Appendix A to Chapter II (Refers to Para 3(c) and Para 16 of Chapter II)

DEFINING ATTRIBUTES AND DECISION FLOW CHARTS

Note: These broad guidelines may be considered for deciding the categorisation.

1.	Decision Flow Charts.		Following Flow Charts are Annexed to this Appendix:-		
	(a)	Annexure I	-	Buying Priority Chart	
	(b)	Annexure II	-	Chart 1-Buy (Indian- IDDM)	
	(c)	Annexure III	-	Chart 2-Buy Indian	
	(d)	Annexure IV	-	Chart 3-Buy & Make (Indian)	
	(e)	Annexure V	-	Chart 4 -Buy & Make	
	(f)	Annexure VI	-	Chart 5-Buy (Global) and Buy (Global – Manufacture in India)	
	(g)	Annexure VII	-	Chart 6-Make Procedure	

Defining Attributes of Procurement Categories

2. **Defining attributes of the 'Buy (Indian-IDDM)' category**

(a) The equipment/system/platform is already in service, having been produced by Indian industry based on in-house R&D or through 'Make' scheme or developed under Para 72 of Chapter II in the past.

0r

(b) The equipment/system/platform is already in service, having been produced by Indian industry based on transfer of technology from a foreign vendor.

0r

(c) Though not in service, but is available in Indian industry for some other sector.

Or

(d) Though not in service, equipment/system/platform can be produced as all key technologies are available and Indian industry has capability to design, develop, manufacture, test and integrate the system.

And

(e) In case of upgrades of in-service equipment/system/platform, Indian industry has the requisite technology and capability to implement the upgrades sought, through one of the means detailed above.

And

(f) In each of the above situations, the Indian industry can deliver the equipment/system/platform with the stipulated indigenous content, firstly for trials and secondly for operational use as per indicated time schedule and in requisite numbers.

3. **Defining attributes of the 'Buy (Indian)' category**

(a) The equipment/system/platform is already in service, having been produced by Indian industry.

0r

(b) Though not in service, but is available in Indian industry for some other sector.

0r

(c) Though not in service, equipment/system/platform can be produced as all key technologies are accessible and Indian industry has capability to manufacture, test and integrate the system.

And

(d) In case of upgrades of in-service equipment/system/platform, technology is available to Indian industry, which has the capability to implement the upgrades sought, through one of the means detailed above.

And

(e) In each of the above situations, the Indian industry can deliver the equipment/system/platform with the stipulated indigenous content, firstly for trials and secondly for operational use as per indicated time schedule and in requisite numbers.

4. **Defining attributes of the 'Buy and Make (Indian)' category**

(a) The equipment/system/platform or the required upgrade is available with foreign OEMs (whether in service in foreign country or not)

And

(b) The foreign OEMs should be willing to provide Transfer of Technology (ToT) for indigenous manufacturing and provide Maintenance ToT (MToT), pertaining to critical technologies as per the specified range, depth and scope.

And

(c) Indian industry can absorb the technology and create the necessary production, test and integration facilities and poise for the up-gradation needed.

And

(d) Indian industry can deliver the equipment/system/platform with the stipulated indigenous content, for operational use as per indicated time schedule and in requisite numbers (graded approach for indigenous manufacture i.e. Fully Formed (FF), Semi Knocked Down (SKD) Kits, Completely Knocked Down (CKD) kits, Indigenous Manufacture (IM) kits).

5. **Defining attributes of the 'Buy and Make' category**

(a) The equipment/system/platform or the required upgrade is available with foreign OEMs (whether in service in foreign country or not).

And

(b) The foreign OEMs should be willing to provide Transfer of Technology (ToT) for indigenous manufacturing and provide Maintenance ToT (MToT), pertaining to critical technologies as per the specified range, depth and scope.

And

(c) One or more than one Indian vendor, who can absorb the technology and create the necessary production, test and integration facilities, have been identified as Production Agencies (PAs). In case more than one PAs are available, foreign OEMs are allowed to select PA.

(d) The equipment/system/platform with the stipulated indigenous content, as per indicated time schedule and in requisite numbers (graded approach for indigenous manufacture i.e. Fully Formed (FF), Semi Knocked Down (SKD) Kits, Completely Knocked Down (CKD) kits, Indigenous Manufacture (IM) kits), can be effected through the selected Indian PA.

6. **Defining attributes of the 'Buy (Global) and Manufacture in India' category**

(a) The equipment/system/platform or the required upgrade is available with foreign OEMs (whether in service in foreign country or not).

And

(b) The foreign OEMs should be willing to setup a subsidiary with complete facilities for manufacturing of manufacturing of the entire equipment or spares/assemblies/sub-assemblies/Maintenance, Repair and Overhaul (MRO) facility for the entire life cycle support of the equipment.

And

(c) The equipment/system/platform with the stipulated indigenous content, as per indicated time schedule and in requisite numbers can be effected by the OEM from the manufacturing facility in India.

7. **Defining attributes of the 'Buy (Global)' category**

(a) The requirement of equipment/system/platform is not of strategic or long term nature which cannot be fulfilled through higher preference category; under this circumstance, the following may be ensured:-

(i) Buy (Global) on multi or single vendor basis.

(ii) Fast Track Procedure in case of urgent operational requirements.

0r

(b) The requirement is of strategic nature and/or of long term nature. A single foreign vendor or all foreign vendors of the same country can provide equipment/system/platform; under this circumstance, the following may be ensured:

(i) Buy (Global) under Government to Government arrangement.

(ii) In case of multiple vendors, product may be selected before approaching the foreign Government.

(iii) Conclude Inter Governmental Agreement if one does not already exist, as required.

(iv) Requirement of ToT/MToT as required/likely to be made available may be factored.

0r

(c) The requirement is of strategic nature and/or of long term nature. More than one foreign vendors from different countries can provide equipment/system platform; under such circumstance, the following may be ensured:

(i) Buy (Global) on competitive bidding basis

(ii) Involve the Govt. of L1 bidder if required.

(iii) Include ToT/MToT as necessary.

<u>Note</u>: ToT in Buy (Global) category cases is essentially to provide the buyer with leverage during negotiations or even post contract stages. It may cover only certain critical product items such as fuel/warhead contents of a missile or ammunition of gun etc. It need not necessarily be as comprehensive in range, depth and scope as under the 'Buy and 'Make (Indian)' or 'Buy and Make' categories.

8. Defining attributes for categorisation of procurement under the 'Make' category

(a) The equipment/system/platform or their upgrades or their sub-systems/subassembly/assemblies/major components, as the case may be, would be designed and developed based on matured technologies.

0r

(b) The equipment/system/platform or their upgrades or their sub-systems/subassembly/assemblies/major components, as the case may be, would be developed using matured/proven technologies which are available to the Indian industry through indigenous or foreign sources; however access to technology and other production related dependencies should be under the control of Indian entities only.

And

(c) Fundamental research & development (R&D) of core technology or materials is not envisaged.

And

(d) Indian industry has or can establish the requisite capability for development, manufacturing, test, integration and production.

And

(e) Adequate time is available for induction of capability.

And

(f) Minimum indigenous content at prototype development and production stages, as stipulated, can be achieved.



Chart 1 - Buy Indian (IDDM)



Chart 2 - Buy Indian





Chart 4 – Buy & Make



<u>Chart 5 – Buy (Global)/Buy (Global- Manufacture in India)</u>





Chart 6 – Make Procedure

Annexure I to Appendix C

(Refer Para 3(q) of Appendix C)

PROPOSED TIMELINE FOR PROCUREMENT

<u>Note</u>: This is the proposed timeline unless otherwise spelt out at Para 3(q) of Appendix C.

Ser No	Stage of Procurement	Time Line as per DPP (in weeks)	Time Line as per DPP (Cumulative	Proposed Time Line	Remarks/ Reason for
1.	Acceptance of Necessity (Date of issue of minutes of DAC/DPB/SPB meeting)	-	Time-in weeks) To		variation
2.	Issue of RFP	08	To+08		
3.	Pre Bid Meeting	06	To+14		
4.	Dispatch of Pre Bid reply	03	To+17		
5.	Receipt of Responses	03	To+20		
6.	Completion of TEC Report	10	To+ 30		
7.	Acceptance of TEC Report	04	To+34		
8.	Completion of Technical Offset Evaluation Committee Report	04-08* (*concurrent activity)	To+34* (*concurrent activity)		Only in case of Offsets
9.	Acceptance of Technical Offset Evaluation Committee Report	04* (*concurrent activity)	To+34* (*concurrent activity)		Only in case of Offsets
10.	Completion of Field Evaluation (Trials)	16-24	To+50-To+58\$		\$ Additional 12 weeks permitted if winter trials are required.
11.	Completion of Staff Evaluation	04	To+54-To+62\$		"
12.	Acceptance of Trials/ Staff Evaluation Report	04	To+58-To+66\$		"

13.	Acceptance of TOC Report (If applicable)	0/04* (*If applicable)		To+58-To+70\$		"
14.	(i) Finalisation of CNC Report	(i) Multi-vendor -06		(i) Multivendor To+64-To+76\$		
	(ii) Finalisation of Offset Contract	(ii) Re Single 18-26	sultant Vendor	(ii) Resultant Sin Vendor To+76-To+96\$	ngle	
15.	Obtaining of CFA-MoD/ MoF/CCS approval CFA-MoD CFA-MoD & MoF CFA-CCS	4-8 6-12 6-16	04-16	 (i) Multivendor - To+68-To+92\$ (ii) Resultant Sing Vendor To+80-To+112\$ 	yle	
16.	Signing of Main Contract & Signing of Offset Contract	02		 (i) Multi-vendor To+70-To+94\$ (ii) Resultant Sin Vendor To+82-To+114\$ 	- gle	\$ Additional 12 weeks permitted if winter trials are required.

Appendix H to Chapter II

(Refers to Para 107 (a) of Chapter II)

BROAD TIME FRAME FOR PROCUREMENT ACTIVITIES

Ser No	<u>Stage of</u> <u>Procurement</u>	<u>Time</u> (in weeks)	<u>Cumulative</u> <u>Time</u> (in weeks)	<u>Offset</u> <u>Activity</u>	<u>Time</u> (In Weeks)	Cumula- tive Time (in weeks)
1.	Acceptance of Necessity (Date of Issue of minutes of DAC/DPB/SPB meeting)		То			
2	Issue of RFP	08	To+08	-	08	08
3.	Pre Bid Meeting	06	To+14	-	-	-
4.	Dispatch of Pre Bid reply	03	To+17	-	-	-
5.	Receipt of Responses	03	To+20	Receipt of Offset Compliance	12	20
6.	Completion of TEC Report	10	To+30	Submission of Technical and Commercial Offset proposals	12	32
7	Acceptance of TEC Report	04	To+34	Acceptance of TOEC report by DG (Acq)	8-12	40-44
8.	Completion of Technical Offset Evaluation Committee Report	04-08* (*concurrent activity)	To+34* (*concurrent Activity)	-	-	-
9.	Acceptance of Technical Offset Evaluation Committee Report	04* (*concurrent activity)	To+34* (*concurrent activity)	-	-	-
10.	Completion of Field Evaluation (Trials)	16-24	To+50-To+58\$			\$ Additional 12 weeks permitted if winter trials are required.

11.	Completion of Staff Evaluation		04	To+54-To+62\$	-	-	
12.	Acceptance of Trials/Staff Evaluation Report	()4	To+58-To+66\$	-	-	
13.	Acceptance of TOC Report (If applicable)	0 (appl	/04* *If icable)	To+58-To+70\$	-	-	"
14.	(i) Finalisation of CNC Report(ii) Finalisation of Offset Contract	(i) N venc (ii) Resu Sing Venc 18-2	fulti lor-06 iltant ile dor i6	 (i) Multivendor To+64-To+76\$ (ii) Resultant Single Vendor To+76-To+96\$ 	Evaluation of Commercial Offset Offers will be done concurrently by CNC	Concurrent with other negotiations	74-114
15.	Obtaining of CFA-MoD/MoF/ CCS approval CFA-MoD CFA-MoD & MoF CFA-CCS	4-8 6-12 6-16	04-16	 (i) Multivendor To+68-To+92\$ (ii) Resultant Single Vendor To+80-To+112\$ 			
16.	Signing of Main Contract & Signing of Offset Contract	02		 (i) Multivendor To+70-To+94\$ (ii) Resultant Single Vendor To+82-To+114\$ 			\$ Additional 12 weeks permitted if winter trials are required

Appendix F to Chapter II (Refer to Para 44 of Chapter II)

"<u>GUIDELINES TO BE FOLLOWED WHEN CHANGE OF NAME OF VENDOR IS</u> INVOLVED WHILE PARTICIPATING IN THE PROCUREMENT PROCESS

1. Whenever, the vendor participating in the defence procurement process, initiates the process for change of name with corporate regulatory authorities, due to change in business strategy, merger/acquisition or any other reason resulting in losing its original legal identity, it must inform the MoD/User Directorate at the earliest about its intent to change name on its official letter head signed by the authorised representative. If, at any stage of the defence procurement phase, approval of merger/amalgamation/acquisition is granted by courts/regulatory authorities, resulting in change of name, then the vendor should submit self authenticated relevant documents such as new certificate of incorporation issued by an appropriate Registrar of Companies (ROC) along with Novation Agreement, an undertaking by the new company whose format is given at Annexure to this Appendix, at the earliest after grant of approval by ROC. If any foreign company is involved in the 'merger and acquisition' and if documents are in languages other than English, then a self-certified/official/legal translation of the document along with the original as well as RBI approval should also be submitted. **The onus of submitting all relevant, self-authenticated, authentic documents lies with the vendor affected.**

2. User Directorate/MoD shall process the change of name of vendor case for consent of the approving authority concerned. On grant of consent, vendor would be informed and he would have to submit new Pre-Contract Integrity Pact (PCIP), Integrity Pact Bank Guarantee (IPBG) and any other applicable financial instruments/documents bearing the new entity name.

<u>Approving Authorities for the Change of Name of Vendor while Participating in the</u> <u>Procurement Process</u>

3. The approving authorities for change of name of vendor in all cases will be as follows:-

(a) <u>**Pre-Contract Stage.**</u> Case is to be processed by SHQ. Consent is to be given by DG (Acq) for schemes granted AoN by DPB/DAC and VCOAS/VCNS/DCAS/CISC/DG ICG for schemes granted AoN by SPB (i.e. for all schemes under delegated powers).

(b) <u>Post-Contract Stage</u>. The case has to be processed by SHQ/Acquisition Wing for consent of Raksha Mantri or VCOAS/VCNS/DCAS/CISC/DG ICG (in case of delegated power cases). On obtaining consent, a corrigendum to the sanction letter reflecting the change in name of vendor is to be issued.

Checklist for Vendor

4. Whenever the company applies to the regulatory authorities for 'change of name of

company', it must inform User Dte/MoD through a letter about proposed change of name and reason for the same.

5. When change of name is approved by regulatory authorities, the following documents must be submitted to User Dte/MoD at the earliest:-

(a) **Before Submission of Response to RFP**

(i) Information Proforma for Vendors as given at **Appendix B to Chapter II** of DPP.

(ii) New certificate of incorporation issued by the appropriate Registrar of Companies in case of Indian vendors or an equivalent organisation in country from where new entity would be operating in case of foreign company.

(iii) Copy of RBI Approval in case of merger/acquisition between Indian and foreign company(s).

(b) If Response To RFP Submitted Or The Contract Has Been Signed

(i) Information Proforma for Vendors as given at **Appendix B to Chapter II** of DPP.

(ii) New certificate of incorporation issued by the appropriate Registrar of Companies in case of Indian vendors or an equivalent organisation in country from where new entity would be operating in case of foreign company.

(iii) Copy of RBI Approval in case of merger/acquisition between Indian and foreign company(s).

(iv) Undertaking/Novation agreement by new company (as per the format given at **Annexure to Appendix F to Chapter II**)

6. On grant of consent to the case of change of name by the User Dte/MoD, the following documents bearing the new entity name will be submitted by vendor:-

- (a) New Pre-Contract Integrity Pact (PCIP)
- (b) Integrity Pact Bank Guarantee (IPBG)
- (c) Advance Bank Guarantee/Bank Guarantee and
- (d) Any other applicable financial instruments/documents bearing the new entity name.
- 7. In case the documents are in languages other than English then a self-

certified/official/legal translation of original documents must be submitted.

Steps To Be Followed By User Directorate/MoD

8. Whenever the Company informs of its intent to change of name, the name will be flagged in the vendor database as it has to submit subsequently, the documentary approvals by regulatory authorities.

9. If the vendor is participating in the procurement process, notwithstanding the vendor's ongoing process of change of name, the procurement process shall continue.

10. Ascertain that vendor has submitted all documents mentioned para 5, as applicable, are self authenticated by the authorised representative of the vendor.

11. Process the 'change of name case' for *obtaining consent* of Raksha Mantri or DG (Acq) or VCOAS/VCNS/DCAS/CISC/DG ICG as applicable.

12. Once the consent is granted inform vendor and solicit additional documents as mentioned in Para 6. Case be monitored till all documents, as applicable are submitted by vendor.

13. All cases involving change of name of vendor not covered by these guidelines shall be brought to the DAC through DPB for consideration.

Annexure to Appendix F (Refers to Para 1 of Appendix F)

<u>Note</u>: If change of name is due to rectification or due to change of business strategy, the terms Transferor and Transferee will be replaced by Old name and new name respectively and all applicable paragraphs will only be included.

FORMAT FOR UNDERTAKING OR NOVATION AGREEMENT FOR NEW ENTITY

The ______ (Transferor), a company duly organised and existing under the laws of India with its principal office in ______ (Address) with ROC Number* _____, The ______ (Transferee) a company duly organised and existing under the laws of India with its principal office in ______ (Address) with ROC Number* ______ and the President of India represented by Joint Secretary and Acquisition Manager (Land Systems/Air/Maritime Systems), Ministry of Defence, Government of India, South Block, New Delhi hereafter referred to as BUYER enter into this Agreement as of ______ [*insert the date of transfer of assets became effective under applicable law*]

* <u>Note</u>: A unique company identification number issued by Registrar of Companies or an equivalent regulatory authority in case of foreign company.

1. The parties agree to the following facts:-

(a) The BUYER has entered into a contract ______ [*insert the contract identifications*] with the Transferor/The transferor has submitted response to the RFP ______ [*insert the RFP identifications*]

(b) As of _____ (date) the Transferror has transferred to the Transferee all the assets to the Transferor by virtue of _____ [*Insert term descriptive of legal transaction involved*] between the Transferor and the Transferee.

(c) The Transferee has acquired the assets of the Transferor in respect of Contract/Response to the RFP.

(d) The Transferee has assumed all obligations and liabilities of the Transferor under the contract/response to the RFP by the virtue of above transfer.

(e) The Transferee is in a position to fully perform all the obligations that may exist under the contract/response to the RFP.

(f) Evidence of the above transfer has been filed with the BUYER.

2. In consideration of the above mentioned facts, the parties agree that this Agreement:-

(a) The Transferor confirms the transfer to the Transferee and waives any claims and rights against the BUYER that it now has or may have in future in connection with contract/response to the RFP.

(b) The Transferee agrees to be bound by and to perform each item/Article in the contract/response to the RFP in accordance with the conditions contained in the contract/response to the RFP. The transferee also assumes all obligations and liabilities of and all claims against, the Transferor under the contract/response to the RFP as if the Transferee were original party to the contract/response to the RFP.

(c) The Transferee ratifies all previous actions taken by the Transferor with respect to the contract/response to the RFP, with the same force and effect as if the action had been taken by the transferee.

(d) The BUYER recognises the Transferee as the Transferor's successor in interest and to the contract/response to the RFP. The Transferee by this agreement becomes entitled to all rights, titles and interests of the Transferor in and to the contract/response to the RFP, as if the Transferee were the original party to the contract/response to the RFP. Following the effective date of this Agreement, the term "SELLER" as used in the contract/response to the RFP shall refer to the Transferee.

(e) Except as expressly provided in this Agreement, nothing in it shall be construed as a waiver of any rights of the BUYER against the Transferor.

(f) All payments and reimbursements previously made by the BUYER to the Transferor and all other previous actions taken by the BUYER under the contract/response to the RFP, shall be considered to have discharged those parts of BUYER'S obligations under the contract/response to the RFP.

(g) The Transferor guarantees payment of all liabilities and the performance of all obligations that the Transferee: -

(i) Assumes under this Agreement; or

(ii) May undertake in the future should this contract/response to the RFP be modified under their terms and conditions. The Transferor waives notice of and consents to, any such future modifications.

(h) The contract/response to the RFP shall remain in full force and effect, except as modified by this Agreement. Each party has executed this Agreement as of the day and year first above written.

<u>BUYER</u>			
<u>By</u>	••••••	•••••	
<u>Title</u>	•••••		
[Office Seal]			

Transferor

Bv	
<u>Fitla</u>	
Corporate Seal	

Transferee

<u>By</u>	•••••
Title	•••••
[Corporate Seal]	

Appendix G to Chapter II

(Refers to Para 75 of Chapter II)

STANDARD CNC COMPOSITION

A. FOR SERVICES & COAST GUARD-ABOVE 300 CRORE

- 1. Acquisition Manager Chairman.
- 2. Technical Manager.
- 3. Finance Manager.
- 4. Advisor (Cost).
- 5. DGQA/DGAQA/DGNAI Representative.
- 6. Procurement Agency Representative.
- 7. User Representative.
- 8. Representative of Contract Management Branch at SHQ.
- 9. Repair Agency Representative.
- 10. Under Secretary concerned.
- 11. Member Secretary to be nominated by the Chairman.

Notes:

- (*i*) If with ToT-rep of DDP, DRDO and Production Agency to be included as member.
- (ii) Participation of Adviser (Cost) is not required in every CNC and it has to be on

actual requirement basis, as determined by the Chairman.

(iii) If the CNC is chaired by a Service Officer in category A above, then reps may be nominated in place of officers mentioned at Serial no. 1,2,3 of A above.

(iv) If Offset included, then rep of Defence Offset Management Wing (DOMW) to be included as member.

(v) In the absence of the designated member, the authorised representative would be deemed to be suitably empowered to take decisions.

(vi) Approval of DG (Acquisition) to be solicited for any change in the compositions mentioned above.

B. FOR SERVICES & COAST GUARD-UPTO 300 CRORE

1. Officer nominated by VCOAS/VCNS/DCAS/CISC/DG ICG (as per under mentioned norms) - Chairman

(a) Cases above Rs 50 Crore and upto Rs 300 Crore to be chaired by Major General / Equivalent.

(b) Cases upto Rs 50 Crore to be chaired by officer not below the Rank of Brigadier / Equivalent.

2. PIFA / IFA(Capital) in respect of Army/Navy/Air Force/CG for CNCs above 50 Crore and upto 300 Crore and reps of PIFA / IFAs for CNCs upto 50 Crores; Rep of PIFA / IFA not to be below the rank of Deputy Secretary.

- 3. Representative of TM
- 4. Representative of Nominated Procurement Directorate of the concerned SHQ
- 5. Representative of DGQA/DGAQA/DGNAI
- 6. Representative of Repair Agency
- 7. Representative of Contract Management Branch at SHQ/ICG.
- 8. Representative of Advisor (Cost).
- 9. Representative of User Directorate.
- 10. Member Secretary to be nominated by the Chairman.

Notes:

- (*i*) If with ToT-rep. of DDP, DRDO and Production Agency to be included as member.
- (ii) Participation of Rep of Costing Cell is not required in every CNC and it has to be
- on

actual requirement basis as determined by the Chairman.

(iii) In the absence of the designated member, the authorised representative would be deemed to be suitably empowered to take decisions.

(iv) Member of any other agency apart from the prescribed members can be associated with the approval of VCOAS/VCNS/DCAS/CISC/DG ICG.

Annexure II to Appendix C

(Refers to Para 3(q) of Appendix C)

F. No.470/Dir (Acq)/07 Government of India Ministry of Defence New Delhi Dated 12th September, 2007

To: The Chief of Army Staff The Chief of Naval Staff The Chief of the Air Staff Chief of Integrated Staff Committee

DELEGATION OF FINANCIAL POWERS FOR CAPITAL EXPENDITURE

Sir,

1. I am directed to refer to the following letters of the Ministry of Defence.

(a) A/89591/FP-1/1974/2006/D(GS-1) dated 26 July 2006.

(b) PL/3221/NHQ/486-S/2006/D(N-IV) dated 19 July 2006 as amended vide Corrigendum No.PL/3221/NHQ/486-S/2006/D(N-IV) dated 25 July 2006.

(c) Air HQ/95378/1/Fin P/2431/US(RC)/Air-II/06 dated 14 July 2006, Air HQ/95378/1/Fin P/2520/US(RC)/Air-II/06 dated 20 July 2006 and Corrigendum No. air HQ/96378/1/Fin P/2321/SO(S)/air-II/06 dated 18 October 2006.

(d) FP/20135/HQIDS/2350/2006/D(GS-I) dated 8 September 2006 regarding delegation of financial powers to various authorities in the Services for revenue and capital expenditure and to convey the sanction of President to enhancement of powers of the Vice chief of Army Staff/Vice Chief of Naval Staff/Deputy Chief of Air Staff/CISC from \gtrless 10 Crore to \gtrless 30 Crore for sanctioning capital acquisition schemes for procurement of equipment and stores. These powers will be exercised with the concurrence of the integrated Financial Advisers. The relevant schedules will be deemed to have been amended accordingly. All provisions of MoD Finance letters No. Misc/Addl. FA (M)/06 dated 26.7.2006 and 16.1.2007 would continue to be followed except as amended by this letter.

2. I am also directed to convey the sanction of the President to the following change in the

procedure with immediate effect:

(a) SCAPCHC will be competent to grant Acceptance of Necessity (AoN), categorisation and Quality Vetting in respect of procurement proposals up to the delegated powers of the Services HQrs, provided such proposals are included in the Five Year Plan. Any change there from would need the approval of the DPB.

(b) Participation of Adviser (Cost) would be on actual requirement basis.

(c) The Chairman of the CNC in the Services, to be nominated by the CFA, will not be below the level of Brigadier/equivalent rank. The level of the Finance and other members of the CNC will be decided by the IFA and other agencies concerned.

(d) Where the CNC is attended by Jt.IFA/Dy.IFA or any other representative of Integrated Finance, the recommendations of the CNC will be sent for approval with the concurrence of the IFA.

3. It is also clarified that procurement proposals of items upto \gtrless 30 crore which have been approved on the basis of estimated prices as part of the procurement proposal of a main weapon system/platform will be negotiated by CNCs under the delegated powers and provided the cost is within the ceiling limit approved for the item(s) no fresh CFA approval will be required. Acceptance of CNC recommendations and expenditure clearance in such cases will be done by the CFA under the delegated powers. The linkage to the main proposal should be brought to the notice of the CFA under delegated powers.

4. The exercise of the financial powers is also subject to availability of funds in the sanctioned budgetary allotment under the relevant Budget Head.

5. The delegated powers also include procurement from foreign sources provided full rupee backing for the amount is available. Separate approval for release of FFE will not be required and release of FFE will only be noted by the respective Financial Planning Directorates after expenditure angle approval for the purchase has been given by the CFA.

6. Directorates of Financial Planning will keep a record of expenditures incurred under the delegated powers. Financial Planning division of HQIDS will be the nodal agency for compiling data of the three Services. HQIDS as nodal agency will submit the monthly expenditure report to FA (Acq) & AS.

7. All provisions of DPP 2006 not affected by the decisions mentioned above and other orders/instructions/procedures concerning capital procurement will continue to be applicable to procurements under the delegated powers.

8. A flow chart highlighting the various stages of the Acquisition process indicating the concomitant responsibility in respect of SHQ for exercising delegated powers is also enclosed.

9. The procedure set out in this letter will apply to all pending procurement proposals that have not already been approved by the DPB/DAC.

10. This issues with the concurrence MoD(Fin) vide ID No. 1310/FM(LS/07 dated 3.8.2007.

Yours faithfully,

(K. K. Kirty) Director (Acquisition)

Copy to:

CGDA -20 copies (including an ink signed copy) for circulation DGADS -5 copies SO to Defence Secretary PS to Financial Adviser (Defence Services) PS to Secretary (Defence Production) PSs to SA to RM, SS (J), DG (Acq), FA(Acq), AS(N), AS(DP) All Joint Secretaries in the MoD All Addl FAs & JS in MoD (Fin) All JS & AMs, FMs, TMs, All IFAs in the Service HQrs ADG (WE), ACNS (P&P), ACAS(Plans)

Annexure II to Appendix C (contd)

FLOW CHART FOR PROPOSED CAPITAL ACQUISITION (DELEGATED POWER CASES)

Stage	<u>Responsibility</u>
QR formulation	Service HQ/Joint Staff
Categorisation/AoN/Qty. Vetting	SPB-For schemes included in 5 Year Capital Plan. Any change there from -DPB
RFP	* Collegiate Vetting by TM, SHQ and IFA.* Issue of RFP by TM after approval of DCAS/VCNS/VCOAS/CISC
TEC Field Trials Staff Evaluation	Approval through TM by VCOAS/VCNS/DCAS/CISC
CNC	Not below the level of Brigadier # (as the case may be)
CFA approval	VCOAS/DCAS/VCNS/CISC/with concurrence of IFA.
Contract monitoring	Service HQ/Joint Staff/IFA

Notes:-

(a) Letter No. A/89591/FP-1/1974/D(GS-I) dt. 26.07.2006 of MoD on the subject "Delegation of Financial Powers to Army authorities for Revenue and Capital Expenditure" is addressed to the Chief of the Army Staff.

This letter supersedes the delegation of financial powers laid down in respect of the authorities for the specified purpose in the FRs and Schedules to MoD letter No. A/89591/693/FP-1/2002/D(GS-I) dated 22 Apr 2002 or any other previous orders/instructions on the subject.

The exercise of these financial powers are to be governed by existing orders and instructions on the subject, as amended by the Government from time to time. Standard Operating Procedures (SOPs) relating to the exercise of the financial powers as issued and amended from time to time will be strictly followed. However, where SOPs conflict with the Govt. Rules/Instructions, the later will prevail. Cases not covered by the delegated financial powers will be referred for sanction of the Ministry of Defence.

Appendix and Notes in the Schedules I to XXIII to this order covers the detailed guidelines for exercise of delegated financial powers in the Army.

To be read in conjunction with Appendix G to Chapter II, regarding composition of CNC.

(b) Letter No. PL/3221/NHQ/486-S/2006/D(N-IV) dt. 19.07.2006 of MoD as amended vide Corrigendum dt. 25.07.2006 on the subject "Enhancement of Delegated Financial Powers of Naval Authorities" is addressed to the Chief of the Naval Staff.

Detailed guidelines for exercise of delegated financial powers to various Naval Authorities are given in Enclosures 1 to 3 of this letter. Re-numbering of the Annexure has been given in the Corrigendum to MoD letter No. PL/3221/NHQ/486-S/2006/D(N-IV) dt. 25.07.2006. Certain key areas that require close monitoring have been identified and placed at enclosure 3 of the letter. Standard Operating Procedures (SOPs) relating to the exercise of the financial powers as issued and amended from time to time will be strictly followed. However, where SOPs conflict with the Govt. Rules/Instructions, the later will prevail. Cases not covered by the delegated financial powers will be referred for sanction of the Ministry of Defence.

(c) Letter No. Air HQ/95378/1/Fin P/2431/US(RC)/Air-II/06 dt. 14.07.2006 of MoD on the subject "Delegation of Financial Powers to various Indian Air Force Authorities" is addressed to the Chief of the Air Staff. Amendments to this letter were issued on 20.7.2006 and 18.10.2006. 21 Annexure to these letters indicate in detail the guidelines for exercise of delegated Financial Powers, separately for Capital and Revenue procurement cases. In respect of Capital procurement, Air HQ has to render a Quarterly Report to MoD (Acquisition Wing) on the progress of various schemes under delegated powers, indicating the actual cash outgo against the budgetary projections.

(d) Letter No. FP/20135/HQ IDS/2350/2006/D(G-I) dt. 08.09.2006 of MoD on the subject "Delegation of Financial Powers to the Joint Staff Authorities" is addressed to CISC.

The delegated financial powers to the CFAs are to be read in conjunction with the financial instructions and orders issued by the three Services in the form of Army instructions/orders, Naval instructions/orders and Air Force instructions/orders and SOPs for any clarification or reference, until issuance of Joint Staff Orders/SOPs. Powers conferred for Projects specifically sanctioned by the Government will also continue to be operative for the duration of such projects and these would be applicable for the Joint Staff Organisations/Inter-Service organisations under HQ IDS.

Detailed guidelines for exercise of delegated financial powers are given in the enclosures 1 & 2 of this letter. The procurement policy to be followed by the Joint Staff Organisation and certain key areas that require close monitoring are given at enclosure 3 of this letter.

(e) MoD (Fin) ID No. Misc/Addl. FA(M)/06 dated 26.07.2006 on the subject "Delegation of Capital Acquisition Powers to the Services" is addressed to VCOAS,

VCNS, CISC, DCAS and officers of Acquisition Wing. This letter gives the details of delegation of powers at the level of SHQs/IDS for Capital Schemes/projects costing upto ₹ 10 Crores. Detailed procedures have also been laid down in the form of a Flow Chart showing the various stages of Acquisition process.

(f) MoD (Fin) ID No. Misc/Addl. FA(M)/06 dated 16.01.2007 is in partial modification of the letter referred to at (e) above regarding Quantity Vetting and composition of CNC.

FET RELATED ASPECTS

1. <u>Introduction</u>. This Annexure lays down the steps that should be considered during all procurement stages to facilitate smooth conduct and timely completion of FET. The Annexure has four sections as follows: -

- (a) Section I Types of trial evaluation associated with DPP.
- (b) Section II Capital procurement stage wise checklist on FET issues.
- (c) Section III –QAP and ATP issues to be considered.
- (d) Section IV Facilities being provided to facilitate certification/trials.

SECTION I - TYPES OF TRIALS

2. <u>Trial Evaluation and Types of Trials</u>. Trial evaluation constitute a very important activity in the entire procurement process. Trials are of various types, have different connotations depending on category of acquisition and have varied scope as well as stakeholders defined by the type of trial. The authority/agency planning and ordering the trial will promulgate comprehensive instructions to include, *inter alia*, defined scope, methodology of conduct, outcomes expected, acceptance criteria and follow-on actions. This Annexure while laying down the types of trials, *primarily deals in planning and conduct of Field Evaluation Trials*. Important types of trials and their broad scope is enumerated in the succeeding paragraphs.

3. <u>Developmental Trials</u>. This term is applicable to indigenously developed products and not to imported equipment. These trials do not form part of the User Trials but are carried out by the developing agency to progressively test the prototype in order to assess its technical suitability. These trials may be on Science and Technology, Technology Demonstrator or Mission Mode projects.

4. <u>User Assisted Technical Trials (UATT)</u>. Developmental Trials carried out on the prototype in Design and Development cases by the Development Agency with the assistance of the User. These are normally carried out by the Development Agency (DRDO/DPSU/OFB) to validate the PSQRs before offering the equipment for User Trials.

5. <u>Field Evaluation Trial (FET)</u>. These involve functional testing of the equipment by the user in various specified conditions as per requirement specified in the RFP and the trial directive. These may be conducted in more than one phase or in different terrains.

6. <u>Technical Trials</u>.

(a) <u>**QA Trials**</u>. QA Trials are conducted by the QA Agencies (DGQA/DGAQA/DGNAI) to assess the performance of the equipment against parameters specified in the RFP and to confirm its suitability for introduction into service.

(b) <u>Environmental Testing (ETs)</u>. These are done to check the equipment suitability to work under various environmental conditions as specified in SQRs. These involve review

of reports of environmental tests done on the equipment earlier by internationally accepted/ NABL accredited/ public sector labs or physical conduct of tests, if needed for verification.

7. <u>Maintainability Trials</u>. These are undertaken to evaluate the maintainability aspects of the equipment in respect of fitment, size, LRUs, components accessibility, technical documentation, BITE etc.

8. <u>EMI/ EMC Trials</u>. These are done to check equipment suitability to work under dense Electromagnetic environment as specified in SQRs. This will consist of either review of reports of EMI/ EMC tests already conducted from authorised labs or physical conduct of tests to ascertain compatibility.

9. <u>**Confirmatory Trials**</u>.Confirmatory trials may be held when, on completion of all trials, it is found that no equipment has fully met all the RFP parameters, but there is reason to believe, that vendors would be able to quickly overcome the drawbacks noticed.

10. **FoPM/First Induction Trials/ Validation Trials**. Induction/ Validation trials are usually done when the design and development trials were conducted on prototype set and the equipment is productionised for first time. These are done on the first of production model to validate specified parameters and to rule out any inconsistency in the production process. Validation trials may also be carried out on major change upgrade of specified parameters or change of production line from OEM premises to Indian vendor premises.

11. <u>Environmental Stress Screening (ESS</u>). These are done on all sets of electronic equipment to weed out infant mortality during production.

12. <u>Factory Acceptance Trials (FATs)</u>. These are functional tests undertaken at vendor's premises by SHQ nominated team to check the equipment functional performance as per an approved test procedure prior dispatch.

13. <u>Installation Inspection (IIs)</u>. These are checks done by SHQ nominated team to check correct installation of equipment on-board ships.

14. <u>Harbour Acceptance Trials (HATs)</u>. These are functional tests undertaken after installation on-board ship in harbour by a SHQ nominated trial team to check the equipment functional performance as per an approved test procedure.

15. <u>Sea Acceptance Trials (SATs)</u>. These are functional tests undertaken after installation on-board ship at sea by a SHQ nominated team to check equipment's functional performance as per an approved test procedure. It may also involve proof firing in case of weapons.

16. **Op Checks**. These are functional tests undertaken after installation on-board ship at sea by a SHQ nominated team to check the equipment's functional performance as per an approved test procedure. These are normally done only on communication equipment, instead of SATs.

17. <u>Acceptance Test Procedure (ATP)</u>. A functional test procedure undertaken to check functional performance of the system for acceptance at a defined stage.

18. **Delivery Acceptance Trials**. Delivery Acceptance Trials are carried out when FET is not applicable for cases such as ships, submarines, simulators etc, where there is no prototype available for conduct of NCNC trials.

19. <u>**Pre-Despatch Inspection (PDI)</u>**.Pre-Despatch Inspection is a part of supply chain management and an important Quality Assurance method for checking the quality and quantity of newly manufactured goods at Sellers' Premises, before they are shipped to the Buyer. These involve undertaking checks in accordance with Acceptance Test Procedures as finalised during contract negotiations. PDI helps in ensuring that production complies with the governing specifications and procedures as specified in the Contract or the Purchase Order.</u>

20. Joint Receipt Inspection (JRI). Joint Receipt Inspection is carried out jointly by the buyer and seller on arrival of manufactured goods in India within specified number of days and at location nominated by the Buyer to check compliance with specifications. JRI consists of quantitative checking of delivered items, complete functional checks, check proof, firing, etc., as per governing specifications and procedures enumerated in the Contract or Purchase Order. The JRI is initiated by the Buyer.

SECTION II – STAGE WISE CHECKLIST FOR FET

21. <u>Introduction</u>. Trials to be undertaken as part of FET will be determined by SHQs/ concerned Lead Service on a case-to-case basis and may include the following: -

(a) <u>User Trials</u>. These will involve functional testing by user of the equipment in various specified conditions as per requirement and may be done in more than one phase.

(b) <u>**Technical Trials.**</u> These trials are conducted by QA agencies to assess the performance of the equipment against parameters specified in the RFP.

(i) QA agencies may assess conformance to specifications of equipment/critical assemblies related to performance output parameters that are measured using Test Equipment (General Purpose/Special). Wherever test equipment is not available within country, vendor shall submit the tests results and also test methodology for such critical assemblies.

(ii) Other tests including environmental tests in lab conditions stipulated in SQRs, will also be conducted by QA agencies to assess conformance. These are undertaken to check the suitability of equipment under various environmental conditions as specified in SQRs. It involves review of reports of environmental tests done on the equipment earlier by internationally accepted/ NABL accredited/ public sector labs or physical conduct of tests, if needed for verification.

(c) <u>EMI/EMC Trials</u>. This will consist of either review of reports of EMI/EMC tests already conducted as part of qualification testing from authorised labs or physical conduct of tests to ascertain compatibility.

(d) <u>Maintenance Evaluation Trials (MET)</u>. This is undertaken to evaluate the ease and sufficiency of maintainability aspects of the equipment in respect of fitment, size, LRUs, components accessibility etc.

22. <u>Stakeholder Interactions</u>. Considering that FET involves maximum number of stakeholders when compared with other stages, **regular and extensive interaction between stakeholders is the key to streamline the FET process**. Stage-wise checklist is enumerated in the succeeding paragraphs.

Request for Information (RFI) Stage

23. **Operational Parameters** of the equipment such as Op Role, terrain / medium of employment, environmental severity, armament characteristics, EM environment and maintenance aspects are to be clearly defined at RFI stage in order to evolve an objective trial methodology. RFI mechanism is to be effectively utilised to evolve well-defined and verifiable SQR parameters and Standards for the given Op Role.

24. **Draft RFI** is to be forwarded to **DRDO**, **trial agencies** (**including QA**, **EMI/EMC**, **MET**, **etc**) **and HQ IDS**, for comments / inputs on equipment standards, environmental tests and technical parameters to be evaluated in *User*, *DGQA*, *EMI/EMC* and *MET trials* based on *Operational Requirements*.SHQ is to incorporate comments of the trial agencies, where applicable.

25. After issue of RFI, **vendor interaction** is to be planned along with trial agencies to obtain the following :-

(a) Inputs on **test standards** adopted for equipment of similar type.

(b) Ascertain parameters for which **Certification** could be applicable in lieu of trial evaluation.

(C) Trials for which **simulation** / **modelling** is available.

(d) **Specialised requirements** for trial evaluation that need to be factored while drafting SQRs.

26. Where required, supplementary RFIs may be issued to seek greater details on trial evaluation, supportability, maintenance, training, EMI / EMC and QA issues.

SQR Stage

27. SQRs must clearly indicate the **equipment parameters** that will be trial evaluated along with their severity and tolerance levels. Generic terms such as 'all weather capability', 'state of the art', etc should not be used.

28. Quality standards such as JSS 55555 and other relevant standards are guidelines for environmental parameters. SHQs are to ensure correct application of such standards at SQR stage based upon operational requirements in consultation with QA agency.

29. To achieve an objective trial methodology, SHQs are to interact with all trial agencies prior to formalisation of SQRs to ensure the following: -

(a) Identification and application of **correct standards**.

(b) Environmental and material tests essential for operational deployment and role.

(c) Applicability of **EMI / EMC trials** especially for non-ICT or other equipment not operating in dense EM environment.EMI/EMC trials shall be included only if operational requirements in SQR so determine and should be specifically mentioned in such cases.

(d) SQR parameters that affect sustenance and MET related aspects and will need to be factored in trial methodology.

RFP and Trial Methodology Stage

30. The combination of SQR and Trial Methodology in the RFP should provide OEM / Vendor a clear and objective assessment of the scope and details of FET, including areas where certification and trials by simulation are allowed. SHQ may interact with vendors/industry and reps of trial agencies at the draft RFP stage. Maximum technical details available at this stage with regard to conduct of FET, Technical trials (including environmental tests), MET and EMI / EMC tests should be included in the draft trial methodology being issued with RFP.

31. <u>Certification Aspects</u>. Due care may be exercised while defining Standards that would apply to equipment, systems or platforms. In case international standards are envisaged, then their Indian equivalent, where applicable, should also be identified. As far as possible, availability of test and certification facilities within India to evaluate the parameters governed by shortlisted Standards should be considered. In case this is not feasible, then all efforts should be made to identify international certification/accreditation agencies that would qualify the Certification requirements. RFI mechanism should be utilised to obtain necessary details prior finalisation of SQRs.

(a) DRDO, QA agencies, EMI/EMC and Maintenance organisations are to forward following to the concerned steering Directorate in the SHQ to formulate an objective trial methodology: -

(i) Recommendation on qualification Standards to be adopted.

(ii) Details of technical trials including environmental conditions for the lab tests and also check proof of weapons and ammunition.

(iii) Parameters where trials can be replaced by certification along with list of accredited labs/ facilities within or outside their organisations where these trials can be conducted.

(b) Where *Certificate of Conformance (CoC)* is acceptable in place of trials, trial agencies shall forward the following details to the steering directorate to be included in the RFP: -

(i) Names of agency/institution/authority(ies) whose certification will be allowed.

(ii) Details and format of test certificates and supporting documents required to be submitted by the OEM/ vendor to prove the validity of CoC.

<u>Note</u>. The Certificate of Conformance should indicate the tests undertaken along with the severity levels specified in the contract and values achieved. The test reports duly authenticated by internationally accredited labs are required to be submitted in respect of all the tests mentioned in CoC.

(c) Suitable penalty clauses for non-conformance to CoC and the provision that User/ Trial agencies would reserve the right to undertake random / sample test to validate the CoC submitted by the vendor/ OEM may be included in the RFP.

32. <u>**Trial Methodology**</u>. A comprehensive trial methodology should form part of RFP and contain the following details:-

(a) **<u>Draft Trial Matrix</u>**. This is to be included for all trials planned as part of **FET**. Following details could form part of the Draft Trial Matrix: -

(i) *Physical Characteristics, Operational* and Technical *parameters* etc along with values and tolerances, where applicable.

(ii) Technical, environmental, MET and EMI / EMC tests, as applicable, along with their severity levels, which will be evaluated during the trials.

(iii) To the extent feasible, methodology for evaluation of each parameter should also be clearly detailed in the RFP, so that the vendors fully understand its implications.

(b) In case of CoC, certificates, test reports, graphs, etc to be submitted as per format along with technical bids.

- (c) Number of equipment required and their distribution for different trials.
- (d) Requirement of Crew and Maintenance personnel.

33. <u>Technical Trials</u>. Technical and environmental tests that are essential to evaluate operational role are to only form part of **Pre-Contract** DGQA/DQA(N) DGNAI/ DGAQA trials. These trials along with their severity are to be listed in the trial methodology. Issues to be considered are as follows: -

(a) QA agencies use various provisions of Joint Services Specifications (JSS), Joint Services Preferred Range (JSPR), Joint Services Rationalised List (JSG) and Approved Notification (AN) for adoption of Indian Standards for testing and evaluation as on case to case basis.

(b) For aircraft related tests DGAQA, CEMILAC & ASTE carry out evaluation based upon **DDPMAS – 2002 (as amended from time to time)** which lists out the Qualification Test Procedure (QTP) and Production Acceptance Test (PAT).

(c) Feasibility of advance tests for **Electrical, Chemical, Biological, Radiological, Mechanical, Forensic and other Lab tests** to ascertain GSQR Technical Specifications. Test certificates in such cases will form the part of TEC.

(d) Methodology and severity of Tests that can only be done in labs like *full load* conditions of voice/data switch, Pressure, Vibration, operational temperature; for example, -20 and + 55 or angle of view of an antenna etc, should be clearly mentioned in the trial methodology.

(e) Environment Tests and evaluation standards such as **Temperature, Humidity, Corrosion, Solar Radiation and Thermal Cycling tests** need to be listed in the Trial Methodology. Compendium of Environmental Test facilities is hosted on MoD website, DGQA website dgqadefence.gov.in and Indian Navy website indiannavy.nic.in/content/test-facilities-available-use-private-sector.Where applicable, CoC are to accepted for these tests and details of labs where these tests can be undertaken are to be included in the Trial Methodology.

(f) Vendor shall submit the following technical documents preferably along with technical bids. If vendor doesn't submit these documents as part of the technical bid, same should submitted at least one month before date delivery of equipment for FET at trial location. The documents required are :-

(i) Technical documents listed in RFP.

(ii) CoC along with test results and test methodology standards, where applicable.

(iii) Proof schedule adopted for similar equipment manufactured by Vendor, if any.

(iv) Draft ATP.

34. <u>EMI/EMC Tests</u>. Following aspects are to be mentioned with regard to EMI/EMC tests in the Trial Methodology, as applicable: -

(a) <u>Policies</u>. RFP should clearly state **EMI/EMC policy** being applied for trial evaluation. For instance in the case of Army, a combination of Joint Services Guide (Directorate of Standardization), Joint Services Policy / Army EMC Policy (DGMO) and Standard Operating Procedure of Trials (DGWE) may be applied.

(b) <u>Military Standards</u>. Military Standards such as Mil Std 464 (Versions A,B or C), Mil Std 461E/F/G for Mil Equipment, Mil Std 331C for Fuzes and Mil Std 188-125 for Bare Shelter or other military standards being applied on case to case basis are to be included in the Trial Methodology.

(c) <u>Common Evaluation Parameters</u>. Details to be provided for Certification for common evaluation parameters such as Conduction & Radiation Emissions and Susceptibility, Hazard Measurement of Electromagnetic Radiation on Fuel, Ordnance and Personnel are to be included. These tests if being conducted as part of FET should be clearly mentioned in the Trial Methodology.

35. <u>Maintenance Evaluation Trials</u>. MET by actual stripping of the equipment to establish adequacy of maintenance tools, test equipment and spares utilisation is to be undertaken only if considered necessary by the user. In all other cases evaluation of MET aspects may be carried out through requisite documents and certification. For MET, the RFP and Trial Methodology are to seek the following from OEM/vendor, as applicable:-

(a) Repair and Maintenance Philosophy.

(b) Technical literature (User Handbook/Operators Manual in English & Hindi and Design Specifications) and Technical Manuals.

(c) Manufacture Recommended List of Spares (MRLS) and Illustrated Spare Parts List (ISPL).

(d) List and one set of Special Maintenance Tools (SMTs) and Special Tools & Equipment (STE).

(e) Test equipment along with calibration details and associated technical manuals.

(f) Complete Equipment Schedule (ECS), Table of Tools & Equipment (TOTE) &Vehicle Kit List.

(g) Engineering Support Package and Life Cycle Support.

(h) MTTR/MTBF parameters to be evaluated.
(j) Details of COTS & imported equipment.

(k) Rotable list, norms of consumption, mandatory/non mandatory spares list for each system.

- (1) Interactive Electronic Training Manuals (IETMs).
- (m) Servicing Schedule.
- (n) Condemnation limits.
- (p) Permissive repair schedule.
- (q) Packing specifications/instructions.
- (r) **Any** additional information suggested by the OEM.

Pre-Bid & TEC Stage

36. Mechanism of Pre-Bid Meeting is to be effectively utilised to clarify aspects of RFP and SQRs that affect evaluation of operational and technical parameters as well as conduct of FET. Issues to be highlighted/ re-iterated during pre-bid meetings could include:-

(a) Clarification on standards/severity of tests to evaluate SQR parameters.

(b) Certification and simulation requirements including test reports and other supporting documents to be attached.

- (c) Availability of labs for conduct of tests.
- (d) Range allocation and related modalities.
- (e) Clarifications/ requirements of trial methodology.

(f) Additional SQR parameters that could be evaluated based on certification; but have not been included in the RFP.

(g) Submission of all essential documents to various trial agencies must be done alongwith technical bid. If not, the documents must be submitted at least one month before the likely date delivery of equipment for FET in trial location.

37. <u>**TEC**</u>. Trials related issues that need special consideration at the TEC stage are enumerated below:-

(a) Members of TEC should include QA, EMI/EMC and MET representatives as applicable.

(b) Acceptance/ rejection of CoC based on evaluation of accredited lab certificates, test reports, graphs and EMI/ EMC tests done as part of TEC should be specifically mentioned in the TEC Report.

(c) TEC Report may recommend evaluation of additional parameters through certification, or conversely, through trials in addition to CoC, as applicable.

(d) The Maintenance Evaluation Trial (MET) mapping, where essential, should commence at TEC stage.

Field Evaluation TrialStage

38. <u>**Trial Directive**</u>. Necessary deliberations with vendors on various aspects prior of finalization of Trial Directive should be carried out. Once the Trial Directive promulgates firm timelines for trial evaluation, the Vendor should ensure availability of technical experts and maintenance teams, to ensure uninterrupted conduct of trial. Trial Directive should amplify the *Draft Trial Matrix* and should contain the following:-

(a) SQR details and evaluation parameters.

(b) Responsibility of conduct of trial and composition of trial team, including members, associate members and observers.

(c) Schedule (Summer & Winter Trials), location and time of trials. Availability of technical experts and maintenance crew is to be ensured by the vendors during this time period.

(d) Methodology of conduct of Trials.

(e) Number of trial equipment and time for submission.

(f) Trial Location and responsibility for Range allocation.

(g) Coordination instructions for movement of trial equipment.

(h) Ammunition details.

(j) Responsibility for Trial Stores.

(k) Training of Crew for conduct of trial.

(I) Security and Administrative Instructions.

(m) Coordination Conference and Nodal Officer.

(n) Feedback system.

(p) Trial Directive should also list tests that would be acceptable by certification through accredited labs.

(q) Trial Directive should mention that the OEM should be ready to deposit the equipment on intimation of successful clearance of TEC, on a date arrived at in conjunction with Steering Directorate, trial agencies and compliant vendors.

39. <u>**FET**</u>. FET will be conducted by the User Service on the basis of Trial Directive. Parameters which can be evaluated at TEC stage, based on documents or certificates rendered by accredited agencies, may not be included in the field trials. Following aspects should be given due consideration during conduct of FET:-

(a) <u>**Trial Teams.</u>** After the acceptance of TEC Report, SHQs will constitute the Trial Team. Representatives of QA agency, EMI-EMC Cell and Maintainability trials agency (where applicable) may also be co-opted, based on requirement. A representative of the Acquisition Wing may also participate in the FET as an observer. Representative from the Service nominated as the lead Service will head such trial team. For trials of equipment involving ToT, representative of PA may be included as an associate member. SHQs will depute a suitable representative to oversee the field trials and provide timely guidance to the trial team.</u>

(b) <u>Conduct of FET</u>. Methodology of conduct will be as under:-

(i) OIC Trial who would be responsible for conduct of the trial according to schedule. Representatives from MoD (Acquisition), QA agencies, DRDO and concerned Service could attend the trials.

(ii) FET will be conducted based upon SQR parameters and as per the Trial Directive, which is derived from the Draft Trial Matrix included in the RFP.

(iii) Trials would be conducted in varying terrain / medium and weather, as determined by operational employment of the equipment/ platform and quantified in SQRs.

(iv) Vendors should cater for in-situ repairs during trials and ensure availability of maintenance teams/ experts.

(v) Daily feedback will be rendered to respective SHQ.

(vi) A compliance matrix will be prepared on termination of the FET and forwarded to the SHQ for Staff Evaluation.

(c) For equipment available commercially off-the-shelf (COTS), which have requisite IS/BIS or equivalent certification, and meet user requirement, the Service Headquarters may accept the equipment on the basis of self-certification by the vendor.

(d) <u>**Trials of Design and Development, Make I and Make II Equipment**</u>. Trials of equipment under these categories will be governed by provisions of Chapter 3 of DPP.

SECTION III - PRODUCTION STAGE QUALITY ASSURANCE & ACCEPTANCE

40. The selection of right equipment largely depends the strength of criterion adapted for validation trials and post induction its intended reliable performance will depend on soundness of production stage QA & Acceptance trials. The principle to be adopted during finalizing the validation trials and production stage QA & acceptance trials is that they should be **sufficient and just**. Any over specification will add to delays and cost whereas any under specification will result in sub-standard equipment availability.

41. <u>**Timeline for Submission of Documents**</u>. Vendor should be intimated the timelines for submission of Draft ATPs, Technical / Operating manuals, Range Table, Technical Description and other specifications in the RFP and reiterated during pre-bid meeting. Number of copies of the document for technical trials shall also be stipulated in the RFP.

42. **Production Stage QA & Acceptance**. The requirements of QA in production process & Acceptance tests are to be indicated in the RFP based on the type/origin of equipment, SQRs and categorisation. The complexity of manufacturing and end use of equipment are also to be kept in mind while specifying the QA requirements and Acceptance test procedures respectively. The QAP should broadly cover project/equipment description, QMS adopted by the manufacturer for systems in the project/equipment, parameters critical to quality and their manufacturing and quality control processes, mandatory documents including reference documents, sampling plan wherever applicable, check-proof activity wherever applicable, procedure to be followed in noticing defects during QA process including defect analysis and remedial action, risk management, support, performance evaluation, resource management, monitoring and measuring, operation planning and control. The ATP should broadly include the specifications, acceptance standards, inspection test records, visual checks, system checks, functional checks, ground checks, flight checks, etc.

43. The **flowchart placed at Enclosure aims in aiding the analysis of an acquisition scheme for the above aspects.** Various likely scenarios of relevant clauses in RFP and Standard Contract Document are as follows:

a. <u>Scenario 1 - Goods already in Service</u>. They have been procured after validation trials and have been type certified. The type certification is valid. The manufacturing stage QAP and acceptance procedure is existing & approved. This will normally be in case of repeat orders. In such cases no Validation Trials/Type Testing is needed and one has to simply specify the correct references of the approved documents.

b. <u>Scenario 2 - Goods already in Service but are being procured with minor</u> <u>modifications</u>. In such cases the requirement of repeating limited type tests and modification in QA & acceptance has to be ascertained and included in RFP.

c. <u>Scenario 3 - Goods being inducted for first time in service</u>. In this case first it has to be ascertained whether they are Military grade/Ruggedised/COTS from the SQRs. In case of COTS, the scope of manufacturer's certification/CoC has to be finalised and included in RFP. The scope of acceptance tests in QAP to be included in the contract will be to establish conformance to the governing specifications adopted by the manufacturer for COTS item.

d. <u>Scenario 4 - Goods being inducted for first time in service and are required to be</u> <u>Ruggedised as per SQRs</u>. The scope of Validation trials/Production stage QA & Acceptance will depend on the Categorisation of the equipment as per AoN. In cases categorized as Buy (Global), the equipment may be outrightly purchased or may contain India specific modifications. In outright purchase, the scope of Induction trials will be maximum (severity of environmental tests severity will be decided in accordance with the SQRs by QA agency in consultation with SHQ) and should cover all aspects and accordingly specified in RFP. However, the scope of production stage QA & Acceptance will depend on whether vendor is in India or abroad, manufacturing process, duration of delivery, order quantity and number of sub-vendors involved. The clarity on same can emerge only after vendor selection.

e. <u>Scenario 5 - Goods falling in Scenario 5 but are Categorised Buy(I-IDDM) or</u> <u>Buy(Indian)</u>. Here, the scope of Validation trials will be maximum (severity of environmental tests severity will be decided in accordance with the SQRs by QA agency in consultation with SHQ) and should cover all aspects and accordingly specified in RFP. However, the scope of production stage QA & Acceptance will depend on complexity of equipment, maturity of manufacturing process for indigenous content, order quantity etc. The clarity on same can emerge only after vendor selection and level of indigenisation achieved. There may be a need to evolve and rationalise QA process with increasing indigenous content. Hence, the RFP has to be worded accordingly to indicate requirement of evolving the same with mutual consent at the time of Technical trials and prior to contract finalization.

f. <u>Scenario 6 - Goods falling in Scenario 5 but are Categorised Buy & Make(Indian)</u> <u>or Buy& Make or Make</u>. Here, the scope of Validation trials will be maximum (severity of environmental tests severity will be decided in accordance with the SQRs by QA agency in consultation with SHQ) and should cover all aspects and accordingly specified in RFP. However, the scope of production stage QA & Acceptance will get derived from the developer (in make case)/foreign partner's processes, technology transfer, and Indian vendor/PA's processes. The clarity on same can emerge only after vendor selection and level of technology absorption achieved in various stages. In make case the vendor will have to evolve QA (FF/SKD/CKD) along with developmental process and indigenization by the nominated production agency. Hence, the RFP has to be worded accordingly to indicate requirement of transferring QA as part of ToT / evolving the same with mutual consent prior contract finalization.

g. <u>Scenario 7 - Goods being inducted for first time in service and are required to be</u> <u>of Military grade as per SQRs</u>. The scope of Validation trials/ Production stage QA & Acceptance will depend on the Categorisation of the equipment as per AoN. In respective cases the Scenarios as applicable in Ruggedised equipment as above at Para (e), (f) & (g) will be applicable except that in military grade equipment the full range of environmental tests will be undertaken.

SECTION IV - INSTITUTIONAL MECHANISMS TO STREAMLINE FET

44. The process of Field Evaluation Trials needs to be supported by a robust infrastructure, facilities and institutional mechanisms that allow effective utilisation of resources and expertise for their efficient conduct. The details of institutional mechanisms and facilities already put in place or under implementation and those which should be considered by the SHQs are enumerated in the succeeding paragraphs.

45. <u>Enabling Framework</u>. Under the overarching umbrella of 'Make in India' various policy initiatives and enabling tools have been introduced which are aimed at simplifying procedures, reduce time consumed for trials and assist the industry to gain clearances and test reports from accredited labs in an earlier time frame. Key issues are enumerated in the succeeding paragraphs.

46. <u>Allocation of Ranges</u>. Standard Operating Procedure (SoP) for allotment and utilisation of proof and field firing ranges have been finalised and uploaded on <u>https://www.makeinindiadefence.gov.in/admin/writereaddata/upload/updated_SOP_for_allotment_of_Ranges_5_9.19_R2.pdf</u>. Requisite nodal Officers have also been nominated.

47. <u>Use of Test Facilities with Govt Institutions</u>. Test Facilities of Army, Navy, Air Force, DRDO, DGQA, DGAQA, HAL, OFB, GRSE, GSL, MDL, HSL, MIDHANI, BDL, BEL & BEML for Utilisation by Private Industry along with details of respective Nodal Officers and application procedure are hosted on the makeindiadefence.gov.in/pages/test-facilities-for-private-sector

48. <u>DGQA Test Facilities</u>. All test facilities available with DGQA and respective cost of utilisation of facilities are updated on DGQA website **dgqadefence.gov.in** - <u>https://dgqadefence.gov.in/test-facilities</u>

49. <u>Indian Navy Test Facilities.</u> All test facilities available with Indian navy and respective cost of utilisation of facilities are updated on<u>https://indiannavy.nic.in/content/test-facilities-available-use-private-sector</u>

50. <u>Directory of NABL Accredited Labs</u>. NABL 400: Directory of NABL Accredited Laboratories as updated from time to time may be referred to by the industry to seek requisite test facilities as per requirements - <u>https://www.nabl-india.org</u>

51. **DTIS (Defence Testing Infrastructure Scheme)** has been launched by the MoD. The scheme envisages establishing of test facilities encompassing drone testing, EMI/ EMC, Rubber testing, Radiation testing, Electronic Warfare, Software testing as well as some other facilities

52. <u>Scientific Research Infrastructure for Maintenance and Networks (SRIMAN)</u>. The scheme envisages institutions declaring instruments / facilities available for use. Instruments in government labs would be rented out for the duration they lie idle, generating a rental income. This would reduce the amount of time expensive instruments remain idle and would be available to the industry for use.

53. <u>Centres of Excellence</u>. SHQs should explore establishing Centres for Excellence for overseeing trials. A standalone and robust Trial Team will accrue following advantages:-

(a) Provide Subject Matter Experts and an institutionalised mechanism for oversight and management of FET through all its stages till completion.

(b) Promulgate a cohesive and comprehensive trial directive as also timeline, in consultation with all stakeholders.

(c) Identify bottlenecks / anticipate delays and apply timely correctives / guidance to Trial Teams.

(d) Provide inputs for evolution of policy issues related to trials.

(e) Conduct suitable training for key personnel engaged in trials.

(f) Serve as a single point contact for trials related activities with other stakeholders in the MoD as well as other organisations.

(g) Coordinate usage of trial infrastructure (Labs/Ranges) in consultation with other agencies.

(h) Build an institutional memory, database and Domain expertise.

(j) Standardisation of trial methodology.

Annexure (refers to Para 45 of Appendix ___)



ESP, MRLS & TRAINING









<u>Appendix D</u> (Refers to Para 16 of Ch II)

FLOWCHART ASSISTED GUIDELINES FOR PREPARATION OF SOC AND RFP

1. The aim of this Appendix is to act as a guide in preparation of SoC and/or RFP as relevant at the time of seeking AoN. This Appendix has three Annexures with flowcharts and associated instructions about various variables that require detailed study and analysis before inclusion in SoC and/or RFP. The objective of theseAnnexures is to enable the acquisition planner/ steering Directorates at SHQ of SoC and RFP to facilitate arriving at optimal scope and to visualise various scenarios and possibilities that are likely to be encountered in procurement process. The flowcharts and associate instructions are meant only to be guidelines and as a helping tool and are not binding. Even though effort has been made to capture all possible scenarios, there may be scenarios which have not been covered and may require more detailed study andsuitable formulations.

2. Flowcharts assisted guidelines with relevant instructions for following requirements are placed at Annexures to this Appendix :

Sr	Requirement	Remark	Annexure
<u>No</u>			<u>No</u>
(a)	Engineering Support	To arrive at optimal ESP, Spare and	I & I A
	Package, MRLS&	Training requirement as per maintenance	
	Training	philosophy for each case.	
(b)	Validation Trials and	To identify sufficient and just set of trials	II & II A
	Production Stage QA	and test to be undertaken for validation	
		and during production stage for	
		optimization of cost and time and to	
		provide the broad scope of trials to all	
		vendors at RFP stage	
(c)	Packaging, Preservation,	To identify the requirement of Packaging,	III&III A
	Delivery, Acceptance,	Preservation and applicable Warranty and	
	Payment Terms and	provision for in-storage re-preservation to	
	Warranty	extend the shelf life of the equipment.	

3. It is recommended that the SoC and RFP shall clearly bring out all the aspects of acquisition project like broad deliverables, proposed repair and maintenance philosophy, delivery schedule, broad scope of validation trials, time lines of procurement, Packaging & Preservation needed and financial aspects, etc.

4. It is reiterated that these guidelines are indicative and do not limit the acquisition planner in visualising various additional scenarios that are likely to arise in individual cases. These guidelines may be amended from time to time with the approval of DG(Acq).

Appendix J to Chapter II

(Refer Para 95(A) of Chapter II)

<u>GUIDELINES ON PROCEDURE FOR DETERMINING THE APPLICABILITY OF</u> <u>IMPOSING LIQUIDATED DAMAGE (LD)</u>

1. These Guidelines lay down the procedure to be followed for determining the applicability of imposing Liquidated Damage (LD) in cases where the Seller wishes to upgrade/ alter the specifications of the equipment already contracted on account of change in manufacturing procedures, indigenisation or obsolescence.

2. Para 6.2 of the Standard Contract Document (Chapter VI of DPP-2016) inter alia states that "The SELLER, in consultation with the BUYER, may carry out technical upgradation/ alterations in the design, drawings and specifications due to change in manufacturing procedures, indigenisation or obsolescence. This will, however, not in any way adversely affect the end specifications of the equipment." This provision in the Contract enables a Seller to make changes in specifications of the equipment as given in the contract with equipment/ sub assemblies which are upgraded/ modified/ altered/ indigenised, promotes the local defence manufacturing industry, increases self reliance and is in consonance with the Make in India vision of the Government.

3. Since the Standard Contract Document also stipulates that the upgradation/ alteration should not adversely affect the end specification of the equipment, it becomes necessary to check, at the Limited Validation Trials stage, all parameters which may get affected due to the said alteration. This further needs to be accepted by the competent authority, and may have a financial effect which needs to be determined by a Professional Officers Valuation (POV) if required. These approvals are time consuming and may lead to delays which may result in non delivery of the equipment within the delivery schedule spelt out in the Contract, due to which the Seller is liable to be imposed LD on account of non adherence to the contract conditions. Imposition of LD on a vendor who is trying to achieve indigenisation, that too for no delay on his part, needs to be addressed.

4. The procedure to be followed in all such cases is enumerated in subsequent Paras. In cases where specifications are better or equivalent, vendor may be permitted without imposition of LD subject to successful conduct of evaluation.

(a) If the Seller wishes to upgrade/ alter the specifications of the equipment after the contract gets awarded, he will submit a written application to SHQ specifying the equipment/ sub assemblies proposed to be changed and the list of RFP parameters which are likely to be affected by this change. The application for initiating the proposal must be submitted by the vendor within a maximum period of 3 months/ 20% of Delivery schedule (whichever is earlier) from the date of award of contract and minimum indigenisation percentage for initiating a proposal may be laid down as 10%. It may be informed ab-initio to the vendor that no changes in original delivery schedule beyond six months would be acceptable; else LD would be applicable if same is violated due to Seller's proposal. Written application from seller proposing Upgradation/ Alteration of equipment must also include the following:-

(i) Timelines required for supply of item for limited evaluation trial after acceptance of offer.

(ii) Effect on delivery timelines.

(iii) Details of internal validation trials done by the Seller for the proposed changes.

- (iv) Changes envisaged in SMTs/ STEs/ Test Jigs/ MRLS.
- (v) Effect on overall cost of project.

(b) SHQ, in consultation with other stakeholders, will analyse the upgrades/ alterations offered by the Seller and the approximate time required for carrying out the Limited Validation Trial of the upgrades/ alterations. The vendor on his part must ensure that mere forwarding the proposal does not impact the original delivery schedule. An undertaking may be sought from the vendor at this stage that LD would be imposed on him if any delay occurs due to failing of proposed modification in equipment during limited validation trials or due to non-cooperation by the vendor in sharing data. Maximum time limit for analysis of proposal would be 4 weeks from date of receipt of the proposal from the vendor.

(c) If the time required for the acceptance of GS Evaluation/ POV is assessed to be more than six months (cumulative time for preparation of equipment after upgradation, fielding upgraded equipment for trials, completion of validation trials alongwith evaluation), upgradation/ alteration offered by the Seller on account of change in manufacturing procedures, indigenisation or obsolescence in the present contract need not be accepted on grounds of likely delay in the current procurement, and should be deferred to subsequent contracts (like Option Clause or Repeat Order). The time period of six months may be extended on a case to case basis depending on the duration of original delivery schedule, if accepted by the competent authority (PSO and equivalent in other services). POV (if applicable) should be carried out simultaneous with validation trials.

(d) If the time required for the same is less than six months, the offer may be accepted at the level of PSO in SHQ.

(e) If the time assessed by the SHQ was less than six months and the proposal was accepted by the SHQ, but thereafter the time taken by the Buyer in acceptance of GS Evaluation/ POV exceeds six months, then the reasons of delay would need to be analysed and decision of imposing LD should be based on attributability identified. GS Evaluation/ POV may get delayed due to non-cooperation by the vendor in sharing data, in these cases delay to be attributable to the vendor and LD to be imposed. Exemption from LD would be applicable only if the delay is attributable to the Buyer. The vendor, at the time of contract signing, would give a comprehensive list of upgrades which he wishes to make, and no further upgrades in that contract would be allowed.

(f) If the time assessed by the SHQ was less than six months and the proposal was accepted by the SHQ, but thereafter the Seller fails the Limited Validation Trials, LD should be imposed for delays, if any. The Vendor while proposing any upgradation should be reasonably confident of an acceptance. LD would be imposed if delivery schedule is delayed by 06 months or more.

(g) There is a need for financial evaluation wherever material variation in any of the terms or conditions in a contract becomes unavoidable. The benefit of downward trend, if established by the POV, would necessarily have to be passed on to the Buyer even in the ongoing contract. However, if the POV establishes a cost escalation due to proposed upgradation/ alteration, same could be factored in the subsequent contracts, with the value of ongoing contract remaining unaltered.

(h) If the offer of upgradation/ alteration has been applied for by the Seller, in the intervening period, he should continue to supply the equipment as per the original delivery schedule with the original equipment/ sub assemblies till such time its acceptance is intimated to him.

(j) Waiver of upto maximum six months of delay in delivery period by PSO in SHQ may be only considered post evaluation of proposal and confirmation of acceptance to the Seller. However LD provision will be applicable for any delays beyond Revised Delivery Schedule. The delivery schedule will not be changed beyond six months and LD would be imposed if the same is violated. This would be done on a case to case basis upon a written request from the Seller.

(k) Diagrammatic Work Flow for implementation of LD in Upgradation/ Alteration cases is given at Annexure I to this Appendix.

5. These Guidelines are issued with the approval of the DAC and are to be adopted with immediate effect.

Annexure I to Appendix J (Refer Para 4(k) of Appendix J)

WORK FLOW



MILITARY MATERIALS CLASSIFICATION

1. Details of the first step viz, classification based on the volume of utilisation, is as follows: -

(a) <u>**Type (I)**</u>. Depending on the volume used i.e., special alloy steels for main Structural Material for platforms like Ship/ Submarine, Aluminium-Magnesium alloys/ composites for Aircraft Structures, high performance steels for Armoured Vehicles, Armour Materials etc., which are generally used by the prime contractors/ vendors.

(b) <u>Type (II)</u>. High end Materials used for various Systems, Sub-Systems, Equipment and various components of equipments like Corrosion Resistant Alloys for Sea Water Systems, Temperature Resistant Turbine materials, Body Armour Materials, Cryogenic Materials for Missiles and other weapon systems, Titanium alloys for submarine applications, Duplex/ super duplex steels etc., which are used by main Vendors and Tier I/ II vendors.

(c) <u>Type (III)</u>. High end multi-purpose materials used in various electronic components and similar components i.e., Semi Conductor Materials, Rare Earth Materials, Dielectric Materials etc., which are generally sourced from lower Tier Vendors.

<u>Note</u>: Type I & II Materials are to be examined for classification/ R&D/ Production. Only such Type III materials that are exclusively used by defence industry are to be examined, rest are to be taken up for development by relevant ministries.

2. On identification of type of materials (as explained above), further classification as follows to be undertaken based on availability of materials and the technology threshold: -

(a) <u>**Class 'A'**</u>. The materials which are available in the country but are being imported by Defence Vendors due to commercial reasons or non-validation of qualitative requirements or absence of knowledge of material availability.

(b) <u>**Class 'B'</u>**. Materials that are not available in the country but commercially available elsewhere in the world and are being imported by Defence Vendors.</u>

(c) <u>**Class 'C'</u>**. Futuristic Material which are not known to be available in the world/ which are not commercially available and which can be developed.</u>

FINAL CLASSIFICATION INTO 3 X 3 MATRIX





INDICATIVE LIST OF PERFORMANCE METRICS FOR A PBL CONTRACT

1. <u>'Level of Performance' Metrics</u>. An indicative list of drivers/requirements to measure level of performance metrics is as follows:-

(a) System availability (serviceability percentages, platform availability, system uptime (hours per), utilisation rate (hours per), and/or

(i) An assured fleet availability of xx% - the methodology and periodicity of calculation to be clearly specified.

(ii) Mission capability (defined) for particular mission.

(b) Spares availability (MRLS/PBL), and/or,

(i) Availability of parts, including those fitted on the main equipment/aircraft at a certain %.

- (ii) Supply of AOG category of items in a defined time frame.
 - (aa) At the port of entry within 96 hours.
 - (ab) Despatch details (airway bill) in 48 hours.
 - (ac) Demand satisfaction /fill rate of 90%
 - (ad) Timely supply of all scheduled servicing kits.
- (c) Reliability metrics, and/or,

(i) Free of cost repair for new items and repaired items which fail within a specified period of time.

(d) Supply chain metrics (Turnaround time, repair time, non-availability time), and/or,

(i) Repair turn-around time (R-TAT) of 3 months for 90% items and the remaining at 6 months.

- (e) Engineering reach back metrics, and/or,
 - (i) Engineering disposition within 48 hours of communicating the problem.
- (f) Cost based metrics, (annual cost of), and/or,
- (g) Consumables/FOL etc, and/or,
- (h) Availability of field support (FSR, LSR etc).

Responsibility Matrix (Sample Data Only)

Note:Fill Col 2 & 3 as applicable)

Function Task	Responsibility of	
	Buyer	Seller
-1-	-2-	-3-
A. Maintenance		
1. Flight Line Operations		
2. Pre flight / Daily checks (1st Line)		
3. Periodic Checks (2nd Line)		
4. GSE / GHE Role Eqpt (1 st Line)		
5. GSE / GHE Role Eqpt (2 nd Line)		
6. Fault Isolation / Troubleshooting (1st & 2nd Line)		
7. Spares / Expendables Removal and Installation / Topping		
8. Service Bulletin Compliance		
9. Minor Structural Repairs		
10. Major Structural Repairs / Repairs		
11. Spares Repair and Inspection		
12. Technical Assistance		
13. Aircraft Configuration Changes (based on Role / Mission)		
C. Supply Support		
1. Initial Purchase of Spares and Expendable Parts (OEM Rec)		
2. Replenishment of Spares and Expendable Parts		
3. Spares Forecasting, Inventory & Re-order Levels		
4. Spares Availability		
5. Spares Repair		
6. Service Bulletin Material		
7. Material and Supply Chain Management		
8. FOL & Consumables as per OEM Recommendations		
9. Availability of Logistics Service Rep (LSR) at Main Operating Base		
(MOB)		
10. Deficiency / Discrepancy Reports		
D. Engine Support		
1. Propulsion system sustainment		
2. Engine Trending & Diagnostics		
3. Engine handling equipment		
E. <u>Facilities</u>		
1. Hangar, Warehouse and other facilities in MOB		
2. Management of Spares Warehouses at MOB		
3. Service / Housekeeping maintenance of MOB facilities		
4. Central Warehouse Responsibility		
5. Office space, Internet and Communication facilities		
F. <u>Ground Support Equipment (GSE)</u>		
1. Purchase GSE for O level Maintenance		
2. Purchase GSE for I level Maintenance		
3. GSE Maintenance (Calibration and Maintenance)		
G. <u>Maintenance & Operation Support</u>		
1. Maintenance Planning		
2 Configuration and Maintenance Documentation Control		

5. Engineering Support to Tasks at Site	
6. Issue SBs / Tech directives / Mods	
7. FDR Data Download	
8. Structural health Monitoring / Aircraft Structural Integrity Program	
9. Calibration Support	
10. Proof Load Testing management	
11. Mission Planning Hardware & Software Support	
12. All software Updates & Subscription Services	
13. Navigation, TAWS data	
H. <u>Packing, Transportation</u>	
Handling	
1. Packing	
2. Transport from SELLER to BUYER Central Warehouse, under DAP	
conditions, Incoterms 2010	
3. Transport from BUYER Logistics Control Point to SELLER	
4. Transport from MOB to other MOB / FOB	
5. Customs Administrative process (Bill of Entry preparation)	
6. Customs clearance and related costs and taxes and duties	
7. Release of items from customs and delivery to final destination	

Annexure – 3 (Refers to para ?? of Appx ??)

SCOPE OF WORK FOR PBL CONTRACT

<u>Note – 1</u>: The sample case relates to main contract for supply of a fleet of aircraft. Modify scope as per equipment/system.

Introduction

1. The SELLER shall provide overall logistics support and perform tasks, functions and responsibilities to support the name of the fleet/equipment/system as a Performance Based Logistics (PBL) Package as described in this Appendix.

2. The PBL Package is based upon the following assumptions:-

(a) **<u>PBL Duration</u>**: specify the period of applicability of PBL.

(b) <u>Aircraft Fleet for PBL</u>: All Aircraft delivered during the PBL period as per delivery schedule in Table 1.

(c) <u>Average Flying Rate</u>: *state the Flight Hours (FH) per Aircraft per*

year.

(d) <u>Warehouse</u>: The Central Warehouse of the BUYER will be (List the BRD/ED/Storage Location of IAF).

3. <u>Aircraft Delivery & Base Opening Plan</u>. The PBL package is designed based on the following aircraft deliveries and the number of bases from the contract effective date (T0):-

No of Aircraft	Delivery Month	Number of Bases	Remarks
1	T0 + 12	1	
4	T0 + 36	2	
8	T0 + 48	4	
36	T0 + 96	8	

Table - 1: Aircraft Deliveries and Bases

(Table filled with sample data only)

4. <u>Minimum Fleet FH Distribution Per Year</u>. The estimated year wise minimum FH distribution at a rate of (....)FH/Aircraft/Year is as follows:-

(Include data here)

<u>Scope</u>

5. The SELLER shall deliver a PBL Package for five years for the BUYER (*list of aircraft fleet/equipment/system*), commencing from delivery of the first aircraft.

6. The SELLER shall position a Program Manager and a Technical Team centrally located at (*mention location*) for the duration of the PBL contract. The Program Manager will act as an interface with the BUYER for ensuring that the conditions of the PBL are met.

7. The SELLER shall be responsible for the following 'off-aircraft' activities:-

(a) Supply Chain Management up to the BUYER's Central Warehouse.

(b) Repair and overhaul of all components (LRU's) of the Aircraft delivered during PBL period.

(c) Repair/Replacement of spare parts.

(d) Replenishment of all Aircraft expendable parts to support the periodic and 'Out Phase' maintenance activities of Aircraft.

(e) Compliance of modifications, Airworthiness Directives (ADs) & Mandatory Service Bulletins (MSBs).

(f) Calibration and maintenance of the GSE, GHE, STE and Role Equipment.

(g) Provide an Information Technology (IT) tool for managing information with the BUYER.

8. The expendable and spare parts in the contract will be only for and specifically for the aircraft fleet considered in the scope of the PBL Package.

9. The BUYER shall be responsible for fault isolation and aircraft maintenance planning. The SELLER may provide assessment when requested by the BUYER.

10. The following table summarizes the main logistic support functions, tasks and responsibilities during the PBL period:

Function Task	Buyer	Seller
-1-	-2-	-3-
A. <u>Maintenance</u>		
1. Pre flight / Daily checks		
2. 50 hour checks and multiples		
3. 100 hour checks and multiples		
4. Six monthly calendar checks		
5. Fault isolation		
6. Spares / Expendables Removal and reinstallation		
7. Service Bulletin Compliance		
8. Structural repairs		
9. Spares Repair and Inspection		
10. Technical Assistance		
C. Supply Support		
11. Initial Purchase of Spares and Expendable Parts*		
12. Replenishment of Spares and Expendable Parts		
13. Spares Repair		
14. Service Bulletin Material		
15. Material and Supply Chain Management		
16. FOL (Fuel, oils, lubricants, sealant etc.)**		
D. Facilities		
6. Hangar, warehouse and other facilities		
7. Management of spares warehouses		
8. Service/Housekeeping maintenance of facilities		
9. Central warehouse Responsibility		

6. GSE Maintenance (calibration and maintenance)	
F. Maintenance and Operation Support	
14. Maintenance planning	
15. Configuration and maintenance documentation control	
16. Engineering support to tasks	
G. Transport	
8. Material transport from the SELLER to the BUYER Central	
Warehouse, under DAP conditions, Incoterms 2010	
9. Material transport from the BUYER Central Warehouse to the	
SELLER	
10. Material transport from MOB to other MOB	
11. Customs administrative process for clearance (Bill of Entry	
preparation)	
12. Customs clearance and related costs and taxes and duties	
13. Release of items from customs and delivery to final destination	

(All data/information in Col 1, 2 & 3 is sample data, for informational purposes only. Fill columns as appropriate)

* Items delivered under the scope of the Engineering Support Package under this Contract.

** All part numbers and their equivalences, along with the vendor information, are included in the technical document Consumable Material List that will be provided by the SELLER within the scope of the Engineering Support Package.

The BUYER shall be responsible for fault isolation and aircraft maintenance planning.

The SELLER may provide assessment when requested by the BUYER.

11. <u>Technical Review Meetings</u>. The Technical review meetings and Program Review meetings shall be conducted as specified in **Annexure I** (*format to be drafted*).

12. <u>PBL Management Plan</u>. The SELLER shall provide the draft PBL Management Plan (*provide time period here*).

(a) The PBL Management Plan will cover all the PBL activities, and establish detailed processes between the BUYER and the SELLER.

(b) The formats and modes of communication will be defined in the PBL Management Plan.

Maintenance Support

13. <u>Maintenance Schedule</u>. The Aircraft scheduled maintenance shall be conducted according to (*List the reference document here*) for (*list the aircraft/equipment/system here*). The Aircraft scheduled maintenance and periodicity is as follows:-

Table 3: Maintenance Intervals

	Type of Maintenance	Interval/Periodicity	Remarks
	-1-	-2-	-3-
(a)			

14. **On-Aircraft Maintenance.** The BUYER shall be responsible to perform:

(The sub-para contains sample list of activities. To be amended as per nature/type of equipment)

- (a) Level maintenance activities including Pre-flight, Daily, checks.
- (b) I-level maintenance activities including (*type of*) checks.
- (c) Non-scheduled and corrective maintenance activities

(i) These activities shall consist of fault diagnosis, isolation and replacement of failed Line Replaceable Units (LRU), intimation to the SELLER's technical representative for updating the spare parts management.

(ii) Any flight associated to scheduled and unscheduled maintenance activities and/or fault corrections

(d) Major scheduled repairs, special inspections like NDI will be undertaken by the BUYER. SELLER shall consider such on-demand job on an over and above quotation basis.

15. Off-Aircraft Maintenance.

(the sub-para contains sample list of activities. To be amended as per nature/type of equipment)

(a) <u>Engine</u>.

(i) The SELLER shall undertake the first ten (10) (*sample data only*) major repair/overhaul activities of the engine within the scope of this contract. All the subsequent major repair/overhauls of engines will be treated as an over and above quotation.

(ii) Major repairs is defined the repair at a depot level facility.

(iii) The BUYERwill conduct the Engine Condition Monitoring (ECM) according to the engine manufacturing manuals and provide the data to the SELLER. The SELLER shall analyse the engine data and report the engines status to the BUYER.

(iv) The BUYER shall be responsible for preventive maintenance of the engine as stated by the "On Condition" maintenance program and ECM. Failure to complete the tasks required by the (provide *applicable document reference here*), and other documents mentioned herein, particularly execution of a correct ECM, will exempt The SELLER from any responsibility and extra costs due to premature engine removal for major repair/overhaul.

(v) SELLER shall be responsible for repair and overhaul of Propeller at an Authorized Repair Centre (preferable in India), within the scope of this contract.

(vi) Other conditions/terms, as agreed.

(b) Landing Gear and its Accessories.

(i) The SELLER shall undertake the first five (f) major repair/overhaul (*sample*

- (ii) Major repairs is defined the repair at a depot level facility.
- (iii) Other conditions/terms as agreed.

(c) <u>Other Components</u>.

(i) SELLER shall undertake repair/overhaul of the remaining components, except for the wheels, batteries and brakes at the approved Repair Centers.

(ii) Brakes heat-pack support is included on the scope of this contract.

(iii) Other conditions/terms as agreed.

Technical Support Services

16. <u>Technical Support Team</u>. The SELLER shall designate a (*type of fleet/equipment/system*) qualified Technical Team centrally at (*Place*) for the duration of the PBL Contract. The Technical Team shall have adequate technical skills in all the fields of (*aircraft, engine, role equipment, GSE etc. Sample data only, replace as necessary*) to assure necessary Technical Support to the BUYER.

17. The Technical Team shall provide following support to the BUYER:-

(The sub-paras contain sample data. Append/delete as it pertains to the case)

(a) Technical assistance in operation and maintenance activities as and when requested.

(b) Assist on the use and interpretation of technical publications, maintenance program, GSE, GHE, STE and Role Equipment operation and maintenance.

(c) Advice and respond to the technical queries on maintenance activities raised by the BUYER.

(d) Monitor fleet and component reliability based on the data received from the BUYER. The SELLER shall deliver reliability reports for the BUYER fleet including benefits of exploiting data from other operators.

(e) Act as Engineering link with the BUYER to solve technical problems and repairs not included in maintenance manuals.

(f) Analyse the BUYER's maintenance practices and operations and recommend necessary changes in the procedures to optimise performance.

(g) Assist and advice on aircraft modifications or Service Bulletins embodiment.

(h) Manage with the BUYER representatives, the periodic FH status to align data bases of both parties. Procedure and periodicity of audits shall be agreed during (*CDR and PRM meetings, sample data only, replace as applicable*).

18. The Technical team activities will be conducted completely on ground and 'off-aircraft'.

19. In the event of request from the BUYER for the Technical Team for on-site support at a location other than operating Bases, the SELLER's Technical Team shall travel to other geographic locations in India where services are requested. The cost of such services shall be separately quoted on case to case basis. Such locations will be limited to low risk areas in terms of security in accordance

20. The working hours of the Technical Team shall be 09:00 H to 17:00 H, Monday to Friday. All queries outside the working hours shall be addressed to the (*AOG Back Office Desk, sample data only, replace as applicable*).

21. The SELLER reserves the right to rotate the personnel of the Technical Team every three months.

22. The SELLER shall deploy Technical Assistance detachment at every operating Base during the set up phase. The Technical Assistance detachment duration shall be agreed between both the parties in the PBL Management Plan. Access to the operating Bases will be granted by the BUYER.

23. Engineering Reach Back/ Technical Assistance / Support Services.

(The sub-para's contains sample data. Append/delete as it pertains to the case)

(a) <u>48 hours Initial Response</u>. The SELLER shall provide assistance (advise) on all technical matters and critical snag rectification. The first response shall be assured within 48 hours of the request by the BUYER.

(b) <u>Engineering Consultation</u>. The SELLER shall ensure response to all technical enquiries with respect to the aircraft, systems, sub systems and associated equipment supplied by the SELLER.

(c) <u>**Repair Dispositions/ Investigation.</u>** The SELLER shall provide first 10 cases () of problem analysis/Investigation or repair disposition within the scope of the contract. All the subsequent Investigation or repair disposition will be separately quoted on case to case basis.</u>

(d) <u>Other Engineering Support</u>. The SELLER will provide technical and engineering support beyond "I" level maintenance that will be separately quoted on case to case basis.

Maintenance Engineering

- 24. The BUYER shall be responsible for the following Maintenance Engineering activities:-
 - (a) Plan and control the maintenance activities.
 - (b) Control the aircraft life limited components.
 - (c) Update the aircraft documentation.
 - (d) Manage and control the fleet configuration.

25. Compliance with Airworthiness Directives (ADs)/ mandatory Service Bulletins (SBs) shall be undertaken by the SELLER through the BUYER's technicians. The SELLER will provide spares and TTGE required for compliance of such ADs/SBs.

26. The SELLER will be granted access to the maintenance engineering management system, of the BUYER according to mutually agreed procedures.

Additional Field Services

27. The SELLER will provide field services as necessary at BUYER's request to assist in major repairs required to recover the (aircraft/equipment/system) after incident/accident. Such support will

These specialists will be available to review personally any situation at any place in the world for any period of time they may be required.

28. The cost of these services will be considered as an "on-demand job" and quoted separately on case by case basis.

Access to Online Technical Manuals & Publications

29. The SELLER shall provide access to technical publications through Web Portal with the latest updates.

30. The SELLER shall provide user licences for forty users (*sample data only, change as applicable*) to access the Customer Web Portal, during the validity of the contract. The BUYER will have to make its arrangements for availability of Internet (World Wide Web).

31. The Web Portal is a tool to drive the BUYER's on-line communication needs using secure protocols. Through this Portal, the BUYER can take benefits of single point online access to on all the technical information. The main features of the Web portal would be:-

- (a) Friendly environment with online access to updated technical information.
- (b) Queries resolution.
- (c) Management In Service Issues.

Software Updates

(Sample data only, change as applicable)

32. The SELLER shall provide updates for the applicable LRUs routinely to ensure continued airworthiness of aircraft.

33. The navigation data base updates are not covered in this contract.

Material & Logistic Support

34. Initial Provisioning. The BUYER shall procure all the initial package of spares, GSE, GHE, STE and role equipment; for carrying out servicing up to 'O' and 'I' level on Aircraft.

35. Repair, replacement and replenishment. The SELLER shall be responsible for the replenishment of expendables and spare parts such that the BUYER stock at the end of the PBL Support period will remain the same as initial Aircraft Package delivery. The SELLER shall minimize as much as possible any possible intermediate shortage of stock during the contract execution.

(a) <u>**Replenishment of Expendables**</u>.

(i) These items shall be replenished and the stock as initial delivery will remain the same at the end of the contract. The SELLER will have the right to replenish with equivalent or upgraded parts.

(ii) The BUYER shall provide the SELLER, the maintenance tasks reports that support the reason for consumption along with the Aircraft Tail Number. The procedure and mode of communication shall be agreed during PDR/CDR meetings. The SELLER shall provide the document proposal two weeks before meeting to allow BUYER revision.

the

(i) The SELLER shall repair/replace the faulty components of Aircraft, GSE, GHE, STE and Role Equipment. The BUYER shall use the spares provided as MRLS to recover the unserviceable aircraft.

(ii) The SELLER shall replenish the spares with new or repaired parts at its sole consideration. In case of repaired items, the SELLER shall ensure that the component life of such replenished spares is maintained at the similar level of the component life of the replaced spares.

(iii) The SELLER will have discretion to choose the Authorized Repair Centre (preferable in India).

(iv) The replenishment of items rendered useless (scrap) or BER will be done by new or repaired items at the discretion of the SELLER.

(v) <u>**Repair activities.**</u> The BUYER will provide to the SELLER the maintenance task report that support the reason for repair, failure description, troubleshooting records and aircraft affected Serial Number.

(vi) **No Fault Found (NFF).** In the event of a 'No Fault Found', the BUYER and the SELLER will engage in a joint assessment to identify the potential solution and way forward for the specific equipment.

(vii) The SELLER's responsibility over spares and expendables shall be limited to inspection/ test/ repair of those components which are removed from the aircraft due to failure or life limited or Shelf-life expired.

(viii) The items removed from the aircraft will be replaced with items pertaining to the BUYER's stock; such support is limited to the aircraft delivery configuration and excludes additional equipment installed by the BUYER.

(c) <u>Consumables/Spares of O level/I level/ Out of Phase Servicing and</u> <u>Service Bulleting Embodiment.</u>

(i) The SELLER shall supply spares and consumables based on past consumption data. The BUYER will intimate the details of scheduled servicing/ maintenance due on the aircraft, four months in advance. The consumables/ spares shall be made available to the BUYER 30 days prior to scheduled task.

(ii) FOL (Fuel, oils, lubricants, according to Consumables Material List) will be the responsibility of the BUYER.

(iii) SELLER will provide the list of FOL items, their in lieu items and sources of supply. This information will be included in the technical manual Consumable Material List.

AOG Items

36. AOG situation shall be considered when BUYER has a lack of a serviceable item within all the BUYER stock locations.

37. In the event of an AOG, the AOG starting date shall be the date when the SELLER receives official communication of such AOG by the BUYER by means of the Form of Material Request as per format to be defined in the PDR and will finish when the SELLER makes the shipping details available to the BUYER.

39. If the demand is raised between Friday to Sunday the SELLER shall provide dispatch/shipping details of AOG items within 72 hours of the demand.

40. AOG items shall be considered as follows:-

(a) NO GO classified items as per Manufacturer Minimum Equipment List (MMEL) from the date the AOG has been declared.

(b) GO IF classified items after the grace period for flight per item as per Manufacturer Minimum Equipment List (MMEL).

(c) Other components items shall become AOG after 15 days from BUYER official request.

Urgent Items Likely to Cause AOG

41. The BUYER will project the demand of items falling due in the next four months for all Urgent items. The SELLER shall ensure availability of these items seven days prior to the scheduled date of maintenance.

Urgent Items Required for Scheduled Maintenance

42. The BUYER will project the demand of items falling due in the next four months for all Urgent Items for scheduled maintenance. The SELLER shall position the items one month prior to commencement of scheduled maintenance servicing.

Anticipated Replacement

43. In case an anticipated replacement is performed, the BUYER must remove the unserviceable item from the aircraft no later than 48 hours from the receipt of the substitution element.

Supply Chain Management

44. **Logistic Support.** The SELLER shall be responsible for Supply Chain Management as follows:-

(a) Provide reports of the inventory.

(b) Provide reports of the level of consumed stock, performing the required material requisitions to maintain the initial level.

(c) List of demands in a given month.

(d) Periodic inventory audits management with the BUYER for inventory data reconciliation between BUYER and SELLER data bases. Procedure and periodicity of before mentioned audits shall be agreed during PRM and CDR meetings.

45. Logistic Support Personnel.

(a) SELLER shall position a logistic support team that will be co-located in a dedicated office at the BUYER's Central Warehouse.

(b) Access to the BUYER installations shall be granted by the BUYER. The Logistic team will have direct contact with the BUYER's maintenance and logistic personnel

(c) The SELLER's Logistic Representative will be responsible for the management of Material Services contractual commitments for the PBL as follows:-

(i) Act as central focal point for all matters related to Material Support Services at the BUYER's site.

(ii) Ensure that the contractual material performance related to maintenance services is achieved, locally at the Central Warehouse.

(iii) Coordination of the materials needs, anticipate the spares needed and inform the BUYER.

- (iv) Manage all the activities related to: -
 - (aa) Repairs & Overhauls of components included in this contract.
 - (ab) Spares.
 - (ac) Transportation.
 - (ad) Communication with the BUYER.

(ae) Provide status of pending items, and delivery status to BUYER (expendables), under repair status (date of return) and critical items identification.

(af) Anticipation of the materials needed for scheduled maintenance activities.

(ag) Liaise with the BUYER to facilitate timely delivery of repaired/ replenished/ replaced items along with the appropriate shipping and quality documentation.

(ah) Be responsible for the follow-up of stock movement at BUYER Central Warehouse, following the performance and consumptions of the BUYER.

(aj) Identify and report the high-rotation and high-failure rate items, specify the root cause (when possible) and launch the opportune actions to prevent stock-out.

(ak) Launch, the repair management process for any repairable item, and provides feedback to the BUYER for the estimated delivery date (EDD) of the serviceable item.

(al) Verify that the repairable item is shipped in the correct packaging conditions according to the ATA300 requirements and arranges the shipment of the goods.

(am) Under ATA300 regulation, any single item is managed in a manner guarantying its safety during the whole logistic process. Special shipment conditions of hazardous materials or electrostatic discharge-sensitive devices are applied and will be indicated.

ATA 300 CAT II - Category II containers are effective for a

ATA 300 CAT III - Category III containers are effective for just one trip.

(an) Manage and follow-up scrapped items.

(ao) Manage with the BUYER, the corresponding periodic physical inventory audits to align stock level database of both parties.

46. **BUYER Responsibilities.**

(a) The BUYER shall be responsible for reporting the monthly flight hours to the SELLER, by means of a joint report prepared with the SELLER's Technical Representative.

(b) The BUYER will be responsible for reporting the weekly spares part inventory status to the SELLER, by means of a report prepared jointly with the SELLER's Logistic Representative.

(c) The BUYER will schedule with the SELLER's representatives periodical meetings to execute audits for data bases reconciliation. The information received by the BUYER shall be considered as valid for all cases. SELLER shall not be liable of any delay caused by not accurate information of stock levels.

(d) The BUYER will grant the SELLER with access to FDR recordings at the SELLER's request when an incidence or exceedance or extreme engine parameters in-flight have occurred.

(e) The BUYER shall deliver the faulty LRU to SELLER representatives not later than fifteen (15) calendar days after LRU removal at BUYER Central Warehouse.

47. Facilities.

(a) The BUYER will be responsible for warehousing of its spares in terms of hangars, warehouse facilities and equipment (air conditioning, shelves, etc). The Facility Requirement Document (FRD) for such facilities will be provided along with the PBL Management Plan ar PDR.

(b) The SELLER will perform a site survey in advance to ensure the BUYER warehouse complies with the requirements for storage of aeronautical components, and the recommended actions will be performed by the BUYER.

(c) The BUYER will provide to the SELLER logistic and technical personnel office space at the Central Warehouse, the necessary furniture (tables, chairs), the necessary utility connections (water and light), and authorize the installation of a stand-alone connection for internet connection.

(d) The BUYER will provide to the SELLER's representative, temporary office space during on-site service, the necessary utility connections (water and light), and authorize installation of a stand-alone connection for internet connection.

Performance of PBL Services

48. The following time periods shall be excluded from performance of PBL Services and therefore shall not be liable for Liquidated damages:-

 (b) Time required to recover Aircraft on AOG due to accident, damage or FOD, or by Force Majeure.

(c) Delays of more than seven days in payment of Custom Duty and allied Taxes by the BUYER, provided that the SELLER has submitted duly completed necessary documents to the BUYER prior to the date of shipping of items.

(d) Any disputed periods of delays shall be resolved at dedicated meetings between representatives of BUYER and SELLER.

49. The SELLER shall issue a certificate of conformity for each supply under PBL package. Supplies shall be deemed to have been accepted by the BUYER upon handing over the item at Central Warehouse of the BUYER.

50. The quantity claims for deficiency of quantity shall be presented within 45 days from the end of each Year Period in a format to be defined in the PDR.

51. Unless otherwise agreed between the Parties, the SELLER shall within a period of 90 days after termination or expiry of the PBL Support complete all repairs/replacements and replenishments that are in progress on such termination or expiry date.

52. Within the Warranty period defined in Article (15, *as applicable*), the warranty of repaired/replaced/replenished parts shall be as defined in Article (15, *as applicable*) of the contract. After completion of the warranty period, the warranty of the repaired/replaced/replenished parts supplied as part of the PBL shall be one (1) year or 300 Flight Hours (*as applicable*) whichever is earlier.

53. <u>Supply Records</u>. The following Supply records will be provided by the SELLER:-

- (a) AOG items status (daily).
- (b) Stock availability report (weekly).

54. The format of the records will be defined during the CDR. The SELLER shall provide the document proposal two weeks before the meeting to allow BUYER revision in advance.

55. <u>Insurance</u>.

(a) The SELLER will be responsible for the insurance of the SELLER personnel.

(b) The SELLER will not be responsible for security and custody of all properties, including spare stock and ground support equipment.

56. <u>Transport</u>.

(a) Transport of Supplies from the SELLER to the BUYER's Central Warehouse will be performed under DAP conditions, Incoterms 2010 and transport of Supplies from the BUYER Main Warehouse.

(b) The SELLER shall be responsible for the Customs administrative process for clearance (Bill of Entry preparation).

(c) Customs Duty and associated Taxes shall be borne by the BUYER. The SELLER shall be responsible for the release of items from customs and delivery to final destination.

57. The following tasks, services and responsibilities which are not part of this Contract and will be considered 'over and above' as follows :-

(a) Replenishment of items installed by the BUYER not part of the SELLER recognized configuration of the aircraft or duly documented evolutions through Service Bulletins. Such replenishments may be considered by the SELLER subject to availability and mutual agreement with the BUYER on 'over and above' basis.

(b) Replenishment of elements with corrosion that exceed the technically allowed limits and have been caused due to lack of BUYER inspections or mitigation actions as per the technical manuals or specific OEM instructions provided by the SELLER.

(c) Replenishment of POL that are not part of initial MRLS (fuel, oils, lubricants, grease, sealants, paints and fluids, etc.).

(d) Replenishment or repair of damaged elements:-

(i) Resulting from crash or accidental damage, foreign object damage (FOD), damage due to war and terrorist activities.

(ii) Secondary damage resulting from a primary equipment failure due to crash or accidental damage, FOD, damage due to war and terrorist activities.

(iii) Due to the BUYER's fault, or negligence, inadequate operation or maintenance activities performed on the aircraft

(iv) Resulting from natural disaster (floods, earthquakes, lightning, etc...).

(e) Modification, substitution or replacement of equipment at variance to the SELLER recognized aircraft configuration.

(f) Any manpower to perform maintenance "On Aircraft" activities.

58. The 'over and above' tasks or service will be quoted on case by case at the BUYER's request, and will be undertaken upon mutual agreement.

Extension of PBL Service

59. The PBL support may be extended after the expiry of the 5 year period in subsequent blocks of 5 year periods upon mutual agreement between the parties.

60. The Logistical Support Service and the Technical Support Service are catered for the Fleet Hours associated to this contract. In case of renewal, these services shall be adjusted to the new Fleet hours.

61. The Fleet Flight Hour Cost will be subject to the following escalation formula:

Escalation formula (with a maximum cap/ limit of 3%) for year 2013 (*change as applicable*) and subsequent years will be:

$$\mathbf{P}_{\mathbf{x}} = \mathbf{P}_{2013} \mathbf{x} \qquad \boxed{\frac{\mathbf{M}_{\mathbf{x}}}{\mathbf{M}_{2013}}}$$

Where:

PX = Price to be applied in the year "X";

MX = The value of the Industry-Producer price index (Manufacturing industries code "Teiis020" of EU28 in accordance with NACE Rev 2) in the Euro zone published by the Eurostat corresponding to February X (*sample data only, change as applicable*).

M2013 = The value of above mentioned Producer price index corresponding to February 2013 which value is 108.69 (*sample data only, change as applicable*).

62. After the completion of the first PBL package, it would be an option that other than MRLS, all further transaction of spares and reparable be undertaken through Indian Aircraft Contractor (IAC) at mutually agreed terms and conditions.

Security

63. A BUYER shall grant security clearance to the SELLER representatives to work at BUYER facilities. Any location declared as Medium-High Risk area by SELLER security department shall be avoided by SELLER personnel.
Appendix E to Chapter II

(Refers to Para 15 (b) of Chapter II)

DRAFT FORMAT: NATURE/SCOPE OF INFORMATION REGARDING CASES WHICH ARE RECOMMENDED TO BE PLACED ON MoD WEBSITE

(THIS IS A STANDARDISED FORMAT FOR GUIDELINES. IT MAY BE VARIED DEPENDING ON USER REQUIREMENTS, TYPE/COMPLEXITY OF EQUIPMENT/ MACHINERY/TEST EQUIPMENT AND OPERATIONAL IMPERATIVES. SHQ MAY ALTER IT AS PER THEIR SERVICE REQUIREMENTS)

2. This Request for Information (RFI) consists of three parts as indicated below:-

(a) <u>**Part I**</u>. The first part of the RFI incorporates operational characteristics and features that should be met by the equipment. Few important technical parameters of the proposed equipment are also mentioned.

(b) <u>**Part II**</u>. The second part of the RFI states the methodology of seeking response of vendors. Submission of incomplete response format will render the vendor liable for rejection.

(c) <u>**Part III.</u>** Guidelines for Framing Criteria for Vendor Selection/Pre Qualification in Buy Indian (IDDM), Buy (Indian) and Buy & Make (Indian) Cases.</u>

PART-I

3 **<u>The Intended Use of Equipment (Operational Requirements)</u>**. To be decided by SHQ keeping in view security considerations.

4. <u>Important Technical Parameters</u>. To be decided by SHQ keeping in view security considerations.

5. Vendors should confirm that following conditions are acceptable:-

(a) The solicitation of offers will be as per 'Single Stage-Two Bid System'. It would imply that a 'Request for Proposal' would be issued soliciting the technical and commercial offers together, but in two separate sealed envelopes. The validity of commercial offers would be at least 18 months from the date of submitting of offers.

(b) The technical offers would be evaluated by a Technical Evaluation Committee

(TEC) to check its compliance with RFP.

(c) The equipment of all TEC cleared vendors would be put through a trial evaluation in India on a 'No Cost No Commitment' basis. A staff evaluation would be carried out by SHQ to analyse the result of field evaluation and shortlist the equipment for introduction into service.

(d) Amongst the vendors cleared by GS evaluation, a Contract Negotiations Committee would decide the lowest cost bidder (L1) and conclude the appropriate contract.

(e) Vendor would be bound to provide product support for time period specified in the RFP, which includes spares and maintenance tools/jigs/fixtures for field and component level repairs.

(f) The vendor would be required to accept the general conditions of contract given in the Standard Contract Document at Chapter VII of DPP placed on www.mod.nic.in.

(a) <u>Offset (if applicable)</u>. The vendor has to undertake offset contracts amounting to ____% of the value of commercial proposals (**Refer Appendix D to Chapter II**).

(j) <u>Integrity Pact (if applicable)</u>. An integrity pact along with appropriate IPBG is a mandatory requirement in the instant case (**Refer Annexure I to Appendix M of Schedule I**).

(k) <u>**Performance-cum-Warranty Bond**</u>. Performance-cum-Warranty Bond both equal to 5% value of the contract is required to be submitted after signing of contract.

(1) <u>**ToT (if applicable)**</u>. GOI is desirous of license production of equipment after acquiring ToT in the case.

PART-II

6. **Procedure for Response**

(a) Vendors must fill the form of response as given in **Appendix B to Chapter II**. Apart from filling details about company, details about the exact product meeting other generic technical specifications should also be carefully filled. Additional literature on the product can also be attached with the form.

(b) The filled form should be dispatched at under mentioned address (concerned Technical Manager):-

Fax:

Email ID:

(c) Last date of acceptance of filled form is _____(to be decided by SHQ). The vendors short listed for issue of RFP would be intimated.

7. The Government of India invites responses to this request only from Original Equipment Manufacturers (OEM)/Authorised Vendors/Government Sponsored Export Agencies (applicable in the case of countries where domestic laws do not permit direct export by OEMs). The end user of the equipment is the Indian Armed Forces (name of user service).

8. This information is being issued with no financial commitment and the Ministry of Defence reserves the right to change or vary any part thereof at any stage. The Government of India also reserves the right to withdraw it should it be so necessary at any stage. The acquisition process would be carried out under the provisions of DPP.

Annexure I to Appendix A

(Refer to Para)

REQUEST FOR INFORMATION: PROCEDURE FOR RESPONSE

Request for Information for

1. The Indian Army is planning to procure ______. With the view to identify probable vendors who can undertake the said project, OEMs/ Authorised Vendors are requested to forward information on the product which they can offer. The parameters/ broad specifications of the item are mentioned in the questionnaire attached as per Appendix B. In addition the vendors are required to furnish details as per Performa at Annexure I (Indian vendors) to Appendix A.

2. Apart from the information as per the Appendices the vendors may also forward technical details/product brochures/literature etc pertaining to the item in question.

3. The required information/ details may please be forwarded at the following address by :-

- (a) User Directorate (Furnish postal address, telephone No, Fax No and Email ID)
- (b) Procurement Directorate (Furnish postal address, telephone No, Fax No and Email ID)
- (c) Planning Directorate (Furnish postal address, telephone No, Fax No and Email ID)
- (d) Technical Manager (Furnish postal address, telephone No, Fax No and Email ID)

Appendix B to Chapter II

(Refers to Para 7 and 15 (a) and 15 (b) of Chapter II)

VENDOR INFORMATION PROFORMA

1. <u>Name of the Vendor/Company/Firm</u>.

(Company profile including Share Holding pattern, in brief, to be attached)

2. <u>Type (Tick the relevant category)</u>.

Original Equipment Manufacturer (OEM) Authorised Vendor of foreign Firm Others (give specific details) Yes/No Yes/No (attach details, if yes)

3. <u>Contact Details</u>.

Postal Address:

City:		State:	
Pin Code:		Tele:	
Fax:		URL/Web Site:	
Email:			
4. <u>Local Branch</u>	/Liaison Office/A	Agent (if any).	
Name & Address:			
Pin code:	Tel:	Fax:	

Email: _____

5. <u>Financial Details</u>. Category of Industry (Large/Medium/Small Scale):_____

6. <u>Certification by Quality Assurance Organisation</u>.

Name of Agency	Certification	Applicable from (Date & Year)	Valid till (Date & Year)

7. **Details of Registration**.

Agency	Registration No.	Validity (Date)	Equipment
GeM			
DGQA/DGAQA/DGNAI			
OFB			
DRDO			
Any other Government Agency			

8. Membership of FICCI/ASSOCHAM/CII or other Industrial Associations.

Name of Organisation

Membership Number

9. <u>Equipment/Product Profile (to be submitted for each product separately)</u>

(a) Name of Product: _____

(IDDM Capability be indicated against the product)(Should be given category wise for e.g. all products under night vision devices to be mentioned together)

- (b) Description (attach technical literature):
- (c) Whether OEM or Integrator:
- (d) Name and address of Foreign collaborator (if any):
- (e) Industrial Licence Number:

(f) Indigenous component of the product (in percentage):

(g) Status (in service/design & development stage):

(h) Production capacity per annum:

(j) Countries/agencies where equipment supplied earlier (give details of quantity supplied):

(k) Estimated price of the equipment _____

10. Alternatives for meeting the objectives of the equipment set forth in the RFI.

11. Any other relevant information:

12. <u>**Declaration**</u>. It is certified that the above information is true and any changes will be intimated at the earliest.

<u>Note</u>: Para 44 and Appendix F to Chapter II may be referred.

(Authorised Signatory)

Annexure III to Appendix (Refers to)

REQUEST FOR INFORMATION: QUESTIONNAIRE

Ser No	Specifications/ Parameters	<u>Reply</u>		
(Details desired from the Vendor w.r.t technical, performance, maintenance, environmental and				
other characteristics may be obtained in form of a questionnaire)				

Appendix C to Chapter II (Refers to Para 16 of Chapter II)

STATEMENT OF CASE TO BE CONSIDERED BY SPB/DPB/DAC FOR CATEGORISATION AND ACCORD OF AON

NAME OF	PROPOSAL	-		
SERVICE		-		
CATEGOR	ISATION STATUS	-		
REFEREN	CE NO ALLOCATED	-		
(To be entered by concerned Secretariat)				
(a)	SPB	-		
(b)	DPB	-		
(c)	DAC	-		

BRIEF OF PROPOSAL

1. Introduction.

- 2. **<u>Proposal</u>**. (Generic in nature and desired capability indicators)
 - (a) Mission Needs.
 - (b) How Mission Currently Undertaken.
 - (c) Deficiency in Capability Observed which Needs Rectification.

(d) Whether Changes in Doctrine/Tactics Cannot Overcome the Void without a Material Solution?

- (e) Material Solution Proposed with Time Frame and Linkage to LTIPP.
 - (i) What is the capability being sought to be inducted?

(ii) What additional capability is being generated? How does this mesh with the long term capability requirements?

(iii) Is there any other associated induction required subsequently to make the equipment operational?

(iv) Which equipment is being phased out/replaced? What will be the life cycle of the new equipment?

3. <u>**Detailed Justification**</u>. (The following aspects to be included, where applicable):

- (a) Details of Equipment/Proposal.
- (b) Operational Role and Necessity.
- (c) Quantity Required (Quantity vetting to be completed prior to SCAPCHC meeting).

(i) How have the quantities required been worked out? What are the details of quantities required for operational units, training and WWR? What are the details on the scaling of the item?

(ii) In case of phased induction of equipment, what are the exact quantities sought during various plan periods/stages?

- (d) Whether Technology is state-of-the-art and ToT considered?
 - (i) In cases where ToT is being sought, which is the PA identified by

DDP/Foreign Vendors for the same? What are its capabilities of absorption of ToT/manufacture as per requirements? Does it meet the eligibility as spelt out by DDP (Refer **Para 20** of Chapter II)?

- (ii) Inputs from SHQ, if any, for selection of PA.
- (e) Whether Item is scaled/not scaled. If scaled, quote Authority.

(f) Maintenance Aspects.

(i) How is the Engineering/Maintenance support catered for the full life cycle of the equipment?

(ii) Is a ToT proposed for providing Maintenance Infrastructure to an Indian firm? If so, are Indian entities identified based on inputs from DDP?

(iii) How are the D Level repairs planned to be carried out? OEM/Vendor or Indian partner or Services Maintenance Agency.

(g) **<u>Details of GSQR/JSQR</u>**. (Copy of approved GSQR/JSQR/PSQR to be appended)

(i) In all cases essential capability and corresponding minimum verifiable functional characteristics (Essential Parameters 'A') in a tabulated form be provided. In cases where Essential Parameters 'B' are sought, the quantity of equipment required with these parameters must be clearly spelt out (with due justification for same). In cases where Enhanced Performance Parameters are sought, these must be clearly stated along with the recommended weightage/credit scores for each duly justified.

(ii) For all repeat order cases of equipment already inducted into service, are there any changes in SQR, modifications of minor nature or upgrades of assemblies/sub assemblies involved? Would this need a Commercial RFP with validation of modifications/upgrades, or issuing of a fresh techno commercial RFP of a multi vendor basis?

(ii) In all cases details of essential verifiable functional characteristics vis-àvis technical parameter of the equipment available in the world market, in as much details as possible in a tabulated form be provided.

(iv) In cases where earlier approved GSQRs have necessitated amendment and revalidation of AoN, detailed justification for each of such amendments be provided in a tabular format.

(h) Whether Proposal is for Replacement/Upgrade/New Induction making up WWR Deficiency?

(j) <u>**Trials.**</u> In cases where trials are not envisaged, are envisaged outside India, or through simulation, what is the exact scope for the same? In case SHQ is planning for trials under Para 61 of Chapter II, details may be spelt out.

(k) Time Schedule for induction (To give full details of induction/delivery schedules).

(1) Commonality and Interoperability Aspects with other Services.

(m) <u>Manpower</u>. What is the effect of the induction on manpower requirements? How would the surplus/deficiencies be adjusted?

(n) <u>**Turnkey Projects</u>**. For all major Turnkey Projects, has a Detailed Project Report been prepared/attached by SHQ laying down detailed scope of work involved, bill of material, cost estimates and time frames for project completion?</u>

(o) **Design & Development Projects**. Has consultation with DRDO/DPSUs/OFB been undertaken for Design and Development case? Has MoQ and timelines upto successful completion of trials been defined?

(p) <u>Single Vendor</u>. In case of a Single Vendor Clearance, which is the vendor and what is the detailed justification for the single vendor option (Para 101 of Chapter II)?

(q) <u>**Timeline for Procurement.</u>** Are there likely to be deviations to the timelines given at **Appendix H to Chapter II** of DPP? If so, deviations and week-wise targets to be proposed by SHQ with justification (Format of proposed timeline is given at Annexure I and flow chart for proposed Capital Acquisition is given at Annexure II to this Appendix).</u>

(r) <u>Option Clause</u>. In case Option Clause needs to be included, justification for the same be provided.

(s) Information regarding Procurement that needs to be placed on MoD website/ Central Procurement Portal.

4. **<u>Financial Aspects</u>**.

(a) To include cost of proposal (including all taxes and duties) and recurring expenditure, if any; the basis of cost estimation and the Base year for which the cost is indicated. The SoC should clearly bring out the future requirements with timeline details to decide whether 'Option Clause' will be economically viable or not.

(b) Recommendation on method for determining L-1 vendor (wherever applicable).

5. <u>Annual Acquisition Plan/Budgetary Provisions</u>.

(a) Whether the proposal is included in the AAP (include AAP Ser No).

(b) Availability of necessary budgetary provision for the current year cash outgo.

(c) In case the project involves cash outgo over one year, confirmation regarding inclusion of budgetary requirements for future years in the five year plan period to be given.

6. **<u>Recommended Mode/Source of Acquisition.</u>**

(a) Buy (Indian-IDDM), Buy (Indian), Buy & Make (Indian), Buy & Make, Buy (Global), 'Make' with justification. (Appendix A to Chapter II may be referred for analysis of Defining Attributes and Decision Flow Charts). Justification for not selecting each of the higher categories may be given.

(b) Has the time required for the procurement and delivery from foreign source vis a vis the time required for making it within India alongwith urgency and criticality of requirement been examined?

(c) Justification for Procurement from a Single Vendor (If applicable).

(d) In case SHQ proposes higher or lower indigenous content, a detailed justification may be given.

7. <u>Comments of HQ IDS</u>. (The issues of commonality and interoperability will be duly commented upon).

8. <u>Comments of HQ DRDO</u>.

(a) (To develop and productionise items and certify lack of capability to meet the needs if above not feasible).

(b) Offset Clause (Proposals for $\mathbf{\xi}$ 2000 Crores & above). (Recommendation as to the offset amount/percentage or any other comment).

9. <u>Comments of DDP</u>.

(a) (To specify capability to manufacture and supply, provide product support, time frame and approximate costs jointly with the R&D and the resources available to the industry. Also certify if such capability does not exist).

(b) Offset Clause (Proposals for \gtrless 2000 Crores & above) (Recommendation as to the offset amount/percentage or any other comment).

10. Comments of QA Agency.

11. Comments of Acqn Wing.

(To recommend the quantities to be procured alongwith other comments)

13. Comments of MoD (Finance).

(Quantity vetting would be approved by Finance Managers/PIFA/IFA(Capital), as applicable. (Refer Para 16 of Chapter II of DPP)

14. <u>Final Comments of SHQ Based on inputs of DRDO, DDP, Acqn Wg and MoD</u> (Finance).

15. **Draft RFP.** Draft RFP should accompany the SoC for accord of AoN. (Refer Para 16 of Chapter II of DPP).

16. **Details of Approvals Sought**.

- (a) AoN.
- (b) Categorisation to include variation in IC, if any.
- (c) <u>Quantity</u>.
 - (i) Buy quantities to be given out as FF, SKD and CKD as applicable.
 - (ii) Details of Indent to be placed for Make quantities after absorption of ToT.

(d) Estimated cost (including all taxes and duties). In case of Make cases, cost to be split into Prototype Development Phase and Procurement Phase.

- (e) Essential Parameters B (if applicable).
- (f) Weightage/Credit Scores of EPP (if applicable).
- (g) ToT including details of PA.
- (h) MToT including details of PA.
- (i) Trials (Waiver/Vendor Premises/Trials under Para 61 of Chapter II etc).
- (j) Timelines for Trials for Essential Parameters B (if applicable).
- (k) Offsets.
- (l) Option Clause.
- (m) AMC Service.
- (n) Any other aspect that require specific approval, including Open Tendering.

Sd/- xx

(Head of User/Plans Dte/equivalent)

Date _____

<u>Note</u>: Col/Equivalent may sign the SoC provided Noting sheet number with date of approval of Head of User/Plans/Directorate/Equivalent is quoted.

Details to be Mentioned by Concerned Secretariat

- 14.
- 15. Recommendation of DPB including Reference No Allotted.
- 16. Decision of DAC/DPB and Reference No allotted.
- 17. Recommendation for Offset Clause Implementation (if applicable).

Appendix B to Chapter II

(Refers to Para 7 and 15 (a) and 15 (b) of Chapter II)

VENDOR INFORMATION PROFORMA

1. <u>Name of the Vendor/Company/Firm</u>.

(Company profile including Share Holding pattern, in brief, to be attached)

2. <u>Type (Tick the relevant category)</u>.

Original Equipment Manufacturer (OEM) Authorised Vendor of foreign Firm Others (give specific details) Yes/No Yes/No (attach details, if yes)

3. <u>Contact Details</u>.

Postal Address:

City:		State:	
Pin Code:		Tele:	
Fax:		URL/Web Site:	
Email:			
4. <u>Local Branch</u>	/Liaison Office/A	Agent (if any).	
Name & Address:			
Pin code:	Tel:	Fax:	

Email: _____

5. <u>Financial Details</u>. Category of Industry (Large/Medium/Small Scale):_____

6. <u>Certification by Quality Assurance Organisation</u>.

Name of Agency	Certification	Applicable from (Date & Year)	Valid till (Date & Year)

7. **Details of Registration**.

Agency	Registration No.	Validity (Date)	Equipment
GeM			
DGQA/DGAQA/DGNAI			
OFB			
DRDO			
Any other Government Agency			

8. Membership of FICCI/ASSOCHAM/CII or other Industrial Associations.

Name of Organisation

Membership Number

9. <u>Equipment/Product Profile (to be submitted for each product separately)</u>

(a) Name of Product: _____

(IDDM Capability be indicated against the product)(Should be given category wise for e.g. all products under night vision devices to be mentioned together)

- (b) Description (attach technical literature):
- (c) Whether OEM or Integrator:
- (d) Name and address of Foreign collaborator (if any):
- (e) Industrial Licence Number: _____

(f) Indigenous component of the product (in percentage):

(g) Status (in service/design & development stage):

(h) Production capacity per annum:

(j) Countries/agencies where equipment supplied earlier (give details of quantity supplied):

(k) Estimated price of the equipment _____

10. Alternatives for meeting the objectives of the equipment set forth in the RFI.

11. Any other relevant information:

12. <u>**Declaration**</u>. It is certified that the above information is true and any changes will be intimated at the earliest.

<u>Note</u>: Para 44 and Appendix F to Chapter II may be referred.

(Authorised Signatory)