

**MAKE-II PROCEDURE AT
HINDUSTAN AERONAUTICS LIMITED**



www.hal-india.com

**HINDUSTAN AERONAUTICS LIMITED
CORPORATE OFFICE, BANGALORE**

10 DECEMBER, 2019

Contents

Sl. No.	Topic	Page No.
1	Introduction	1
2	Development Process steps	1
3	Formation of Indigenization Committee	2
4	Formulation and approval of Proposal	3
5	Identification & Hosting of items	8
6	Issue of Eol	9
7	Evaluation of Eol responses	9
8	Issue of Nil Value Project Sanction Order	10
9	Design and Development	10
10	Time Overrun	11
11	Solicitation of Commercial offers after successful D&D	11
12	Qualification Testing(QT) / Flight Trial Evaluation	12
13	Commercial Negotiations by Contract Negotiation Committee (CNC)	13
14	Multiple technological solutions	13
15	Intellectual Property Rights (IPRs)	14
16	Project Management, Review and Monitoring	14
17	Foreclosure/ Reduction in quantity	15
18	Deficient delivery	15
19	Additional requirement	16
20	Miscellaneous	16
21	Annexure-I: Indicative Eligibility Criteria for responding to Eol	17
22	Annexure-II: Categories & Domains of startups eligible for participation in Make-II	18

Abbreviations

CDR	Critical Design Review
CEMILAC	Centre for Military Airworthiness and Certification
CFA	Competent Finance Authority
CNC	Contract Negotiation Committee
D&D	Design & Development
DA	Development Agency
DGAQA	Directorate General Aeronautical Quality Assurance
DPP	Defence Procurement Procedure
DPSU	Defence Public Sector Unit
EOI	Expression of Interest
GHE	Ground Handling Equipment
GSE	Ground Support Equipment
IC	Indigenization Committee
IDDM	Indigenously Designed Developed and Manufactured
IV&V	Independent Verification and Validation
LQT	Limited Qualification Testing
LRU	Line Replaceable Unit
MOD	Ministry of Defence
MOU	Memorandum of Understanding
NRC	Non-Recurring Costs
OEM	Original Equipment Manufacturer
PDR	Preliminary Design Review
PNC	Price Negotiation Committee
QT	Qualification Testing
RC	Recurring Costs
RFP	Request for Proposal
ROM	Rough Order of Magnitude
SOF	Safety of Flight
SOW	Scope of Work
SVC	Single Vendor Case
TTGE	Tool Tester Ground Equipment

Framework for implementation of 'Make-II' Procedure

Introduction

1. With the emerging dynamism of private sector and with the aim of achieving substantive self-reliance in defence production, it is imperative that HAL harnesses the potential of the private sector.
2. The 'Make-II' procedure notified by MoD is part of "Make" procedure of the DPP-2016 with an objective of wider participation of Indian industry and impetus for MSME/start-ups sector. As per MoD letter No. D.O No. 18(2)/18/MII-OFB&DPSUs/DP(PIg-MS) dated 07 Mar, 2019, MoD had directed DPSUs to incorporate a similar procedure into their existing procurement procedures. The present Framework is being issued in compliance with this directive. In this sub-category of Make-II, no HAL funding is envisaged for Design & Development (D&D) but there has to be an assurance of Supply Order to be placed on the lowest bidding Development Agency (DA) on successful development.
3. Indian vendors as detailed in Annexure-I to this framework are eligible for participation as per the Make-II procedure for D&D and subsequent supply of items.
4. The salient points applicable specifically for Make-II framework are detailed in this procedure. Aspects which are not stated specifically herein are to be guided by the normal procurement procedure in HAL.
5. Projects under this framework will involve development of equipment/ system or their sub-systems/assembly/ sub-assemblies/components/material, primarily for import substitution, wherever commercial viability can be established.
6. Projects with estimated cost (Design & development phase and Procurement phase) not exceeding Rs 250 Lakhs, will be earmarked for MSMEs/Startups. However, if no MSME /Startup expresses interest for any such proposal, the same may be opened up for the general category of vendors.

Development Process steps:

7. The development & procurement process under this scheme would involve the following stages/ activities:-
 - i. Formulation of Proposal by Indigenization Committee (IC).

- ii. Approval of proposal by Competent Authority.
- iii. Issue of Expression of Interest (EOI)
- iv. Evaluation of EOI responses
- v. Award of Nil value Project Sanction Order
- vi. Design and Development.
- vii. Solicitation of Commercial Offer
- viii. Qualification Testing (QT) & Flight Trial evaluation.
- ix. Opening of commercial bids and evaluation of the offers
- x. Commercial negotiations by Contract Negotiation Committee (CNC).
- xi. Award of Procurement Contract

Formation of Indigenization Committee (IC)

8. HAL will identify the potential Make-II projects on the basis of requirement of the customers, Indigenization plan, or other valid considerations. An Indigenization Committee shall be constituted for this purpose at each Division and carry out functions as detailed below.

- a) An Indigenization Committee shall be constituted with representatives (as applicable) from Indigenization group/cell, Design Liaison Group, Manufacturing, Planning and Quality Assurance as members. Further, reps of the concerned R&D Centre and/or Certification agency may be co-opted if necessary. The committee will be constituted with the approval of Divisional Head. The senior-most member of the committee preferably at AGM/ DGM level should be the Head of the Committee. Head of the Committee may co-opt additional members for specific cases and specific periods as required.
- b) All procurement activities under this Procedure should be handled by a team comprising of rep(s) from Divisional IMM & Finance.
- c) Indigenization Committee and Procurement Team shall, inter-alia, carry out the following important functions: -

Indigenization Committee (IC):

- i. Preparing of Proposal, EOI & RFP.
- ii. Technical Evaluation of EOI/RFP responses.
- iii. Assisting IMM department in Commercial Evaluation of EOI/RFP
- iv. Monitoring and reporting on the progress of the project.
- v. Handholding of the DA to provide guidance, to resolve problems and to improve the probability of success of the project

- vi. Coordination of utilization of HAL facilities for tests, integration on aircraft, etc. as required
- vii. Any other responsibilities as entrusted by the Head of Division.

Procurement Team :

- i. Issue of EOI/RFP and receipt of responses
- ii. Commercial Evaluation of EOI/RFP responses
- iii. Issue of Project Sanction Order.
- iv. Issue of Production Order
- v. Post-Order administration of contractual issues/matters

Formulation and Approval of proposal:

9. Indigenization Committee (IC) will formulate the proposal as described below.

9.1. The proposal to the CFA at the EOI stage will be structured around the following considerations:

- i. Visibility of orders from HAL's customers. Firm Orders can be committed to the DA. Anticipated quantity can be committed if the corresponding Order from HAL's customer is already being processed under applicable DPP and if there is a high probability of it being approved by the CFA. Quantity estimate should also consider Spares, Floats, replacement after expiry of TTL, etc. as appropriate. For ROH, in general, 5 years requirement can be taken as a basis unless a higher demand can be convincingly proved. If any additional quantity is envisaged (or arises later), a Repeat Order provision can be included in the EOI/RFP.
- ii. Economic viability of the project. Economic viability is to be assessed based on the estimated unit price of the item to be developed. The estimated unit price (or benchmark price) will be determined as follows.
 1. Import substitution cases: The landed cost of the imported item coupled with the expected price reduction due to indigenization, declining price trend in the market, etc. as assessed by the Indigenization Committee, plus the amortization of the estimated cost of D&D.
 2. Other cases: Technical estimate by the Indigenization Committee based on the price of functionally similar items or nearest comparable items, data in the public domain or any other reliable source.
 3. In both the above cases, the estimated unit price should include taxes,

levies, etc. as applicable. In case the item needs accompanying essential deliverables such as mounting tray, connectors, etc. for its intended use, then the price of such deliverables also should be included in the estimated unit price.

For assessment of economic viability, the following check should be applied.

- Import substitution cases: The Estimated unit price should be less than or equal to the landed cost of the imported item. The indigenization Committee can waive this condition if sufficient justification including strategic benefit, self-reliance, need to address obsolescence, etc. exists.
- Other cases: Price reasonability of the item would be sufficient to establish economic viability of the project as well.

9.2. The value for determination of the CFA for approving the proposals would be the estimated unit price multiplied by the total quantity estimated for the Production stage.

9.3. The proposal to the CFA will contain the following:

- i. Background of the proposal, including the reasons for selection of the specific product/item.
- ii. Scope of Work (SOW) for the project including any part of the SOW that will be done by HAL to be brought out. Providing long term product support should also be a part of the SOW.
- iii. Deliverables from the DA to HAL during the D&D stage. This could include Engineering unit, SOF unit, etc. to be used for testing and integration and associated items like Connectors, Mounting trays, Testers, Documentation, etc. as applicable.
- iv. Technical specifications/ Preliminary specifications of the item(s) to be developed
- v. Estimated Unit price (without amortization) and NRC details to be mentioned.
- vi. Required timeframes/schedules for PDR, CDR, realization of Engineering unit, SOF unit, LQT/QT units, Rig test, Software IV&V, Flight Trials, Field Evaluation and final certification as applicable should be indicated.
- vii. Estimated Quantity as per 9.1.i above.
- viii. Estimated total cost as per Para 9.2 above
- ix. Acceptability of Multiple Technological Solutions. (Details at para no. 25)
- x. Draft EOI as per 9.5 below.
- xi. Number of DA's to be shortlisted after evaluation of EOI responses. (See Note below).

- xii. List of test facilities/ other facilities/ items/ consumables that will be offered for the purposes of D&D as detailed at 9.4 below.
- xiii. Evaluation Criteria for assessment of EOI responses. (Refer Para 9.5 xii)
- xiv. Economic viability as per Para 9.1.ii
- xv. Planned dates of issue of EOI, due date for Receipt of responses

Note :

- a. If the Certification of the item involves substantial efforts in testing and integration on HAL platforms and therefore supporting multiple vendors might lead to high cost, clash of priorities and/or inordinate delays, then generally only one vendor should be selected at the EOI stage based on the lowest ROM price. In this case, as part of EOI, vendors are required to submit fully amortized ROM prices (Unit price at Production stage including amortized cost of D&D).
- b. For certain specific items, the Indigenization Committee may decide to select two vendors at EOI stage. In these cases as part of EOI, vendors are required to submit fully amortized ROM prices (Unit price at Production stage including amortized cost of D&D). Amongst technically qualified vendors, two vendors offering the lowest ROM prices (L1 and L2) will be considered for granting nil value project sanction order.
- c. In all other cases, no ROM prices need be sought as part of the EOI. The DAs should be shortlisted based on Technical Evaluation. The pricing element is sought only as part of Commercial RFP.

9.4 Test facilities/ items/ consumables offered by HAL

- a. For making prototypes or conducting tests, the vendor may require to use HAL's facilities such as Wind Tunnel, Rigs, Labs, Process/Heat Treatment shops, etc. These can be offered to the DA on chargeable basis or free of cost. The unit rate (per hour, per occasion, etc.) of such facilities being offered by HAL at cost & test facilities being offered FOC should be mentioned in the EOI. However, the value of the test facilities offered on FOC basis should be brought to the notice of CFA while seeking approval for the proposal. The DA will be required to estimate the quantity (in hours, no. of times, etc.), apply the unit rates specified by HAL and arrive at the cost for such utilization of HAL facilities. These costs also to be taken into consideration by the Vendor for amortizing the D&D cost while submitting the proposal to HAL.
- b. If flight tests are involved for Qualification/Certification, the per-hour rate for such testing should be mentioned in the EOI. If integration of the item on any HAL aircraft or other platform involves changes to the aircraft/platform, the incremental costs for such modifications/de-modification should also be charged to the vendor. A consolidated cost of such modification / de-

modification to be paid to HAL by the DA should be estimated upfront and indicated in the EOI. These costs also to be taken into consideration by the Vendor for amortizing the D&D cost while submitting the proposal to HAL..

- c. During the D&D stage, every time the DA desires to utilize any HAL facility as above, he should make a request to HAL. In turn, HAL should raise an invoice on the DA for the payment involved computed based on the rates mentioned in the EOI or as mutually agreed. The payments can be in stages if the vendor is unable to pay in advance.
- d. If such utilization of HAL facilities to an extent more than what was originally included in the D&D cost is necessitated (for example, if the item fails in a test, has to be redesigned and tested again), a specific request should be raised by the DA and the payment should be made as above. These payments will not form part of the D&D cost and will therefore not be eligible to be amortized.

9.5 The EOI should contain the following. (Additional information if necessary can also be included).

- i. Scope of Work (SOW) for the project (if any part of the SOW will be done by HAL, the details have to be mentioned).
- ii. Technical specifications / Preliminary specifications of the item to developed
- iii. Deliverables from the DA to HAL during the D&D stage. This could include Engineering unit, SOF unit, etc. to be used for testing and integration and associated items like Connectors, Mounting trays, Testers, Documentation, etc. as applicable.
- iv. HAL's estimate of the amortised unit price which is inclusive of the design & development cost.
- v. Required timeframes/schedules for PDR, CDR, realization of Engineering unit, SOF unit, LQT/QT units, Rig test, Software IV&V, Flight Trials, Field Evaluation and final certification as applicable should be indicated and vendor should either confirm or offer his estimate of the schedule which should not be materially different from what HAL requires.
- vi. The aspect of placement of Nil value sanction order/s only to One/Two/Multiple Vendor to be brought out. Point no : 9.3 (xi) and corresponding Note refers.
- vii. If the intention is to shortlist only one or two vendors at the EOI stage, then Vendor should be requested to quote the fully amortized ROM unit price at the Production stage. All taxes, duties, etc. included in these cost estimates should also be sought from the vendor.
- viii. Quantities estimated for the Production stage. Firm and Optional quantities can be stated if so required. Year-wise distribution of Production quantities should be included if applicable.

- ix. In case multiple vendors are to be issued with Project Sanction Orders, it should be stated that in general, only the lowest bidder (L1) will be considered for ordering at the Production stage. In case two vendors are acceptable to HAL during the Production stage, the EOI should state the manner in which quantity will be distributed (usually 60:40) and the need for L-2 vendor to agree to L-1 price and terms.
- x. Indigenous Content: The DA should assure that the item(s) deliverable to HAL during Production stage will have at least 40% Indigenous Content(IC). If the extant guidelines issued by the MoD permits a lower level of IC for the item to be developed, the same can be adopted. The vendor should indicate through credible proof/computations in his EOI response that the IC will be met. It should also be mentioned that if the mandatory IC is not met (or not likely to be met as per HAL's assessment) in the unit used for LQT/QT as applicable, HAL will be under no obligation to issue Purchase order to the DA. The EOI should state that the mandatory IC should be maintained during the Production stage also.

Indigenous Content (IC) shall be mandatorily reported by all stages (tiers) of manufacturing/ production/ assembly to their higher stages (tiers). All stages (tiers) are required to aggregate indigenous content 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 a contract/ PO is signed by HAL.

The HAL/ MoD reserve the 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 Tier -1 vendor downwards. Applicable DPP will be referred for defining IC.

- xi. List of test facilities/ other facilities/ items/ consumables that will be offered for the purposes of D&D including their unit rates (as detailed at Para 9.4) should be stated in the EOI. In his response, the vendor should quote his quantity/frequency of usage of these facilities and arrive at the cost by applying these unit rates. The other relevant details and conditions in Para 9.4 should also be mentioned in the EOI.
- xii. Evaluation Criteria for assessment of EOI responses should be provided. These should include the following.
- a. Compliance to Scope of the project including supply of deliverables.
 - b. Compliance to Technical Specifications
 - c. Compliance to mandatory Indigenous Content
 - d. Conformance to the time schedule of D&D

- e. Vendor's response to utilization of HAL facilities including agreeing to the unit rates and quoting the quantity/frequency of such utilization.
- f. Whether the D&D cost and the unit price during Production stage has been quoted by the vendor with details as mentioned in the EOI.
- g. Specific acceptance of the conditions specified in the EOI and agreement to abide by them
- h. Completeness and comprehensiveness of the vendor's response
- i. Vendor's confirmation that he has read and understood the HAL Make-II Procedure as provided on HAL website and would abide by the procedure and conditions stated therein.

xiii. Due date for submission of response to the EOI.

xiv. Stage at which RFP will be issued (after SOF testing, after LQT/QT, etc. as decided by HAL) and the conditions subject to which RFP will be issued (meeting defined time schedule, meeting or likelihood of meeting Technical Specifications, etc. as decided by HAL).

xv. Vendor's CEMILAC/DGAQA approval status/plan.

10. Approval of Competent Authority as per DoP (not less than Head of Division) would be obtained for the proposal formulated as per point no. 9.

11. This provisioning will be valid for six months for issuance of EOI. For cases where EOI is not issued within six months from accord of approval, Head of the Division can revalidate the approval based on due justification by the Indigenization Committee.

Identification & Hosting of Items:

12.1. List of projects identified shall be hosted on HAL's Make in India web portal and clearly demarcated as "Make-II" so that vendors become aware that they will have to make up-front investment in Design & Development (D&D).

12.2. Indigenization Department in Corporate Office will make a senior executive in charge of Make-II specific activities (designated as Nodal Officer). Upon approval of the EOI by CFA, the divisions will send the EOIs along with a short abstract to the Nodal Officer who will check whether any another Division has floated EOI for the same or essentially same item(s). If no such duplication is present, he will host the abstract on the portal and simultaneously ask the Division originating the EOI to host the EOI on the e-procurement portal of HAL.

Issue of EOI:

13. The EOI will be issued as below.

- a. The procurement team shall host the EOI (as approved by the CFA) on the e-tendering portal of HAL after clearance from the Nodal Officer as mentioned at 12.2 above.
- b. The Nodal Officer shall indicate EOI hosting status in the list hosted under Make-II in the Make in India portal and provide reference to the EOI tender

Evaluation of EOI responses:

14.1 Responses to EOI shall be evaluated as per criteria given in the EOI and a report shall be finalized by the Indigenization Committee. Prior to this, the Indigenization Committee and/or the procurement team may interact with the concerned vendors to obtain clarifications as necessary. At first, those vendors whose technical responses are acceptable should be shortlisted.

14.2 If multiple vendors are shortlisted, but the intention was stated in the EOI that only one vendor will be chosen, then the vendor whose quote is the lowest in terms of fully amortized ROM price should be selected. If two vendors were planned to be selected as per EOI, then the L-1 and L-2 based on ROM price should be chosen. If any vendor backs out, the offer should be made to the next vendor in the increasing order of total cost. [refer note a & b of point no. 9.3 and point no. 9.5(vii)]

14.3 In cases of EOI which had not sought for ROM prices then all the technically qualified Vendors will be short listed.

14.4 The finalized report with recommendation on shortlisted DA(s) on whom Nil value Project Sanction Orders are proposed to be issued along with the draft Orders will be put up to the CFA for approval. CFA will be determined in line with Para 9.2 with the change that estimated prices will be replaced with prices indicated in the EOI response or as amended as above. If multiple DA's are proposed to be issued Project Sanction Order, the maximum cost among the shortlisted DA's can be taken as the basis to determine the CFA. In case ROM price is not sought in EOI, the proposal will be progressed on the value as determined at 9.2.

15. Generally, Project shall be progressed even if only one EOI respondent is found meeting the evaluation criteria.

Issue of Nil Value Project Sanction Order

16. Project Sanction Order with 'Nil' financial implications to HAL shall be issued after obtaining approval of the competent authority. The Order should contain the following stipulations in addition to general terms and conditions.

- Estimated Quantity involved during the Production stage.
- Unit rates for availing HAL's facilities and agreed Hours/frequency of utilization
- Schedule of D&D and conditions under which time extensions will be granted.
- Prerequisites to be met by the DA(s) for them to expect to receive an RFP for Production stage. This could include successfully crossing defined milestones (like SOF Unit, LQT, QT, etc.) and the likelihood of meeting the technical specifications of the item being developed.
- In case of urgent/ time bound projects, specific last dates by which PDR, CDR, LQT, QT or any other milestone should mandatorily be met by the DA(s) to stay in the race should be mentioned. In case the DA fails to meet these prerequisites and/or criteria, the Sanction Order will be short closed by HAL without any financial implications to itself.
- In case Acceptability of Multiple Technological Solutions was indicated in the EOI, the same has to be reiterated in the project sanction order. Besides the distribution pattern and the methodology of distribution as covered in EOI has to be clearly mentioned.

Design and Development:

17. Indigenization Committee will act as the primary interface for DA(s) during the design and development stage and will facilitate the following: -

- i. Provision of requisite professional inputs/documentation/samples to the DA(s).
- ii. Providing clarifications to the DA(s) on functional and/or operational aspects of the equipment, testing of prototype(s) and certification
- iii. Coordination of testing and acceptance of prototype(s)
- iv. Coordination with HAL Divisions where the DA needs to utilize HAL infrastructure and facilities during the course of development and testing.
- v. On request by the vendor(s), provision of appropriate sample for study (if feasible) on loan basis. In case this is not feasible, the vendor(s) may be permitted to study the sample at HAL premises.

Time Overrun:

18. The approval of extension of timelines for any 'Make-II' project may be recommended by the Indigenization Committee and approval sought from the Head of the Division. In case multiple vendors are developing the same item, the time extension should apply to all the vendors. Such extensions should not critically affect the schedule of the basic project (or product to be launched) for which the item is being developed. Vendors who fail to complete the development (or cross predetermined milestones to make them eligible to receive the RFP) within the extended schedule should be considered as unsuccessful.

Solicitation of Commercial offers after successful D&D:

19. In order to ensure that there is no large time gap between the end of development and placement of the Production Order, the commercial solicitation process through an RFP should begin sufficiently in advance. At the same time, it should be ensured that such a process should not be initiated even before sufficient positive indications are available that the development will likely result in a successful product. Preconditions to become eligible to receive an RFP will be as mentioned in the Project Sanction Order.

20. The RFP should be issued as per the usual commercial procedures followed by HAL. Considering the nature of this RFP, all DA's who have successfully crossed the predetermined milestone of development (as stated in the Project Sanction Order) would be shortlisted as technically qualified and the Commercial offers would be solicited from them. In addition to the normal contents of the RFP, the following specifics should be mentioned.

- (a) Year-wise distribution of quantity as required by HAL (Financial Year basis is preferable). The RFP should also state that the actual pattern of Ordering can be different from what is indicated in the RFP and that the Order stream can be terminated at any point of time due to factors beyond the control of HAL.
- (b) The Vendor is required indicate the total D&D price and the production unit price separately. However the D&D price will be paid pro-rata along with the production unit price against deliveries.
- (c) If the deliveries are spread over several years, the DA should be asked to quote year-wise prices or an escalation formula along with a base year price. (In case of strong Learning Curve effects, it could be possible that the prices can remain constant over the years or even reduce over the years). In such cases where the cash outgo from HAL will be spread over several years, DCF technique should be used to determine L-1, L-2, etc. on Present Value basis.

- (d) The fully amortised Unit price at the RFP stage generally need to be the same as or less than the ROM price quoted during EOI stage [refer note a & b of point no. 9.3 and point no. 9.5(vii)]. However, considering the risks inherent in D&D programmes, HAL can consider, based on substantiation provided by the vendor(s), accepting up to 10% increase with respect to the ROM price quoted at the EOI stage. In case the price quoted is beyond this 10% limit, but the only vendor/ L-1 vendor agrees to bring it down within the limit during the Price Negotiation stage, HAL can accept the same. This 10% will exclude normal escalation applicable in case HAL alters the delivery pattern with respect to what was indicated in the EOI.
- (e) Even though RFP is issued to a certain DA, he can be dropped from the race at any stage if he fails to meet the success criteria as defined in the Project Sanction Order at any stage after issue of the RFP (for example, RFP was issued after clearing the LQT stage, but the DA failed later during the QT stage).
- (f) In case DA's have utilized certain HAL facilities offered FOC for development of the item, the successful DA's should not directly deal with HAL's customers for such items.

21. Determination of the CFA for RFP issuance: Cases where only one DA is involved from the beginning will be treated as Single Tender cases. Cases where two DA's began development but only one DA successfully developed the item will be treated as Resultant Single Vendor case. All others will be treated as Limited tender cases with two DAs. Value for determination of the CFA will be the total cost estimated for the Production stage. (Unit price including amortization and taxes, etc. as quoted/agreed at the EOI stage multiplied by the total quantity estimated for the Production stage including optional quantity if any).

Qualification Testing(QT) / Flight Trial Evaluation:

22. Lab , Environmental , integration, Rig tests and Flight trials as agreed at the EOI stage would be carried out by HAL to validate the performance of the prototype(s) offered by DA/DA's. In case multiple DA's are involved, there could be a clash of priorities in terms of time slots available. In such cases, HAL should sequence the tests at its convenience and the DA(s) affected by such shifting of test slots should be given a corresponding time extension for completing the development. Based on the outcome of Limited QT/QT/ flight trials as cleared by DGAQA/ CEMILAC, etc. as applicable, the Indigenization Committee will declare successful DAs, to enable further progression for procurement.

Commercial Negotiations by Contract Negotiation Committee (CNC):

23. The Procurement team will carry out all processes from opening of commercial bids & commercial evaluation to final selection of vendor (and in case of multiple successful DA's, the quantity distribution to each DA where applicable) and negotiation of P.O./Contract clauses with the DA(s). Head of the Indigenization Committee should also be part of the CNC so as to ensure continuity. Besides if any additional member of IC need to be co-opted the same can be done. Negotiations in case of multivendor projects having procurement cost less than Rs 5 crore shall be carried out only in special circumstances with reasons to be recorded. However, CNC will carry out negotiations for all single vendor cases, other than resultant single vendor cases, irrespective of value of the project. Generally, no negotiation should be carried out, even in single vendor cases, if the L-1 price is lower than the import parity price by 20% or more.

24. After negotiations, the extant procurement procedure of HAL would be followed and the Procurement contract/ Purchase Order would be signed.

Multiple technological solutions:

25. In cases involving large quantities and where multiple technological solutions are acceptable, an option may be provided in the EoI and subsequently in the Commercial RFP for the 'procurement' phase for procurement of specified quantities (in the ratio of 60:40) from L1 & L2 vendor who have successfully developed the product, on the condition that the L2 vendor accepts the price and terms & conditions quoted by the L1 vendor. In case L2 vendor does not agree to match with L1 price, the next successful DAs say L3 shall be offered to match L1 price and so on progressively.

26. As explained earlier, if the costs/time/effort in integration and testing (including flight testing) of the item under development is prohibitive, only one DA will be issued the Project Sanction Order. Otherwise, for risk management, better price discovery, etc., multiple DAs can be selected and issued with Project Sanction Orders. In cases involving multiple DA's, DA's other than the ones on whom production orders have been placed will be issued a certificate indicating that the product has been successfully trial evaluated by HAL. Further, if the DA's continue development of the item after design corrections, etc., HAL shall render minor assistance as necessary to such DA's to obtain certification from CEMILAC or DGCA as applicable to facilitate such vendors to explore other markets and remain in the production of the product. Such assistance may be rendered as per mutually agreed terms. Whenever a DA has successfully completed development under the present Make-II procedure and irrespective of whether the Production Order for the

item has been issued by HAL or not, HAL on request by the DA should issue testimonials showing for which platform or ground system the item was developed, what trials have been done in HAL, associated test results, etc. for the DA to explore business outside HAL. While issuing such testimonials (or certificates mentioned above), third party confidential information should not be disclosed. Also, no NDA or Confidentiality clauses in MOUs and Contracts to which HAL is a signatory (or such obligation not to disclose certain information applies to HAL as a government owned company) should be breached. In case of doubt, a generic certificate/testimony can be issued without mentioning specific details like platform, etc. Heads of Divisions are authorized under this procedure to sign and issue certificates and testimonials mentioned above.

Intellectual Property Rights (IPRs):

27. HAL and the successful DA(s) on whom Production Orders have been placed by HAL shall be co-owners of Intellectual Property generated during the project including rights of sale and after-sale service of the item developed. Each of the co-owners can exploit the IP to its benefit, independently or jointly, with or without the consent of other co-owner(s). Where DA's have utilized certain HAL facilities offered FOC for development of the items, the successful DA's should not directly deal with HAL's customers for such items. However, this generic provision doesn't affect the right of the parties to make any other mutual agreement as to the exact manner in which the IPR will be utilized on a case-by-case basis, including non-compete agreements. As the manufacturing and ROH technology will be available only with the DA(s), in order to enable independent exploitation of the IP by HAL, the transfer of technology for manufacturing and ROH in the form of comprehensive and complete documentation (such as production drawings & Design/technology documents) should be supplied by the DA(s) if so required by HAL. HAL at its discretion can waive its rights over the IP and permit the DA(s) to retain the IPR in an exclusive basis. The converse condition also will be permissible.

Project Management, Review and Monitoring:

28. The progress of the project would be monitored by Indigenization Committee on a regular basis. HAL may engage services of independent consultants/experts on need basis for assessing the physical and/or financial progress of any project.

29. Review of the projects shall be carried out by the Divisional Head and a Quarterly Status Report should be forwarded to Corporate Indigenization Cell for consolidation and reporting to DDP/ MoD.

Foreclosure/ Reduction in quantity

30. No foreclosure of any development Project will be done other than for reasons mentioned in this Procedure. Serious breach of contractual terms by the DA, unsatisfactory progress of the project, serious design deficiencies, repeated failures during testing, quoting unacceptably high prices for the production stage, etc. are valid reasons for foreclosure. If HAL's EOI or RFP is based on an existing or anticipated Order from its customer(s), and if such Order gets foreclosed or does not materialize, then the related Project Sanction Order or the Supply Order can be foreclosed by HAL.

- (a) In case the foreclosure is done during the Production stage, the unamortized portion of the cost of D&D will be reimbursed by HAL to the DA(s). For this purpose, it will be assumed that the cost of D&D is uniformly amortized over the firm quantity mentioned in the Production Order. (If "D" is the cost of D&D, "Q" is the firm quantity and "q" is the quantity cancelled, then the reimbursement will be equal to $D \times [q/Q]$).
- (b) Generally, foreclosure is not done before the development process is completed. However in exceptional cases where the foreclosure is done during the D&D stage, for reasons attributable to HAL, the irreversible financial commitments made by the DA(s) up to the date of HAL notifying the foreclosure will be reimbursed to the DA(s). For this purpose, the DA(s) should submit a claim verified and signed by its/their Auditor(s) along with documentary evidence. HAL will independently verify the evidences presented and determine the amount to be reimbursed. Such amount should have a clear proportionality to the cost of the work completed out of the cost of the total SOW that prevailed at the start of the project. The reimbursement shall not exceed the cost of D&D in any case. All usable or salvageable assets and material covered under the reimbursement claim (and remaining in the possession of the vendor) and documentation generated during the period before foreclosure are to be handed over to HAL.
- (c) Notwithstanding anything mentioned under (a) and (b) above, no reimbursement shall be made to the DA(s) if the foreclosure is due to reasons attributable to the DA(s). Such reasons could include serious breach of contractual terms, unsatisfactory progress of the project, serious design deficiencies, repeated failures during testing, demanding higher prices/ erratic supply/ poor quality during the production stage, etc.

Deficient delivery

31. In case the successful DA (L-1) does not supply the production quantity in accordance with the contract, the pending quantity will be taken up for procurement as follows:

- If two DA's are involved in supply at L-1 rate & terms as per a quantity distribution arrangement, the DA other than the one in default will be requested to take up the pending quantity in addition to his own.

- If the above arrangement did not exist originally, a fresh Tender can be issued to the other DA(s) who met the success criteria at the development stage but did not get the Production Order. The prices and terms can be negotiated afresh with the lowest bidder/bidders.
- The DA in default should transfer Drawings, Tools, Test Equipment, etc. used in production and ROH to HAL free of cost so as to continue production.
- The balance portion of the cost of D&D as part of amortization will also not be paid to the Vendor in default. No further punitive action other than imposition of LD should be taken against the DA in default.

Additional requirement

32. If the quantity is likely to turn out to be higher than what is originally assessed during the EOI stage, the supply Contract with the DA pursuant to the RFP can have Option/Repeat Order clause to cover the additional quantity likely to materialize later. In case such increase in quantity could not be anticipated, and no Option/Repeat Order clause exists, a fresh Single or Limited Tender should be issued depending on whether one or more successful DA's is/are available. If due to lapse of time, the other DA might not be in a position to set up production facilities or to make supplies, then a fresh Single Tender should be issued to the existing supplier.

Miscellaneous

33. All EOIs and RFPs issued under this procedure should make a reference to this procedure (which should be accessible to all potential vendors through HAL's Make-in-India web portal) and state that although certain terms and conditions may not be present in the EOI/ RFI, vendors should explicitly state and agree in their responses that they have read and understood the procedure and that they agree to abide by it in dealing with issues during their engagement with HAL for any Make-II project.

34. Although this Make-II procedure is broadly modelled on the similar procedure promulgated through the DPP-2016, it is clarified that no related provision in the DPP-2016 (or its later versions) shall apply to the HAL procedure by implication, extrapolation, generalization or wide interpretation. Dispute resolution under this procedure will be as per the mechanism specified in the EOI/RFP/Contract as applicable at the appropriate stage when the dispute arises.

35. Headings used in this procedure are merely for convenience of reference and organization of ideas. As such, the headings in no way shall limit understanding or interpretation of the subject matter dealt with through this procedure in a holistic manner.

-XXX-

Indicative Eligibility Criteria for responding to EoI

1. All the entities (except start-ups/ MSMEs) satisfying all of the following criteria shall be considered as an eligible 'Indian Vendor' for evaluation of EoI by Indigenisation Committee (IC).

- i. 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 if the product to be developed under this Make-II procedure requires license as per the licensing policy of the Department for Promotion of Industry and Internal Trade.
- ii. 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-II.

2. Criteria for Startups/MSME:

- i. Startups recognized by Department for Promotion of Industry and Internal Trade under the eligible Domain/Category as per Annexure-II, shall be eligible to participate.
- ii. MSMEs registered as per provisions of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006
- iii. For projects with estimated cost (Design & development phase and Procurement phase) not exceeding Rs 250 Lakhs, no separate technical/ financial criteria be defined for both 'startups' and 'MSMEs, to encourage their participation.

Categories & Domains of startups eligible for participation in Make-II

Sl.No	Category
(i)	Engineering
(ii)	Manufacturing
(iii)	Research
(iv)	Government
Sl. No	Industry Domain
(i)	Aeronautics/Aerospace & Defence
(ii)	Analytics
(iii)	Augmented/Virtual Reality
(iv)	Automotive
(v)	Computer Vision
(vi)	IT Services
(vii)	Telecommunications and Networking
(viii)	Green Technology
(ix)	Internet of Things
(x)	Nanotechnology
(xi)	Renewable Energy
(xii)	Robotics
(xiii)	Security Solutions
(xiv)	Technology Hardware