of DAP 2020, which is as follows:-

(a) Individual EoI Recipient; or

(b) Unless specifically provided for in a clause/section/chapter or elsewhere of the DAP, an Indian Vendor by whatever nomenclature when referred to means - for defence products requiring industrial license, an Indian entity, which could include incorporation/ownership models as per Companies Act, Partnership Firm, Proprietorship and other types of ownership models including Societies as per relevant laws, complying with, besides other regulations in force, and the guidelines/licensing requirements stipulated by the Department for Promotion of Industry and Internal Trade (DPIIT) as applicable. For defence products not requiring industrial license, an Indian entity registered under the relevant Indian laws and complying with all regulations in force applicable to that industry will be classified as an Indian Vendor. The following two additional conditions will apply to the definition for Buy(Indian-IDDM), Make I, Make II, Development cum Production Partner (DcPP) in D & D acquisitions through DRDO/DPSUs/OFB and SP Model categories:-

(i) Ownership by Resident Indian Citizen(s). Further, a company is considered as 'Owned' by resident Indian citizens if more than fifty percent (50%) of the capital in it is directly or beneficially owned by resident Indian citizens and / or Indian companies, which are ultimately owned and controlled by resident Indian citizens. This implies that the maximum permitted Foreign Direct Investment (FDI) shall be forty nine percent (49%). No pyramiding of FDI in Indian holding companies or in Indian entities subscribing to shares or securities of the Applicant Company or the Strategic Partner shall be permitted. Indirect foreign investment shall be accounted for in counting the forty-nine percent (49%) FDI.

(ii) Control by Resident Indian Citizens(s) (As defined in Companies Act 2013). 'Control' shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

7. **Indigenous Content.** Vendors offering indigenously designed, developed and manufactured product having minimum of 50% Indigenous Content(IC) on cost basis of the base contract price are eligible. Apart from overall IC as detailed above, the same percentage of IC will also be required in (a) Basic Cost of Equipment; (b) Cost of Manufacturers' Recommended List of Spares(MRLS); and (c) Cost of Special Maintenance Tools (SMT) and Special Test Equipment(STE), taken together at all stages, including FET stage. For IC on cost basis, vendor should ensure compliance as detailed in **Appendix 'A'** and furnish a certificate as per **Annexure 1 to Appendix 'A'**. For Indigenous Design, the vendor is required to furnish 'Undertaking to Comply with Indigenous Design', placed at **Annexure 2 to Appendix 'A'** during EoI response submission. Compliance to the same will be ensured by the PFT during Single Stage Composite Trials (SSCT).

8. **Embedded Software.** Not applicable.

9. **Intellectual Property Rights (IPRs).** Intellectual Property Rights of Government in "Make" projects are placed at **Appendix 'B'**. Development Agency/Agencies (DA/DAs) shall retain title or ownership and all other rights in intellectual property generated during the development of project. However, the Government shall have March-in rights under which the Government can require the contractor to grant, or may itself grant license for, inter alia, the following reasons:-

- (a) Where health and safety requirements so require the Government to act in public interest;
- (b) For National Security Reasons;
- (c) To meet requirements for public use not reasonably satisfied by the contractor;
- (d) For failure of the contractor to substantially manufacture the products embodying the subject invention in India; or

(e) For failure of the contractor to comply with any of the requirements laid down under these guidelines.

10. **Foreign Collaboration.** If the DA(s) collaborate(s) with a foreign firm as a technology provider in a certain technology area for the project, the nature of such collaboration and the technology areas being transferred must be clearly stated in the response. *The contribution of the Indian industry in acquiring, developing and indigenising including design critical technologies shall be one of the key criteria in assessment of various proposals.*

11. No component or any sub system of **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)** shall be subjected to any type of inspection or audit by any Foreign Govt or Agency without prior approval of MoD, Govt of India.

12. A trusted supply chain that will include the engineering support requirements would be established for **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)**. All documents related to the **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)** project are liable to be audited by Indian Govt or its nominated agency.

13. Detailed information about blacklisting of the company and foreign technology partner by any Govt Agency in India/ any other country would be provided as part of the response. Companies currently blacklisted by any Indian Govt Agency are ineligible for participation. Any such information not disclosed but revealed at a later stage would render the Company/Consortium ineligible for further participation.

14. **Time frames and critical activities.** The important time frames and critical activities for the Project **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)** are as follows:-

<u>Ser</u>	<u>Activity</u>	<u>Time in weeks from submission of EoI (T₀)</u>
(a)	EoI Response Submission	T ₀
(b)	EoI Response Evaluation	T ₁ = T ₀ + 06
(c)	Issue of Project Sanction Order	T ₂ = T ₁ + 02
(d)	Prototype Development	T ₃ = T ₂ + 48
(f)	Single Stage Composite User Trials & Acceptance of Trials Report	T ₄ = T ₃ + 07
(e)	Conversion of PSQRs to SQRs	T ₅ = T ₄ + 02
(g)	Issue of Commercial RFP	T ₆ = T ₅ + 02
(h)	Solicitation of Commercial Offer	T ₇ = T ₆ + 04
(k)	Finalisation of CNC	T ₈ = T ₇ + 04
(l)	Signing of Contract	T ₉ = T ₈ + 02

15. **Milestones of the Project.**

(a) **Evaluation of EoI Responses.** EoI responses will be evaluated in accordance with assessment parameters and evaluation criteria given in

Part V & VI of the EoI. All the shortlisted companies will be called Development Agencies (DAs). The project is presently reserved for MSMEs, however if at least two MSMEs do not respond, the Project shall be opened up for all, under the condition that interested MSME(s), if any at that stage and meeting the eligibility criteria, will get preference over Non-MSMEs in selection of DAs. Project shall be progressed ahead even if only one EoI respondent is found meeting the eligibility criteria.

(b) **Project Sanction Order.** PFT will issue Project Sanction Order for the development of prototype with **Nil** financial implication for Indian Navy/MoD. In case of only single vendor having offered the developed prototype ready for trials within timelines stipulated in the Project Sanction Order, not more than two time extensions will be accorded and thereafter the case is to be progressed as resultant Single Vendor Case.

(c) **Design and Development of Prototype.** PFT will act as the primary interface between the Indian Navy and the industry during the design and development stage to ensure matching of product functional units/ prototype specification with the user requirements/ PSQRs. PFT to facilitate the following:-

- (i) Finalization of trial methodology.
- (ii) Provision of requisite professional inputs/documentation (if feasible/available with **IN**) to industry.
- (iii) Providing clarifications related to functional or operational aspects of the store under development, as may be sought by the DAs from time to time, during the design and development of prototype.
- (iv) The Development Agency (DA) will be required to render a Quarterly return to the PFT on the progress of the project. The report would contain details of activities undertaken in the given quarter and activities envisaged in the upcoming quarter with Estimated Date of Completion (EDC).

(d) **Single Stage Composite Trials.** Trials would be carried out by PFT to validate the performance of the material against the parameters/specifications approved after the development of prototype. PFT will formulate the trial directives and constitute the Trial Team. The trial directive will specify the fundamental points that needs to be addressed for validating the 'essential' parameters. Trial Methodology is placed at **Appendix 'K'**.

(e) **Staff Evaluation.** Based on the Single Stage Composite trials, Indian Navy would carry out a Staff Evaluation, which gives the compliance of the demonstrated performance of the material vis-à-vis the specification. On the acceptance of Staff Evaluation report, the specification shall form the basis for the 'Buy (Indian-IDDM)' category of acquisition. If the prototypes of only a

single firm/individual clears the trials, the project will be progressed as resultant single vendor.

(f) **Finalization of Staff Qualitative Requirements (SQRs)**. PFT will facilitate the finalization of preliminary SQRs to final SQRs. The specification of the equipment would therefore be a part of the trial directives, and only the essential parameters as detailed in the specification will be tested.

(g) **Solicitation of Commercial offers**. A commercial Request for Proposal (RFP) for '**Buy (Indian-IDDMM)**' phase will be issued to all DAs for submission of their commercial offer **post completion** of Single Stage Composite User trials. A **Single Stage Composite Trial (SSCT)** will be conducted at all the firms premises which are ready with the prototype, by the Project Facilitation Team in order to establish completion of development of prototypes along with test certificates in lines of mandated specifications. This would include all destructive/ non- destructive checks by the NABL/QA agencies on the prototype (as applicable).

(h) **Award of Contract**. Commercial offers of only those DAs/vendors will be opened whose equipment has been short-listed consequent to Staff Evaluation and the L1 bidder would be determined based on the provisions of the Commercial RFP and awarded the contract for manufacture.

16. Once the prototypes are successfully validated, 30 tonnes of **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)** shall be procured by MoD, Govt of India under **Buy (Indian-IDDMM)** category **against a RFP**.

17. **Multiple Technological Solutions**. Other successful vendor(s) will be issued a certificate by the DDP indicating that the product has been successfully trial evaluated, to facilitate vendors to explore other markets. This is iaw Para 21 of Ch III of DAP 2020.

PART II: TECHNICAL REQUIREMENTS

18. **Scope of the Project.** The scope of Project Marine Grade Aluminium Alloy Plates (30 tons) includes carrying out Indigenous design and development (with min. 50% IC on cost basis of the base contract price) of effective and reliable aluminium plates.

19. **Operational Requirements** The indigenised plates will be utilised for new construction and repairs of *IN* vessels.

Technical Parameters

20. **Design.** The manufacturing of the plates should be as per PSQR, placed at **Appendix D**.

21. **Dimensions.** The shape and size of the aluminium plates should be in accordance to the PSQR, placed at **Appendix 'D'**.

22. **Essential Parameters.** The essential requirements of the plates should be as per PSQR placed at **Appendix D**.

23. **Acceptance.** PFT will be the approving authority for the prototype.

24. **Quantity.** The quantity is as per Para 5, Part I of EoI.

Maintenance and Qualification

25. **Specifications.** As per PSQR placed at Appendix D.

PART III: CRITICAL TECHNOLOGY AREAS

26. The capability assessment of the DAs will largely depend on their ability to design and manufacture independently or in collaboration. It is imperative that the project 'Marine Grade Aluminium Alloy plates, 6.3 – 30 mm' will make Indian Navy self-reliant. **The contribution of the Indian industry in acquiring and developing technologies in critical areas, if any, shall be a key criterion in assessment of the proposal.**

27. The assessment of critical technologies for the Project Marine Grade Aluminium Alloy plates (**6.3 - 30 mm**) offered by the DA(s)/Consortium must be supported with all Rights and Licenses (IPR) as mentioned at **Appendix 'B'**.

PART IV: ELIGIBILITY CRITERIA

28. **Reservation for MSMEs.** The Project **Marine Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)** is earmarked for MSMEs. However, if at least two MSMEs do not express interest for a Make programme earmarked for them, the same shall be opened up for all, under the condition that interested MSMEs, if any at that stage and meeting the eligibility criteria, will get preference over Non-MSMEs in selection of DAs in accordance with Para 12 of Chapter III of DAP-2020.

29. Indian entity satisfying all of the following criteria shall be considered as eligible 'Indian Vendor' for issue of EoI by PFT:-

(a) Public limited company, private limited company, partnership firms, limited liability partnership, one Person Company, sole proprietorship registered as per applicable Indian laws. In addition, such entity shall also possess or be in the process of acquiring a license as per DIPP's licensing policy.

(b) The entity has to be owned and controlled by resident Indian citizens; entity with excess of 49% foreign investment will not be eligible to take part in 'Make' category of acquisition.

30. Start-ups recognised by the DIPP are eligible for the project. Start-ups registered under the following categories and industry domains are eligible:-

(a) Categories.

- (i) Engineering
- (ii) Marine Engineering
- (iii) Manufacturing
- (iv) Research
- (v) Government

(b) Industry Domains.

- (i) Naval Architecture & Defence
- (ii) Technology Hardware

31. This EoI is being published on MoD/DDP website inviting Companies to participate in the 'Make-II' project and also issued to the potential vendors who have indicated willingness during the Feasibility Study to participate in the development of **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)**.

32. **Vendors are required to be compliant to Chapter III of DAP 2020 published on www.mod.gov.in**

PART V: ASSESSMENT PARAMETERS

33. The assessment of the EoI responses would be based on the Evaluation Criteria, which are elaborated in the succeeding paragraph.

34. **Technical Capability Criteria.** The project **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)** is a material which will require sound knowledge of metallurgy, manufacturing technology and global standards. The DA(s) should have a good understanding of Project Management, required for the development of **Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)**. The contribution of the DA in acquiring and developing technologies in critical areas shall be an important criterion in assessment of the proposal. The respondents to this EoI (including start-ups) are required to furnish information about their technical capabilities as per **Appendix 'F'**.

PART VI: EVALUATION CRITERIA OF ASSESSMENT PARAMETERS

35. **Evaluation Criteria for All Entities Other Than 'Start-Ups'**. The responses to this EoI will be evaluated based on the assessment parameters given at **Appendices 'D' to 'G'** to identify Companies/Consortia with proven Commercial, R&D, Indigenisation and Technical strengths and capabilities. The weightage for each of the criteria and sub-criteria at **Appendices 'D' to 'G'** would be finalised by the Project Facilitation Team.

36. **MoD, Govt of India reserves the right to modify these criteria at any time before the responses are opened for evaluation.** MoD, Govt of India also reserves the right to disqualify a respondent/consortium if he/they fail to comply with specific criteria at any stage of the evaluation process by the PFT. **No amendment/ change in response to EoI will be accepted under any circumstances once the EoI response is submitted.**

Note 1. Details regarding proposed expenditure/ establishment of facilities/ lab etc. are liable to be included in the contract in case the Company/ Consortium gets shortlisted for development of Marine Grade Aluminium Alloy Plates (6.3 - 30 mm).

Note 2. Company/Consortium giving False/Misleading information will be barred from participation in the Project Marine Grade Aluminium Alloy Plates (6.3 - 30 mm).

PART VII: DOCUMENTS TO BE SUBMITTED BY EoI RESPONDENTS

37. Following documents are required to be submitted by EoI respondents:-

- (a) Annexure I and II of Appendix 'A'.
- (b) Appendix 'C' (Financial and Commercial Criteria)
- (c) Appendix 'E' (if applicable) and 'F' (Technical Capability Assessment Criteria).
- (d) Appendix 'G'
- (e) Certificate as per Appendix 'H'.
- (j) MSME certificate, if claiming to be MSME. Start-ups are to submit their certificate in specified domain registered with DPITT.
- (k) Latest Certificate of Incorporation by the Registrar of Companies (RoC).
- (l) Latest Memorandum of Association and Articles of Association of the Company.
- (m) Auditor certified data of company for Share holding pattern including details of FDI, Net worth and Annual Consolidated Turnover.
- (n) Credit Rating Certificate.
- (p) Any other undertaking/affidavit as required by the MoD.

Note. The company/organisation is to certify the correctness of reply (ies) to this EoI on an undertaking signed by the authorised signatory.

38. The EoI respondents shall submit three (03) copies of response to EoI, clearly marking one copy as 'Original Copy' and the remaining two as 'Copy No 2 & 3'. The respondents are also required to submit a soft copy of the response to EoI in a CD/ DVD. In the event of any discrepancy between the content in copies of documents submitted, the contents in the 'Original Copy' shall govern/prevail. Each page of the response will bear the signatures of the authorised signatory of the Company/Lead Member in a Consortium.

39. **Guidelines for Submitting EoI Responses.**

- (a) The responses should be submitted strictly as per the formats given in respective appendices along with Certificate at **Appendix 'H'**. Should a Vendor/Consortium need to mention any other information, a separate column may be added as the last column only.
- (b) All response appendices should be submitted in a single file/folder. Supporting documents/additional reference should be submitted in a separate folder with proper reference mentioned against each parameters/sub parameters/sub sub parameters in respective appendices.

(c) Any supporting document/ evidence without any reference to specific parameter of criteria will not form part of the assessment.

40. The envelopes shall be addresses as under:-

Chairman, PFT
Project Marine Grade Aluminium Alloy Plates (6.3 - 30 mm)
Directorate of Naval Architecture
IHQ MoD (Navy)
Room 200, Talkatora Navy Annex
New Delhi 110 001
Email: dna.ihqmod@navy.gov.in Ph: 011-21410483

41. The response to this EoI must be submitted by ____ hrs on ____ 2022 at the address mentioned above.

42. MoD, Govt of India at its discretion can extend this deadline for the submission of responses to EoI and the same shall be notified in writing.

PART VIII: QUERIES AND CLARIFICATIONS

43. Following aspects will govern the procedure for queries and clarifications:-

(a) **Companies/Consortium may submit written queries/clarification/ amplifications on specific issues by ____2022.** Consolidation and examination of the queries received will be carried out by the PFT and clarification will be given to all the industries during the pre-response meeting.

(b) **Pre-Response Meeting**. A pre-response meeting is scheduled on _____2022 at ____ hrs at Directorate Naval Architecture, Room 200, Talkatora Navy Annex, New Delhi 110 001 to clarify the issues/ queries raised to facilitate submission of response.

(c) If deemed necessary, a written reply may be given to all respondents after the meeting.

PART IX: MISCELLANEOUS

44. This EoI is being invited with ***no financial commitment*** on part of the Govt. of India/ MoD. Govt of India reserves the right to withdraw or change or vary any part thereof at any stage. MoD, Govt of India also reserves the right to disqualify any company should it be so necessary at any stage on grounds of national security.

45. Respondent/consortium would be disqualified if they make false, incorrect, or misleading claims in their response to this EoI. A certificate as per the format at **Appendix 'H'** would be furnished as part of the response, including respective consortium partners, where applicable.

Note. The above guidelines are to be read in conjunction with the guidelines under Chapter III of DAP 2020.

(Suharsh Singh)
Commander
Secretary, PFT
Project Marine Grade Aluminium Plates
for Chairman

Enclosure:- Appendices 'A' to 'L'

Distribution: - Shortlisted vendors & hosted on MoD/DDP website

INDIGENOUS CONTENT ASPECTS

Definitions.

1. 'Indigenous Content'(IC) for an equipment or an item shall be arrived at by excluding from the total cost of that equipment/item, the following elements at all stages (tiers) of manufacturing/production/assembly: -

(a) Direct costs (including freight/transportation and insurance) of all materials, components, sub-assemblies, assemblies and products imported into India.

(b) Direct and Indirect costs of all services obtained from non-Indian entities/ citizens.

(c) All license fees, royalties, technical fees and other fees/payments of this nature paid out of India, by whatever term/phrase referred to in contracts/agreements made by vendors/sub-vendors.

(d) Taxes, duties, cess, octroi and any other statutory levies in India of this nature.

2. The "on cost" basis for 'Buy (Indian IDDM)' shall imply that IC is required as specified under Para 6 of Chapter I of DPP 2016, read with additional specific requirements in this regard, if any, mentioned in the EoI/RFP.

Reporting Requirements.

3. IC as defined in Para 1 and 2 above shall be mandatorily reported by all stages (tiers) of manufacturing/ production/ assembly to their higher stages (tiers). All stages (tiers) are required to aggregate IC based on certifications and inputs from lower tiers, as well as on the basis of their own procurement actions and manufacturing activities undertaken. The final aggregation of IC shall be undertaken by the prime (main) contractor with whom an acquisition contract is signed by the Ministry/SHQ.

4. All contracts, sub-contracts, agreements and MoUs made by prime (main) contractors (and their lower tier suppliers/vendors) with their business partners/suppliers, insofar as these contracts, agreements or MoUs relate to the main acquisition contract, shall mandatorily incorporate the definition and reporting requirements for IC in terms of Para 3. Similarly, these business partners/suppliers shall sequentially incorporate these definitions and reporting requirements with their

next levels of business partners/suppliers and so on, till the lowest tier in the manufacturing/production/assembly chain.

Audit.

5. The Ministry of Defence can exercise its right to conduct an audit of all certifications and costs relevant to IC at all or any stages (tiers) of manufacturing/production/assembly, starting from the prime (main) contractor downwards. The audit(s) could be conducted by the Ministry itself and/or by an agency/institution/officer(s) nominated by the Ministry, as may be decided by the Ministry.

6. All contracts, sub-contracts, agreements and MoUs made by prime(main) contractors (and their lower tier suppliers/vendors) with their business partners/suppliers, insofar as these contracts, agreements or MoUs relate to the main acquisition contract, shall mandatorily incorporate the right of Ministry of Defence to conduct an audit in terms of Para 5. Similarly, these business partners/suppliers shall sequentially incorporate these definitions and reporting requirements with their next levels of business partners/suppliers and so on, till the lowest tier in the manufacturing/production/assembly chain.

Certification.

7. All relevant deliveries made under contract shall be accompanied by a certificate of IC issued by the Chief Financial Officer (CFO). All final deliveries under contract shall be accompanied, in addition to the certificate issued by the CFO of the prime (main) contractor as aforesaid, by its Company Auditor's certificate. An Indigenisation Plan for Buy (Indian-IDDM) will be required to be submitted by the vendor to meet the requirement of IC as specified in Para 6 Chapter I of DPP 2016. Further, the equipment offered for trial shall be accompanied with a certificate of IC issued by the CFO of the prime (main) bidder. The format for certification of IC by the CFO/ Company Auditor shall be as per **Annexure 1 to this Appendix**. Undertaking to ensure compliance to Indigenous design is also to be furnished in format placed at **Annexure 2 to this Appendix**.

8. In case mandatory IC and design is not achieved by a vendor and/or if a false certificate is furnished by a vendor/sub-vendor, the Ministry can initiate proceedings for banning or suspension of business dealings with the erring Indian vendor/sub-vendor and its allied firms for all future contracts for a period up to 5 years. This right can be exercised by the Ministry at any point of time; and initiation of banning or suspension proceedings, if ordered, shall be in addition to any other action that may be taken/ordered by the Ministry against the erring vendor/sub-vendor under any law(s) in force.

Miscellaneous.

9. In the event of non-incorporation of the definitions and/or audit requirements laid down under Para 1 to 6 in contracts or agreements vendors with next tier at any stage (tier) of manufacturing/production/assembly, it shall be presumed that items/services provided by that stage/tier to the next (tier) have no IC for the purposes of the DPP. Similarly, in the event of non-certification of IC at any stage (tier) as required herein, it shall be presumed that items/services provided by that stage/tier to the next stage (tier) have no IC for the purposes of the DPP. In such cases, the Ministry of Defence can take any of the steps under Para 8 above against erring vendors/sub-vendors.

Annexure 1 to
Appendix A

FORMAT FOR CERTIFICATION OF INDIGENOUS CONTENT

This is to certify that we, _____ (Name of Prime/Main Vendor) have achieved/are offering the following IC in the accompanying delivery under contract/equipment being offered for trials/prototype, as defined under the Defence Procurement Procedure and as required under the RFP/Contract (tick whichever is applicable) No. _____ dated _____.

Description of Supplies and Indigenous Content Therein:

Sl. No.	Description of Supplies	IC achieved/ being offered	IC required to be achieved/ offered as per RFP/Contract
1			
2			

Signed by:

1. CFO

----- (Name of Prime/Main Vendor)

2. Statutory Auditor (if required under Appendix A)

----- (Name of Prime/Main Vendor)

Annexure 2 to
Appendix A

UNDERTAKING TO COMPLY WITH INDIGENOUS DESIGN

We, _____ ("Name of Vendor"), do hereby certify, undertake and confirm that:

1. The Design of _____ ("Named Product"), as claimed by us in response to the RFP No _____ dated _____ is owned partly or wholly by us/by an Indian entity.

2. Further, we confirm that the Design of the Named Product, as claimed by us, has not been licensed from a foreign third party except for standard software licences such as, but not limited to OS / Database / _____ (Strikeout / Specify as applicable).

3. The ownership of the Design, as claimed by us, enables us to manufacture, realise, sell, provide Through Life Support, modify and upgrade the Named Product without any encumbrances, except as specified below: (If any form of encumbrances exist on the product or any of its subsystems these should be elaborated here)

4. We further claim that we own the following Intellectual Property (IP) Rights in relation to the design of the Named Product: (Specify any Patents, Registration of Designs, if any, held by the Vendor)

5. We also undertake to permit MoD/MoD appointed Specialists Committee, to inspect/ carry out technical verification at our premises of the applicable documents, such as Design Reports, Drawings, Specifications, Software Documents & Codes, Gerber files, etc, as may be reasonably necessary and required to prove the above claim of ownership of the Design of the Named Product. (Examination on site at company's premises only. Documents, in any form, are not to be sought nor required to be submitted for examination outside the Company's premises)

6. Failure on our part to prove the ownership of the Design of the Named Product by us/by an Indian entity or submission of any false undertaking or claim as indicated in the response at any post contract stage of the intended procurement may make us liable to forfeiture of the PWBG to the extent of any direct losses or damages suffered by the MoD as a consequence of such false undertaking or failure to prove the ownership of the Design.

**INTELLECTUAL PROPERTY RIGHTS OF GOVERNMENT
IN 'MAKE' PROJECTS**

Guiding Principles.

1. The Government shall retain only a license in the Intellectual Property being generated under contract; and the contractor retains title or ownership and all other rights in intellectual property that are not granted to the Government, subject to conditions prescribed herein.
2. During the development of prototype, if any technology/product is developed, which the Government considers to be sensitive or classified and needs to be restricted for use in other purposes or for export, the Government through PFT or any other expert or body may identify such technology/product and shall retain the full ownership of IPRs in respect of such technology/product.
3. All technology licensing is divided up between two mutually exclusive categories of deliverables: (a) Technical Data (TD)¹ and (b) Computer Software (CS)². The Government shall also have certain rights to subject inventions and patents generated under the 'Make' contract.
4. The EoI shall contain details of (a) the delivery requirements, storage formats and storage medium; and (b) the associated data rights, in all technologies required to be developed or delivered under the 'Make' contract. Officials connected with award of 'Make' projects shall ensure that all such delivery requirements are clearly stated in the EoI and the 'Make' contract signed, if any, including delivery and form in which source code is required as a contract deliverable.

¹'Technical data' means recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and/or management information.

²(a)'Computer software' means computer programs, source code, source code listings, object code listings, design details algorithms, processes, flow charts, formulae and related material that would enable the software to be reproduced, recreated or recompiled. Computer software does not include computer data bases or computer software documentation. (b) 'Computer program' means a set of instructions, rules, or routines recorded in a form that is capable of causing a computer to perform a specific operation or series of operations. (c) 'Computer software documentation' means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software. (d) 'Computer data base' means a collection of data recorded in a form capable of being processed by a computer. The term does not include computer software.

5. The Government's standard license rights in (a) subject inventions and associated data; and (b) all other data generated under the 'Make' contract, including technical data and computer software whether associated with such subject inventions or otherwise, shall be 'Government-Purpose Rights' (GPR). In respect of subject inventions, the Government shall hold a non-exclusive, non-transferable, irrevocable, paid up (royalty-free) license to practice, or have practiced for on its behalf, the subject invention throughout the world.

6. These guiding principles shall apply at both the prime and subcontract levels; i.e., the prime DA(s) shall incorporate the rights of the Government as prescribed in this Annexure in all their subsequent sub-contracts and agreements insofar as technology development under 'Make' projects is concerned.

Government Rights

7. The Government shall have 'Government-Purpose Rights' and 'Unlimited Rights' as explained below.

8. For all subject inventions under the 'Make' contract, including technical data and computer software associated with such subject inventions, the Government shall hold GPRs, in that it shall hold a non-exclusive, non-transferable, irrevocable, paid up (royalty-free) license to practice, or have practiced for on its behalf, the subject invention throughout the world. These GPRs shall automatically convert to 'Unlimited Rights' as defined under this section upon the expiry of ten years.

9. For the purpose of all technical data and computer software, whether related to subject inventions or otherwise, GPRs shall imply the right to use such technical data and computer software within the Government without restriction and the right to authorise any other entity for any government purpose including re-procurement. More specifically, GPRs include the rights to:-

(a) Use, modify, reproduce, release, perform, display, or disclose technical data within the Government without restriction; and

(b) Release or disclose technical data outside the Government and authorise persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose that data for Government purposes.

(c) Form, Fit and Function data: and Manuals or instructional and training materials for installation, operation, or routine maintenance and repair;

- (d) Computer software documentation required to be delivered under the 'Make' contract;
- (e) Corrections or changes to computer software or computer software documentation furnished to the contractor by the Government;
- (f) Computer software or computer software documentation that is otherwise publicly available or has been released or disclosed by the contractor or subcontractor without restrictions on further use, release or disclosure other than a release or disclosure resulting from the sale, transfer, or other assignment of interest in the software to another party or the sale or transfer of some or all of a business entity or its assets to another party;

10. For the purposes of these guidelines, 'Government Purpose' means an activity in which the Government of India is a party, including cooperative agreements with international or multinational Defence organisations, or sales or transfers by the Government of India to foreign Government or international organisations. Government purposes include competitive procurement, but do not include the rights to use, modify, reproduce, release, perform, display, or disclose technical data for commercial purposes or authorise others to do so.

11. In addition to standard GPRs, Government rights in computer software to be delivered under contract shall also include the right to:-

- (a) Use of a computer program with Government computer(s);
- (b) Transfer to another Government computer;
- (c) Make copies of computer software for safekeeping; backup or modification purposes;
- (d) Modify computer software;
- (e) Disclose to service contractors;
- (f) Permit service contractors to use computer software to diagnose/correct deficiencies, or to modify to respond to urgent or tactical situations; and
- (g) Disclose to contractors or any other third-parties for proposes of emergency repair and overhaul.

March-In Rights.

12. The Government shall have 'March-In' rights for all items covered under its 'Government-Purpose Rights'. 'March-In' Rights shall include the right to work the patent, either by itself, or by another entity on behalf of the Government, in case the contractor fails to work the patent on its own within a specified and reasonable period of time.

13. Under its march-in rights, the Government can require the contractor to grant, or may itself grant license for, inter alia, the following reasons:-

- (a) The contractor fails to work the patent towards practical application within a reasonable time; or
- (b) Where health and safety requirements so require the Government to act in public interest;
- (c) For National Security Reasons;
- (d) To meet requirements for public use not reasonably satisfied by the contractor;
- (e) For failure of the contractor to substantially manufacture the products embodying the subject invention in India; or
- (f) For failure of the contractor to comply with any of the requirements laid down under these guidelines.

Miscellaneous

14. The contractor is required to have a timely and efficient disclosure system in place for reporting of intellectual property generation under the 'Make' contract to the Ministry of Defence. Failure to disclose in timely manner, or failure on part of the contractor to invoke his/her default right of ownership, shall imply that all IPRs shall ab-initio vest in the Government of India. The contractor may elect to retain title of any invention made in the performance of work under a contract. If the contractor does not elect to retain title, the title shall ab-initio vest in the Government as stated above and the contractor shall only be entitled to a license on such terms and conditions that the Government may deem it fit. Such license to the contractor shall usually be (a) revocable, non-exclusive and royalty-free; (b) extend to its domestic subsidiaries and affiliates; and (c) include the right to sublicense; but (d) shall not be transferable without prior approval of the Government.

15. The contractor shall also be required to submit periodic reports about commercialization and manufacturing activities undertaken for products embodying the subject invention under 'Make' contracts.

16. The Government's IPRs shall flow down from the prime contractor to all sub-contractors at all tiers; that is, every sub-contractor will have the same obligations vis-à-vis the Government as applicable to the prime contractor under the main procurement contract. To this end, the subcontractors shall have limited contractual privity with the Government solely for the purposes of their IPR obligations to the Government.

17. The ownership of any rights by the contractor does not include an absolute right to transfer of any software, product or documentation; and such transfer, including export thereof, shall continue to be governed by and be subject to the Export Policy, Export Guidelines and all applicable laws, rules, regulations, orders and instructions of the Government of India. All such transfers and exports shall require prior and explicit approval of the Ministry of Defence.

18. Where the DA is not a consortium, ownership rights in intellectual property (IP) being generated under the 'Make' contract shall vest with the Government upon dissolution of such DA. Where the DA is a consortium, the ownership rights in the IP generated under the 'Make' contract, upon dissolution of the consortium, shall vest amongst the partners as per their agreement on the subject contained in the joint partnership agreement of the consortium, without government rights as licensee being adversely affected in any manner.

Appendix C**FINANCIAL AND COMMERCIAL ASSESSMENT CRITERIA**

Name of the vendor:

<u>Ser</u>	<u>Criteria and Sub- Criteria</u>	<u>Vendor Submissions</u>			<u>Remarks, if any</u>
		<u>Lead Bidder</u>	<u>Partner 1</u>	<u>Partner 2</u>	
(i)	Turnover of at least Rs. 1 crore				Submit documents in support of these claims.
(ii)	Profitable for at least three out of last five years. In case of MSMEs, profitable for at least one out of the last three years				
(iii)	Positive Net Worth				
(iv)	Capital assets				
(v)	Credit rating				
(vi)	Turnover				
(vii)	Net profit				

Station:

Signature

Company Seal

Date:

PRELIMINARY STAFF QUALITATIVE REQUIREMENT (PSQR)
MARINE GRADE AA5086 ALUMINIUM PLATE
(6.3 TO 30 MM)



Directorate of Naval Architecture

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**PRELIMINARY STAFF QUALITATIVE REQUIREMENTS (PSQR)
MARINE GRADE AA5086 ALUMINIUM PLATE (6.3 TO 30 MM)
UNDER MAKE II**

1. **Scope.** This PSQR relates to specifications for indigenous development of marine grade AA5086 aluminium plates to be used for construction and structural repair of warships/auxiliary vessels of Indian Navy.

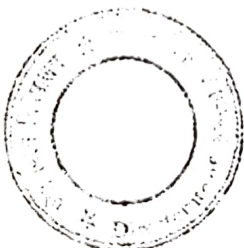
2. **Chemical Properties.** The chemical composition of the aluminium plates, when analysed in accordance with ASTM E 34, shall confirm to the requirements given in Table 1. The qualification criteria of ingots & slabs are as per the details given in Table 2.

Table 1 – Chemical Properties

Element	% Weight	
	Min	Max
Magnesium	3.5	4.70
Manganese	0.30	0.80
Chromium	0.05	0.20
Iron	-	0.20
Silicon	-	0.12
Zinc	-	0.15
Titanium	-	0.15
Copper	-	0.10
Other Elements, each	-	0.05
Other impurities, total	-	0.15
Aluminium	Remainder	

Table 2 – Ingot Qualification Checks

Quality attribute	Requirements
Composition	Major alloying elements shall be within $\pm 0.03\%$ throughout cast except Mg which shall be within ± 0.25 wt%
Alkali metal content like Na, K, Ca, Li	<5 ppm for each element
Hydrogen content	<0.20 cc per 100 gm of molten metal measured just before casting
Inclusions	Slab – PoDFA index <0.20 mm ² /kg
Grain size (core)	Slabs - 250 μ m (max)
Ultrasonic quality	Class 'A' (Single defect – \varnothing 2 mm FBH & Multiple defects \varnothing 1.2 mm FBH)



3. **Mechanical Properties** The aluminium plates in M temper shall meet the mechanical property requirements as specified in Table 3.

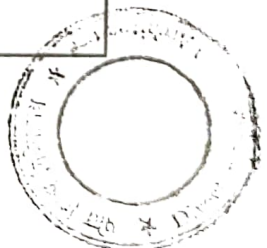
Table 3 – Tensile Properties

For thickness 6 mm – 30 mm (Temper M)	
0.2% Proof Stress (in MPa)	≥ 105
Ultimate Tensile Strength (in MPa)	≥ 240
Elongation in 50 mm or GL 5.65 $\sqrt{A_0}$ (%)	≥ 9, <i>where A_0 is initial area of cross-section</i>

4. **Manufacture.** Aluminium alloy shall be manufactured using direct chill casting method. Suitable measures shall be taken by the alloy producer to minimize loss of Mg, maintain required hydrogen level during melting & casting and segregation. The alloy is to be kept free from inclusions as far as possible. As-cast ingots shall be homogenized (at 530 ± 5 °C for 12-15 hours), scalped and visually inspected for surface defects, and subjected to ultrasonic testing. Only ultrasonically accepted slabs shall be utilised for rolling into plates & sheets. The plates & sheets shall be produced by hot or cold rolling, depending on the product thickness. The tentative rolling schedule is as per Table 4, however, the actual rolling parameters shall be at the option of the manufacturer.

Table 4 – Tentative Rolling Cycle

Description	Temperature
Preheating of slabs	Soaking at 510 °C
Hot rolling	475 °C <ul style="list-style-type: none"> - For plates of final thickness of ≥ 20 mm, the slabs are directly hot rolled to the final desired thickness. - While for final thickness of < 20 mm, the slabs are first rolled to 270 mm, reheated followed by hot rolling to the desired thickness.
Cold rolling	With cold rolling stock (between 7-9 mm thick) intermediate annealing is given at 490°C for 12 hours at a suitable thickness (e.g. at 4.5 mm for the 2 mm thick sheets)
Notes. The 2 mm thick cold rolled sheets are annealed at 200°C for 10 hours to attain desired mechanical properties in H24 temper	



5. **Surface Quality**. The plates & sheets shall be free from surface defects such as deep scratches, pitting, blisters, etc. The edge of the product shall be free from harmful discontinuities. Repair by welding shall not be permitted.

6. **Heat Treatment**. The plates shall be produced in M temper, to meet the properties specified in Table 3. Heat treatment shall be conducted on product at a temperature and time stated below:-

(a) **Homogenization of cast slabs**. The cast slabs shall be subjected to homogenization at $530 \pm 5^\circ\text{C}$ for 10-15 h followed by air cooling.

(b) **Preheating of homogenized slabs prior to hot rolling**. Preheating of the slabs shall be carried out at $510 \pm 5^\circ\text{C}$ for 12-16 h.

7. **Testing Requirements**. The details of various mechanical tests including tensile tests, hardness are given below :-

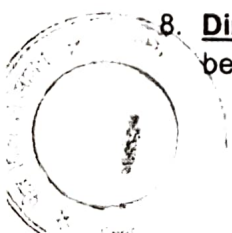
(a) **Tensile Test**. Tensile test shall be done in accordance with ASTM B557 and ASTM E8. The test specimens shall be taken transverse to the rolling direction from the front end and the back end of the plate. Minimum three plates randomly selected must be tested for each thickness for a given heat. However, the actual number of plates & sheets to be tested may be mutually decided by the manufacturer and the user based on the total number of plates & sheets of each thickness produced from same heat. The frequency of tensile test shall be one sample for each plate & sheet tested.

(b) **Hardness Test**. Hardness to be checked on each heat treated plate & sheet as per ASTM E10 and value obtained shall be recorded.

(c) **Weldability Test**. Weld tensile and weld bend tests shall be carried out on radio graphically cleared specimens as per Qualification Standard for Structural Welding of Aluminium by the Aluminium Association, USA. Typical tensile strength of the weld joint shall be 80% UTS of the parent metal. The test results of the above qualification tests shall comply with requirements specified above.

(d) **Ultrasonic Testing**. The ultrasonic testing of plates shall be carried out as per ASTM A 594 with acceptance standard as per Class A (Single defect $\text{Ø}2$ mm FBH and multiple defects $\text{Ø}1.2$ mm FBH). The acceptance of the products shall be mentioned as satisfactory in the test certificate. Each plate of thickness above 6 mm shall be subjected to ultrasonic testing.

8. **Dimensional Tolerances**. The tolerance of dimensions, flatness and waviness shall be as per BS 4L 100 (1993) and are indicated below:-



(a) The tolerance on thickness of hot rolled plate shall be as appended in the table below -

Nominal thickness (mm)	Tolerances on thickness for hot rolled plate of width		
	≤1250	1250 ≤ 1750	1750 ≤ 2000
Over 6 and <7	± 0.30	± 0.38	± 0.43
7 to <8	± 0.35	± 0.40	± 0.45
8 to <9	± 0.38	± 0.43	± 0.45
9 to <10	± 0.40	± 0.45	± 0.50
10 to <11	± 0.45	± 0.50	± 0.55
11 to <12	± 0.50	± 0.53	± 0.60
12 to <13	± 0.53	± 0.55	± 0.60
13 to <14	± 0.55	± 0.58	± 0.63
14 to <15	± 0.58	± 0.60	± 0.65
15 to <20	± 0.65	± 0.65	± 0.75
20 to <25	± 0.73	± 0.73	± 0.80
25 to <30	± 0.75	± 0.75	± 0.85
30 to <40	± 0.88	± 1.00	± 1.00

(b) The tolerance on thickness of cold rolled plate shall be as appended in the table below:-

Nominal thickness (mm)	Tolerances on thickness for cold rolled sheet of width					
	≤ 1000		1000 ≤ 1250		1250 ≤ 1550	
6.0 to 7.0	+0.20	-0.16	+0.20	-0.20	+0.21	-0.22

(c) The tolerance on flatness of plates shall be as appended in the table below:-

Nominal thickness (mm)	Tolerances on product of width					
	≤1000 mm (maximum deviation)		1000 ≤ 1500 (Deviation per 1000 mm)		1500 ≤ 2000 (Deviation per 1000 mm)	
> 6.0 to 30	+0.20	-0.16	+0.20	-0.20	+0.21	-0.22

(d) The tolerance on lateral curvature of plates shall be as appended in the table below:-

Product	Tolerances on products of length	
	≥ 3000 maximum lateral deviation per 3000 mm chord	< 3000 maximum lateral deviation
Sheet Strip, Class A tolerance Plate	6	2 x chord length/1000
Strip, Class B tolerance	12	4 x chord length /1000



9. **Quality Assurance** The quality assurance standards to be achieved for acceptance of plates/sheets shall be based on specified requirements/limits with respect to the following criteria:-

- (a) Chemical composition (Ladle analysis)
- (b) Mechanical properties
- (c) Surface quality
- (d) Dimensions and flatness
- (e) Ultrasonic testing
- (f) Dye penetrant testing (for sheets)

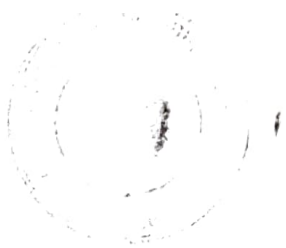
10. **Supplementary Requirements.** The following details/results shall be obtained from the manufacturer which shall be purely for the purpose of information only and not be a part of the acceptance criteria:-

- (a) Stress corrosion cracking resistance.
- (b) Exfoliation corrosion susceptibility.

11. **Certification Agency.** DMRL/DRDO.



आर वी वी वी रत्नाकर(RVVV Ratnakar)
कप्तान/Captain
कमोडोर(एनए)/Commodore (NA) (AOL)
03 Nov 21



COMMERCIAL ASSESSMENT CRITERIA FOR START-UPS

Name of the vendor:

<u>Ser</u>	<u>Criteria and Sub- Criteria</u>	<u>Vendor Submissions</u>			<u>Remarks, if any</u>
		<u>Lead Bidder</u>	<u>Partner 1</u>	<u>Partner 2</u>	
(i)	Nature of Company				Submit documents in support of these claims
(ii)	Category of Industry				
(iii)	Company location				
(iv)	History of successful execution of supply orders(with examples)				
(v)	History of past non performing contracts				
(vi)	Pending Litigation/ Litigation history				

Station:

Signature

Company Seal

Date:

Appendix FTECHNICAL CAPABILITY ASSESSMENT CRITERIA

Name of the vendor:

<u>Sl. No</u>	<u>Criteria and Sub-Criteria</u>	<u>Vendor Submissions</u>			<u>Remarks</u>
		<u>Lead Bidder</u>	<u>Partner 1</u>	<u>Partner 2</u>	
(i)	Execution of similar projects for military users in India and abroad				
(ii)	Execution of similar projects for other users in India and abroad				
(iii)	Execution of projects pertaining to critical technology area				
(iv)	Adherence to timelines, minimization of slippages, cost overruns				
(v)	Approach to meet user functionalities. Specific areas where assistance of Academia/ other industries where the resident expertise is not available with the respondent is to be indicated. Nature of partnership/ assistance to be sought is to be indicated.				
(vi)	Proposed system configuration. Approach to meet the specifications stipulated giving details of methodology to be adopted				
(vii)	Approach to address assembly and inter-operability issues.				
(viii)	Availability of Class Certification from IACS member society				

Station:

Signature

Company Seal

Date:

Appendix 'G'**INFORMATION PERFORMA: FOR RESPONDENTS OTHER THAN START-UPS**

1. Name of the Company
2. Name of CEO with Designation
3. Address of the Registered Office
4. Address of the Factory/Factories
5. Company Website(s)
6. Date of Incorporation
7. Brief History of the Company
8. Category of Industry (Large Scale/Medium Scale/Small Scale)
9. Nature of Company (Public Limited/Private Limited)
10. Nature of Business (Please give broad product range against each)
 - (a) Manufacturer
 - (b) Trader
 - (c) Sole Selling or Authorised Agent
 - (d) Dealer
 - (e) Assembler
 - (f) Processor
 - (g) Re-packer
 - (h) Service Provider
11. Details of Current Products
 - (a) Type/Description

- (b) Licensed/Installed Capacity
 - (c) Annual Production for preceding 3 Years
12. Details of Bought Out Items
- (a) Main Equipment
 - (b) Component/Assembly/Sub Assembly/Processes
 - (c) Name and Address of the Sub-Contractor
13. Sources of Raw Materials
- (a) Imported/Indigenous
 - (b) Brief Description
 - (c) Estimated CIF Value
 - (d) Percentage FE Content in Final Product
14. Details of Foreign Collaborations
- (a) Product
 - (b) Name and Address of Collaborator
 - (c) Year of Collaboration
 - (d) Current Status of the Collaboration (whether expired or current)
15. Technology Received from Abroad and Assimilated
16. Technology Transfer MoUs Signed/Under Negotiation
17. Products Already Supplied
- (a) To Indian Army/Air Force/Navy/ Coast Guard
 - (b) PSUs
 - (c) DRDO and its Laboratories
 - (d) Shipyards
 - (e) Any other Defence Organisation
 - (f) To other Principal Customers

18. Details of Registration Certification held (along with product details)
 - (a) DGQA
 - (b) DGAQA/DGNAI
 - (c) CEMILAC
 - (d) DGS&D
 - (e) Other Defence Departments
 - (f) Other Government Department
19. Details of ISO Certification (Attach certificate, if any)
20. Details of Pollution Control Certificate (Attach certificate, if any)
21. Latest Certificate of Incorporation by the Registrar of Companies (RoC), if any
22. Details of Credit Rating Certificate (Attach certificate, if any)
23. Details of Patent/IPR certificates (Attach certificate, if any)
24. Details of Permanent Man Power (with the details of qualifications)
 - (a) Technical
 - (b) Administrative
25. Total Area of Factory
 - (a) Covered (sq. mtrs)
 - (b) Uncovered (sq. mtrs)
 - (c) Bonded Space Available (sq. mtrs)
26. Electric Power
 - (a) Sanctioned
 - (b) Installed
 - (c) Standby

27. Details of Important Facilities
 - (a) Production (including Heat Treatment, Dies, Jigs and Fixtures)
 - (b) CAD, CAM, ROBOTS and Other Advanced Technology Tools
 - (c) Environmental Test Facilities.
 - (d) Tool Room, Metrology and Test Equipment and Facilities
 - (e) Type of Instrument
 - (f) Make and Model
 - (g) Date of Purchase
 - (h) Frequency of Calibration

28. Details of Developmental Facilities
 - (a) R&D Facilities Available
 - (b) Number of Technical Manpower
 - (c) Inspection and Quality Control of Raw Material, Components and Finished Products.
 - (d) Assistance from Central Agency/Agencies for Testing/Calibration
 - (e) Laboratory and Drawing Office Facility
 - (f) Percentage of Total Turn-Over Spent on R&D during the Last Three Years

29. Area of Interest for Future Expansion/Diversification (please provide adequate details)

30. Future Plan (if any) in respect of Expansion Program, Installation of Additional Machines/Test Facilities

31. Turn-Over during the last three Financial Years (Attach relevant documents, if any).

32. Present Net Worth of the Company (Attach relevant documents, if any)

33. Any other Relevant Information

34. Contact Details of the Executive Nominated to co-ordinate with the Assessment Team (please provide telephone, mobile and e-mail address).

ADDITIONAL INFORMATION

35. Outline features of the proposal.
36. Recommended stages/phases of development with priorities and time schedules.
37. Milestones that can be clearly demonstrated to facilitate project monitoring.
38. Estimated capital expenditure for prototype development.
39. Roles Responsibilities and expertise details of consortium members, if any.
40. Role of foreign technology provider, if any, including the agreement intended to be entered into on being shortlisted.
41. Requirement of specialised testing assistance where facilities are available only with DRDO/DGQA/NMRL.
42. Indicate the minimum order quantity for execution after the successful completion of the project (prototype development).
43. Undertaking to furnish the cost of the final product during evaluation stage itself, once the final configuration of the end product under development is frozen.
44. Details of the proposed facilities being created for Marine Grade AL Alloy Plates.
45. Any existing facility proposed to be used for production/ manufacture of Grade AL Alloy Plates.

INFORMATION PROFORMA: FOR START-UPS

1. Name of the Vendor/Company/Firm
2. Brief about the Company (Nature & category of company)
3. Contact Details
4. Local Branch/Liaison Office/Contact in Delhi

5. Details of Registration Certification held (along with product details). Attach certificate, if any
- (a) DGQA
 - (b) NMRL/ NSTL
 - (c) CEMILAC
 - (d) DGS&D
 - (e) Other Defence Departments
 - (f) Other Government Department
6. Membership of FICCI/ASSOCHAM/CII or other Industrial Associations. Give Name of Organisation and Membership number.
7. Credit rating of the company.
8. Details of Prototype/product to be developed
- (a) Name of product
 - (b) Description (attach technical literature)
 - (c) Specification of Material
 - (d) Technical Specifications
 - (e) Dimensions/Weight of the product
 - (f) Type of tests planned to be carried out post manufacturing
 - (g) Proposed methodology for evaluation
 - (h) Conformance to MIL grade/international manufacturing standards
 - (j) Details of inspection agency/Accredited Lab planned to be involved
 - (k) Details of safeties to be incorporated
 - (l) Interface requirement
 - (m) Indigenous Content
 - (n) Product life
 - (p) Guarantee/Warranty
 - (q) Whether proposed product being offered is an invention/ improvement/ innovation? Please elaborate
 - (r) Tentative cost of the product

(s) Proposed timeline for development of prototype, and if successful, production and delivery timelines, along with the cost breakup

(t) If the price varies with the number of procurement, please indicate cost breakup vis-à-vis number

9. Details of products developed earlier
10. Products Already Supplied
 - (a) To Indian Army/Air Force/Navy/ Coast Guard
 - (b) PSUs
 - (c) DRDO and its Laboratories
 - (d) Shipyards
 - (e) Any other Defence Organisation
 - (f) To other Principal Customers
11. Execution of similar projects for military users in India and abroad
12. Execution of similar projects for other users in India and abroad
13. Execution of projects pertaining to critical technology area
14. History of successful supply orders (Attach relevant documents, if any)
15. History of past non-performing contracts (Attach relevant documents, if any)
16. Pending litigation/Litigation history (Attach relevant documents, if any)
17. Capital Asset of the Company
18. Turn-over during last three Financial Years (Attach relevant documents, if any)
19. Present Net Worth of the Company (Attach relevant documents, if any)
20. Net profit in the last five years
21. Any other relevant information

Declaration. It is certified that the above information is true and any changes will be intimated at the earliest.

CERTIFICATE

It is certified that information submitted in the documents as part of the response to Expression of Interest for Project Marine Grade Aluminium Alloy Plates (6.3 – 30 mm) is correct and complete in all respects. It is acknowledged that the company and/or all consortium members will be disqualified from further participation if any information provided is found to be incorrect.

Signature with Company Seal

Company No1

Company No 2

Company No3

**DIMENSIONAL DETAILS FOR PROJECT MARINE GRADE ALUMINIUM
ALLOY PLATES (6.3 – 30 MM)**

Sr	L (m)	W (m)	Thk (mm)	Vol	Density	Per sheet weight	No of Plates projected under Make II	Total weight in Tonnes
1	3.50	1.20	6.3	0.02646	2700	71.44	140	10.00
2	3.50	1.20	7.0	0.02940	2700	79.38	75	5.95
3	3.50	1.20	8.0	0.03360	2700	90.72	132	11.98
4	3.50	1.20	15.0	0.06300	2701	170.16	12	2.04
5	3.50	1.20	30.0	0.12600	2700	340.20	2	0.68
Total							361.00	30.65

TRIAL METHODOLOGY

1. Inspection, Tests and Trials.

- (i) Certification of plates by PFT/DNA post conduct of Single Stage Composite Trials (SSCT) during Prototype Development Stage as per test/ procedures outlined in PSQRs and inspection of plates by DQA (Naval).
- (ii) Technical support to be provided by DMRL during Prototype Development Phase.