

Biman Bangladesh Airlines
Engineering & Material Management Directorate

Name of Tender : Selection of Agency for Overhaul and Loan of
Boeing 777-300ER Landing Gears

01. Introduction :

Biman Bangladesh Airlines is operating 04 (four) Boeing 777-300ER Aircraft with average daily utilization of 12.89 FH and 2.7 landings. With this current utilization, overhaul life of 02 777-300ER Aircraft landing gear shipset (2 MLG & 1 NLG) shall expire during 3Q-4Q of 2021, and the remaining 02 Aircraft landing gear shipset shall be due in early 2024. Details of all 4 shipset Landing Gears are as follows:

Aircraft MSN	Shipset Part Number	CSN/CSO	EIS	Next due	Max Taxi Weight
40122	161W2100-7,-8 and -13	7242	30-09-2011	29-09-2021	777,000
40123	161W2100-7,-8 and -13	7007	17-10-2011	16-10-2021	777,000
40120	161W2100-7,-8 and -13	5203	09-01-2014	08-01-2024	777,000
40121	161W2100-7,-8 and -13	4959	03-03-2014	02-03-2024	777,000

** Data provided above as of date 30-06-2019 ** Average monthly fleet utilization for 777-300ER is 380 Hrs & 80 Cycles.*

Biman hereby invites offer from (a) OEM or (b) approved Landing Gear MRO having proven capability and experience on overhaul of 777-300ER landing gears and capability to provide landing gear shipset on loan basis for the above-mentioned Aircraft. The tender offer may propose 4 shipsets of Landing Gear Overhaul with loaner shipset support.

The agreement shall be valid for a period of Five (05) Years from the date of signing the agreement unless terminated by either party giving to the other party not less than 3 months in advance written notice prior to the date such termination becomes effective. However, validity of the agreement may be extended for a mutually agreed period for continue and work completion of all 4 Shipsets of Landing Gear Overhaul.

02. Tenderer Qualifications (Mandatory):

The Tenderer shall provide following Information/ Technical Documents and must agree with the following terms and conditions:

- (a) Tenderer must be either (a) OEM or (b) approved Landing Gear MRO capable of in-house repair and overhaul of 777-300ER Landing Gears having Certificate of Approval(s) from (i) FAA or EASA and (ii) local Regulatory Authority. In addition, the Tenderer must agree to obtain CAAB (Civil Aviation Authority of Bangladesh) approval and also comply with all Applicable Directive(s) / instruction(s) issued by the Civil Aviation Authority of Bangladesh (CAAB).
- (b) Tenderer must have minimum five years period of general experience in landing gear overhaul.
- (c) Tenderer must have an experience of Overhauling at least 10 (Ten) 777-300ER Landing Gear Shipsets. Proven experience of overhauling at least 04 (Four) 777-300ER Landing Gear Shipsets over last three years (July 2016 to June 2019 inclusive) is a must, and Tenderer shall provide landing gear serial numbers in tender offer.
- (d) A Tender submitted by MRO Joint Venture, Consortium or Association is not acceptable.
- (e) Any discussion/ negotiation will be done directly with the Tenderer MRO. Biman will not deal with any Agent/Broker during the process of evaluation and finalization of the proposal or agreement.

03. Tender Mandatory Requirements:

The Tenderer shall agree and provide response to following Mandatory requirements to qualify as Responsive tenderer:

Tender requirement	Tenderer Response and Sign
(a) The Intended Completion Days per Shop Visit : Each Landing Gear Shipset Shop-in to Shop-out Turn-Around-Time (TAT) shall not be more than 60 (Sixty) calendar days, lower preferable. The TAT and its term and condition(s) shall clearly be specified in the offer and draft agreement.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign _____
(b) The workscoping of landing gears during overhaul will be carried out jointly by Biman representative and Tenderer's engineering personnel in reference to the applicable CMM and any valid approved document. Biman will maintain control of landing gear 'workscape' requirements at all times and will have the right to change workscope during early stages of shop visit.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign _____
(c) Warranty periods shall be minimum of 36 (thirty six) months and 5000 Cycles, whichever later. The Tenderer must also warrant their subcontractor's work.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign _____
(d) The Tenderer shall agree to undertake any warranty claim(s)/ issue(s) with Manufacturer/ subcontractor on behalf of Biman.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign _____
(e) Overhaul/Repair and test capabilities must be defined including wiring harness.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign _____
(f) All Used Serviceable Parts (including LLPs, LRUs etc.) installed in Biman landing gears by Tenderer shall have proper documents and traceability, back to birth history and all such parts should be in good operating condition, be of the same (or better) value and utility, must not have been involved in an incident or accident, must not have been installed on an aircraft registered on a military aircraft register and be of the same or a more advanced OEM configuration status.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign _____
(g) Tenderer shall deliver Loan Landing Gear and Overhauled Landing Gear Shipsets to Biman Hangar facility (at Dhaka). All costs inclusive of insurance and transportation of Loan Landing Gear and the Overhauled landing gear shall be borne by Tenderer. Original shipping documents shall have to be provided with the Loan Landing Gear and Overhauled Landing Gear Shipsets. During return, Biman will deliver all Core Units and return the Loan Landing Gear from Biman Hangar facility (at Dhaka) in accordance with the Incoterms (Incoterms 2010 published by the International Chamber of Commerce). Biman will provide all necessary supporting documents. All costs inclusive of insurance and transportation of Core Units as well as return of loan landing gear shipsets shall be borne by the Supplier.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign _____
(h) Landing gears shall be checked at receipt and dispatch time. A list of missing items must be made at Shop-in & Shop-out, should be reported within 10 days after landing gear induction and such list shall accompany	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed

Tender requirement	Tenderer Response and Sign
the landing gear documentation at delivery.	Sign_____
(i) A list of all AD's and SB's with applicability/ compliance data applicable to landing gear should be provided in the shop visit report. Electronic copy of landing gear shop visit report along with 2 (two) hardcopies should be provided after landing gear shop visit or exchanged landing gears received by Biman.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(j) Use of PMA part, Non - OEM repair, and DER repairs are not allowed for installation on Biman landing gears. However, any specific cost effective DER repair may be discussed, and approved by Biman prior implementation.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(k) The prices quoted by Tenderer in Price Schedule Annexure-1 shall preferably be fixed during contract period. If there is any change in quoted fixed price during the contracted period, the methodology and financial figure (including escalation cap for each year) should be clearly mentioned in the offer for any escalation or reduction of prices for necessary adjustment during evaluation. Annual price escalation rate must be capped by a certain value in percentage which will be used during financial evaluation process. As such Tenderer must propose an Annual Escalation Cap in addition to the methodology and financial figure, which shall also be part of the draft agreement escalation provisions. Refer to Price Schedule Annexure-1, para 7.0.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(l) All prices shall be quoted in US\$.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(m) All disassembly, assembly, repair, Overhaul, inspection, cleaning, testing, modification, alteration, or any other process, technique required during landing gear shop visit must be up to the manufacturer's approved repair standard and must comply with regulatory requirement. An NTO (No Technical Objection) from Boeing shall be arranged for repairs not covered within applicable Repair Manuals and prior concurrence from Biman must be made before incorporation of the same.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(n) The Tenderer shall have an independent Quality Assurance program that monitors compliance with applicable airworthiness regulations, requirements and their own maintenance procedure manual. Such program shall also address the specific requirement of the customer's Quality Assurance program as detailed in customer's Maintenance Control Manual. Tenderer must comply applicable clauses of Biman Quality Assurance Audit Checklist, Form- QA/AUD/CHK/002/029. Tenderer must ensure and provide Certificate annually that their personnel are trained on SMS and is implemented in Organization culture.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(o) Cost of CAAB Approval process including all required approval fees to be borne by Tenderer.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____

Tender requirement	Tenderer Response and Sign
(p) Parts to be scrapped during any landing gear shop visit should be held for an agreed period of time to allow inspection by Biman.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(q) The repair agency must assist Biman by providing estimated cost of repairing/ overhauling a landing gear due to serious damage, whenever requested by Biman for insurance claim.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(r) Strip condition and detail inspection reports should be made available in a timely manner and be included in shop visit report. Strip reports shall include photographs and list of all replaced / reinstalled / scrapped items.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(s) 12 months Preservation, Packaging, shipment and transportation requirements must be of Industry standard and acceptable to Biman. Necessary certification for preservation shall be provided.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(t) The repair shop must respond to quality complaints formally and promptly.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(u) The landing gears shall be repaired on a Time-and-Material basis with fixed price quote for routine repair. Tenderer must quote prices as stipulated in paragraphs of attached Price Schedule as 2A, 2B, 2E and 4, Annexure-1. Tenderer shall also quote prices for monthly loaner charges for each ship set per Price Schedule as Para 4, Annexure-1.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(v) Tenderer must agree that new part prices should be applicable at the date of landing gear release from the shop but not at the date of invoice.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(w) Tenderer shall meet all requirements mentioned in Annexure-1.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(x) Full In-house capability is preferred however, for parts subcontracted, the Tenderer must agree to provide subcontractor's invoice. Charges for handling of parts including insurance and warranty will be the responsibility of the Tenderer.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(y) Tenderer must agree to pay any taxes/GST/VAT or any other tax related charges outside Bangladesh. Any taxes/GST/VAT or any other tax related charges within Bangladesh shall be borne by Biman.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(z) Tenderer shall borne all the cost for repair of any parts per CMM, and that must be done within the TAT.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____
(aa) The Tender validity period shall be 120 days minimum. Biman may request further validity extension, if needed.	<input type="checkbox"/> Agreed <input type="checkbox"/> Not agreed Sign_____

04. Documents to be provided along with the Tender Offer (Mandatory) :

The Tenderer shall submit with its Tender offer the following additional documents in English:

- (a) Copies of FAA or EASA approval and Certificate of Approval from local regulatory authority of the approved landing gear maintenance services organization are to be provided.
- (b) Original tender offer must be submitted with signature and seal of tenderer in every page along with original copy of Tender documents.
- (c) One copy of tender offer shall also be submitted as working paper and must be ensured that the copy should not carry any deviation from the original tender documents.
- (d) List of repaired/overhauled landing gears with Serial Number during the period June 2016 to May 2019 (inclusive).
- (e) Technical Specification and Documents for the Offered Loan Landing Gear Ship Sets to be provided along with the offer/ tender proposal.
- (f) Draft copy of the Landing Gear Maintenance Agreement highlighting corresponding each requirements of the Tender and shall include, but is not limited to the following:
 - a list of facilities where the maintenance is to be carried out, including a list of satellite facilities that the tenderer may use;
 - a 'Statement of Work' (SOW) for the Maintenance Agreement that contains the detailed technical requirements, including references to maintenance intervals, manuals, Airworthiness Directives (ADs), Service Bulletins (SBs) and operator special requirements. A clear, unambiguous and sufficiently detailed SOW and assignment of responsibilities are required to ensure no misunderstanding arises between the operator, the Contractor and the operator's Authority that could result in a situation where the work, which has a bearing on the airworthiness or the serviceability of operator's aircraft, is not properly performed;
 - a requirement for the repair agency to produce a suitable quality plan for the project;
 - use and control of parts and materials;
 - process for the approval of deviations from maintenance documents;
 - a need for an internal evaluation system by the repair agency;
 - access by the customer's quality assurance department staff for the purpose of evaluating ongoing quality;
 - a reporting structure that immediately notifies the customer immediately if there is any defect, un-airworthy condition, failure or malfunction which are related to aircraft structure, aircraft systems or equipments;
 - a system of completing, reviewing, retaining maintenance records;
 - a system of calibration of tooling and equipment;
 - a system of managing customer supplied parts;
 - a system of inspecting and testing, i.e., a quality control system;
 - a system of handling unsatisfactory product;
 - a system of handling, storage, packaging and delivery;
 - a system of product identification and traceability;
 - a system of training by the repair agency of its staff including continuation training not exceeding 36 months interval,
 - a system of Release To Service of an aircraft or component;
 - a system for communication between the customer and the repair agency;
 - a Service Level Agreement (SLA) that includes clear Key Performance Indicators as agreed between the customer and the repair agency for the assessment of achievement of ongoing quality levels (the definition of the specific indicators depends on the policy of the customer);
 - a system of periodic review meetings to include some or all of those below:
 - Contract Review Meeting
 - Workslope Planning Meeting

05. Tender Financial Evaluation

The following points would be considered for purpose of Tender Financial Evaluation :

- (a) Tenderer(s) evaluated as RESPONSIVE after application of all the evaluation factors indicated in Tenderer Qualifications and Tender Mandatory Requirements shall be evaluated to determine financially lowest-evaluated Tenderer in accordance with calculated total quoted price per Para 4, Annexure 1.
- (b) Annual escalation or reduction (if any) quoted per Para 7, Annexure 1 shall also be considered for five years to determine financially lowest evaluated tenderer.

06. Clarification / further Information :

For any further information/ clarification to the Tender, Tenderer is requested to contact with the following official:

Chief Engineer, Engineering Services
Biman Bangladesh Airlines
Email to : chiefengr@bdbiman.com
Copy to : debiman@bdbiman.com

Annexure 1

Price Schedule for Overhaul and Loan of B777-300ER Landing Gear Shipset

1. General terms :

- (i) All prices quoted by the Tenderer as per Annexure-1 shall be in United States Dollar (USD).
- (ii) The agency must consider the following items as MLG Assembly and NLG Assembly and so they are to be included for overhaul quotation as in 2.A, 2.B, 2.C, 2.E and 4.

Main Landing Gear (MLG) Assembly

Main Landing Gear
MLG Side Strut
MLG Drag Strut
MLG Reaction Link
MLG Retraction Actuator

Nose Landing Gear (NLG) Assembly

Nose Landing Gear
NLG Drag Strut
NLG Retraction Actuator

2. OVERHAUL/REPAIR OF LANDING GEAR SHIPSET ALONGWITH ASSOCIATED PARTS:

- A. The agency shall quote fixed cost labor for Full Overhaul workscope, which includes but not limited to the following :
 - i. All Receiving Inspection.
 - ii. All Disassembly.
 - iii. Replacement of all Bushings.
 - iv. Cleaning and paint removal.
 - v. Any types of Non-Destructive Testing.
 - vi. Stress Relief.
 - vii. All Corrosion Removal from any area of Landing Gears.
 - viii. All Dimensional Inspection and Evaluation.
 - ix. Repair Scheme Engineering (Engineering Services).
 - x. Out of scope labor for those repairs beyond CMM covered by OEM repair concession
 - xi. Incorporation of repair scheme published in the current applicable CMM.
 - xii. Rectification of ladder cracks.
 - xiii. Grinding, Machining and Polishing.
 - xiv. Shot Peening.
 - xv. Chrome and Nickel plating and grinding.
 - xvi. Restore all Cad Plating.
 - xvii. Bush Sealing and Painting.
 - xviii. All applicable AD issued until the date of contract signed and mandatory modification Incorporation.
 - xix. Labor required for incorporation of mandatory Service Bulletins if required.
 - xx. Final Inspection of all components.

- xxi. Assembly and Functional Test.
- xxii. Repair of Hydraulic components.
- xxiii. Repair/Test of electrical harnesses.
- xxiv. Nital etch as required.
- xxv. Documentation to Release specification.

Tenderer must quote fixed cost labor for Full Overhaul workscope for the following:

Nomenclature	Labor cost (Fixed Rated) (USD)
Main Landing Gear Assy (LH + RH) Each Overhaul	

Nomenclature	Labor cost (Fixed Rated) (USD)
Nose Landing Gear Assy Each Overhaul	

- B. The Tenderer shall quote flat rated material cost for the Ship Set which will cover all Bushings, Consumable Parts and Material, 100% Standard Replacement Material and any parts price equal to USD 10,000 or below each (in the OEM price catalog) for the following:

Nomenclature	(Flat Rated Cost, USD)
All Materials/Parts price equal or below US\$ 10,000 for MLG (LH + RH)	

Nomenclature	(Flat Rated Cost, USD)
All Materials/Parts price equal or below US\$ 10,000 for each NLG	

- C. Agency shall specify Man-Hour Rate for Non-routine works as may be required during Landing Gear repair.
- D. Since most of the repairs are of 'standard-type', a repair capability list should be submitted as per CMM, which covers the cost as mentioned in 2.A and 2.B. Any out of scope repairs (not covered in 2.A and 2.B) should be separately quoted.

E. Material:

- (a) Tenderer must quote prices for materials used as per the following table:

	Price Source	Price	Handling Charges (%)	Handling Charges Ceiling
New Parts				
Used Parts				

- (b) For the parts exchanged utilizing rotatable pool, the agency must quote prices as per the following table:

	Price Source	[(%) Price] plus	Handling Charges (%)	Handling Charges Ceiling

New Parts		Repair price of Biman parts		
Used Parts		Repair price of Biman parts		

(c) Full In-house capability is preferred however, for the parts subcontracted, the agency must agree to provide subcontractor's invoice. Charges for handling of parts including warranty will be the responsibility of the Overhaul agency.

3. **LOAN SUPPORT OF LANDING GEAR SHIPSET TO COVER OVERHAUL OF 04 LANDING GEAR SHIP SETS :**

The Tenderer shall provide support with loaner Unit of Landing Gear Shipset to cover repair/overhaul of removed gear shipsets. Considering repair TAT and both way shipping, it is estimated that to cover two aircraft (for example MSN 40122 & 40123) Landing Gear Ship Sets overhaul, one shipset of loaner gear shall be required to be provided to Biman for approximately 12 months. Detailed requirements for loaner gear support and their cost requirements are mentioned below.

A. LOAN Requirements:

- (a) Tenderer shall support Biman by providing One Shipset of Landing Gear compatible with Biman aircraft for a tentative period of 12 months to cover overhaul of two ship sets including both way shipping. For example, first shipset loaner unit for 12 months loan shall cover overhaul period of MSN 40122 & 40123 Landing Gears, and another 12 months loan shall cover overhaul period of MSN 40120 & 40121 Landing Gears.
- (b) Tenderer shall quote Flat Rated Monthly Loan Charge for Loaner Landing Gear Shipset along with associated components as mentioned above. Tenderer shall specify other terms and also quote for Recertification charges involved (if any), upon return of loaner ship set.
- (c) Tenderer shall provide technical status and documents of proposed loaned Landing Gear Shipset along with associated components in terms of TSN, TSO, CSN and CSO. The Tenderer shall also evaluate compatibility between proposed loaner gear shipset with Biman gear shipset and also provide technical status of complete gear shipset including life-limited parts associated with the MLG Assy and NLG Assy.
- (d) The loaner landing gear shipset must have fresh FAA-8130 and EASA Form One along with preservation tag.
- (e) Tenderer must ensure inclusion of following associated components to the offered Loaner Gear Unit for facilitating quick gear replacement.
 - (i) MLG Assy must include Side Strut, Drag Strut, Reaction Link, and Retraction Actuator.
 - (ii) NLG Assy must include Drag Strut Assembly, Lock Mechanism and Retraction Actuator.
- (f) Tenderer must quote following Charges for each loaner Landing Gear Shipset :
 - (i) Monthly Loan charge for one shipset of 777-300ER Landing Gear compatible to Biman landing gears.
 - (ii) Recertification Charges (if any) for each loaner shipset after loan return.
- (g) Tenderer must arrange for both way shipping/ transportation at their own cost. The point of receiving and delivering each shipset of Landing Gear shall be at Biman Hangar premises located at Hazrat Shah Jalal Int'l Airport, Dhaka-1229.
- (h) To accommodate stagger plan for both MSN 40122 and 40123, Tenderer must position loaner landing gear shipset unit at DAC by 01 May 2021.

4. Total Cost Chart (Mandatory) :

Price to be quoted for following Price Bid Format as per terms and conditions mentioned in para 2.A, 2.B, 3.A of Annexure 1.

SN	Aircraft MSN	Landing Gear	Fixed Overhaul price (labor + parts price equal or below US\$ 10000) (in USD)	Total loan charge of One Shipset for 12 months + Recertification Charges (in USD)	Total Cost (in USD)
1	40122	Shipset	A1	B1	C= A1 + A2 + B1
2	40123	Shipset	A2		
3	40120	Shipset	A3	B2	D= A3 + A4 + B2
4	40121	Shipset	A4		
TOTAL COST FOR ALL FOUR 777-300ER LANDING GEAR OVERHAUL INCLUDING LOAN CHARGES					C + D

* Tenderer to quote A1-A4 : Total fixed price for all 3 landing gears (01 NLG+ 02 MLG)

** Tenderer to quote B1-B2 : 12 months loan + recertification charge to cover overhaul of 2 landing gear shipsets

5. Penalty for TAT extension

In case of TAT failure, US\$ 500.00 (US Dollar Five Hundred) will be imposed as penalty for each calendar day till Landing Gear is redelivered after repair/overhaul from the shop.

6. On-site support

Tenderer shall provide on-site support at Dhaka or any out-station, if necessary. Price to be quoted per man-day for such on-site support.

7. Price Escalation / Reduction

Prices quoted by the Tenderer in this Price Schedule Annexure-1 shall preferably be fixed during contract period. If any changes in quoted price during the contracted period, the methodology and financial figure (including escalation cap for each year) should be clearly mentioned for any escalation or reduction of prices for necessary adjustment during evaluation. **Annual price escalation rate must be capped by a certain value in percentage which will be used during financial evaluation process.** As such Tenderer must propose an Annual Escalation Cap in addition to the methodology and financial figure, which shall also be part of the draft agreement escalation provisions.

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