

Invitation for Bids

Date:	11.05.2018
Loan No. and Title:	49469-IND: Mumbai Metro Rail Investment Project
Contract Nos. and Title:	<u>MS01: Design, Manufacture, Supply, Installation, Testing and Commissioning of Train Control & Signalling and Telecommunication system for Mumbai metro line 2A, 2B and 7</u>
Deadline for Submission of Bids	25.06.2018 .Indian Standard Time (IST)

- India (hereinafter called “Borrower”) has applied for financing from Asian Development Bank (ADB) toward the cost of **Mumbai Metro Rail Investment Project (MMRIP)**. Part of this financing will be used for payments under the contract named above. Bidding is open to Bidders from eligible source countries of ADB.
- Mumbai Metropolitan Region Development Authority (MMRDA) is the Owner of the Project and the Executing Agency for the proposed financing from ADB. MMRDA (the “Owner”) has entered into an Agreement with Delhi Metro Rail Corporation Limited (DMRC) for carrying out the procurement process and implementing this contract on behalf of MMRDA. DMRC is a 50:50 joint venture of Government of India and the Government of National Capital Territory of Delhi. In accordance with the above arrangement, DMRC (the “Project Implementation Agency/Purchaser/Employer”) on behalf of Mumbai Metropolitan Region Authority (MMRDA, the ‘Owner’) invites sealed bids from eligible bidders for the procurement of goods as mentioned below:

Procurement of Goods	Name of work	Units (Kms)	Cost of Bid Document	Completion period in months
MS01	Design, Manufacture, Supply, Installation, Testing and Commissioning of Train Control & Signalling and Telecommunication System for Mumbai Metro Line 2A, 2B and 7	58.12	₹21,000 (inclusive as applicable GST) or US\$400	45

- International Competitive Bidding (ICB)** will be conducted in accordance with ADB’s [Single-Stage: Two-Envelope](#) bidding procedure and is open to all bidders from eligible source countries.

4. This is a substantially large contract requiring experience for supply and commissioning of Signalling and Telecommunication System and including some maintenance and performance responsibilities. Detailed eligibility criteria are given in the bidding documents, and only eligible Bidders meeting the required key qualifications should participate in this bidding. Some of the indicative eligibility criteria, for purposes of illustration only, are as follows:

- (i) Work Experience Requirements for Train Control and Signalling Systems;
- (ii) At least two CATC works (out of which at least one CBTC) shall be outside the country of origin/country of manufacture or in India
- (iii) CBI & ATP subsystem shall be from OEMs under same parent company. Applicant must have experience of integration of all major subsystems (Interlocking, ATP, ATS and Radio) in a CBTC project;
- (iv) Bidder must have experience of integration of signalling system with all subsystems (Civil, Tunnel Ventilation, Rolling stock, Telecommunication, Track, Traction, Platform screen door) in at least one CBTC work out of the work(s) submitted in support of work experience
- (v) At least one 10 Route Km of UTO have been commissioned and proven for one year with satisfactory operation by any of the group company under same parent company
- (vi) Work Experience Requirements for Telecommunication Systems and
- (vii) Other eligibility criteria including financial parameters such as cash flow and turnover.

The detailed formulation for these criteria are given in the bid documents and are given online as part of the Invitation For Bid (Section 3: "Evaluation and Qualification Criteria", of "Part I: Bidding Procedures") at the tendering websites of [Delhi Metro Rail Corporation](#) and [Mumbai Metropolitan Region Development Authority](#).

5. To obtain further information or inspect the proposed work site, Bidders should contact the office of:

CGM / Contracts
Delhi Metro Rail Corporation Limited,
5th Floor, A-Wing, Metro Bhawan
Fire Brigade Lane, Barakhamba Road
New Delhi-110 001.

6. To purchase the bidding documents, bidders should:

- Write to address above requesting the bidding documents for Bid MS01: Design, Manufacture, Supply, Installation, Testing and Commissioning of Train Control & Signalling and Telecommunication System for Mumbai Metro Line 2A, 2B and 7 for Mumbai Metro Rail Investment Project; and
- Pay a non-refundable fee of ₹ 21,000/- (Rupees twenty one thousand only) or USD 400 in the form of demand draft/Banker's Cheque in favor of "Delhi Metro Rail Corporation Ltd" payable at any Scheduled Bank in New Delhi, India.
- If the Bidding Document is desired by courier/post, an additional sum of Indian Rupees 1,000/- for the dispatch of the bidding document anywhere in India or USD 100 for dispatch of document outside India should be sent. The employer shall promptly dispatch the documents by Courier/Post, but under no circumstances will it be held responsible for late delivery or loss of documents so mailed.
- The Document shall be available for sale during office hours (IST 1030 hrs. to IST 1730 hrs.) from 21.05.2018 to 22.06.2018

7. A pre-bid meeting will be held 28th May 2018 at 15:00 hours IST at the following address:
CGM / Contracts
Delhi Metro Rail Corporation Limited,
5th Floor, A-Wing, Metro Bhawan
Fire Brigade Lane, Barakhamba Road
New Delhi-110 001.

8. Deliver bids:
CGM / Contracts
Delhi Metro Rail Corporation Limited,
5th Floor, A-Wing, Metro Bhawan
Fire Brigade Lane, Barakhamba Road
New Delhi-110 001.
 - on or before 25.06.2018 15:00 hours Indian Standard Time (IST).
 - Bids shall be accompanied by a bid security as per clause 21 of the Instructions to Bidders, and the Bid Data Sheet in Section (2). In the event of the specified deadline for submission of bid being declared a government holiday, the next official working day would be deemed as the last day for the submission of bid.

Technical bids will be opened immediately in the presence of Bidders' representatives who choose to attend, whereas the Financial Bids shall remain sealed and unopened and shall be placed locked. The Financial Bids of only Technically Responsible and Qualified Bidders shall be opened after Technical Bid Evaluation, whereas, the Financial Bids of those Bidders whose Technical Bids are not responsive and qualified shall be returned unopened after the contract is awarded.

BIDDING DOCUMENTS

FOR

**DESIGN, MANUFACTURE, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF
TRAIN CONTROL & SIGNALLING AND TELECOMMUNICATION SYSTEM FOR
MUMBAI METRO LINE 2A, 2B AND 7**

BID NO. MS01

PART I: BIDDING PROCEDURES

SECTION 3: Evaluation and Qualification Criteria

2. Requirements for the Qualification Criteria

The legal entity or entities comprising the Bidder, and not the Bidder's parent companies, subsidiaries, or affiliates, must satisfy the qualification criteria described below.

2.1 Eligibility and Pending Litigation

2.1.1 Eligibility

S.No.	Criteria	Compliance Requirements				Yes	No
		Single Entity	All Partners Combined	Each Partner	One Partner		
2.1.1.1 Nationality	Nationality in accordance with ITB Subclause 4.2.	must meet requirement	must meet requirement	must meet requirement	not applicable		
	Note : 1. Documents required in compliance to above shall be "Section-4: Bidding Forms: Bidder's Qualification: Technical Bid Submission Sheet; Forms ELI – 1 and ELI – 2". 2. A "NO" answer to above mentioned question will disqualify the Bidder.						
2.1.1.2 Conflict of Interest	No conflicts of interest in accordance with ITB Subclause 4.3.	must meet requirement	must meet requirement	must meet requirement	not applicable		
	Note : 1. Documents required in compliance to above shall be "Section-4: Bidding Forms: Bidder's Qualification: Technical Bid Submission Sheet". 2. A "NO" answer to above mentioned question will disqualify the Bidder.						
2.1.1.3 ADB Eligibility	Not having been declared ineligible by ADB, as described in ITB Subclause 4.4.	must meet requirement	must meet requirement	must meet requirement	not applicable		
	Note : 1. Documents required in compliance to above shall be "Section-4: Bidding Forms: Bidder's Qualification: Technical Bid Submission Sheet". 2. A "NO" answer to above mentioned question will disqualify the Bidder.						

2.1.1.4 Government Owned Enterprise	Bidder required to meet conditions of ITB Subclause 4.5.	must meet requirement	must meet requirement	must meet requirement	not applicable		
	<p>Note :</p> <ol style="list-style-type: none"> Documents required in compliance to above shall be "Section-4: Bidding Forms: Bidder's Qualification: Technical Bid Submission Sheet; Forms ELI – 1 and ELI – 2". A "NO" answer to above mentioned question will disqualify the Bidder. 						
2.1.1.5 United Nations Eligibility	Not having been excluded by an act of compliance with a United Nations Security Council resolution in accordance with ITB Subclause 4.7.	must meet requirement	must meet requirement	must meet requirement	not applicable		
	<p>Note :</p> <ol style="list-style-type: none"> Documents required in compliance to above shall be "Section-4: Bidding Forms: Bidder's Qualification: Technical Bid Submission Sheet". A "NO" answer to above mentioned question will disqualify the Bidder. 						

2.1.2 Pending Litigation

Pending litigation and arbitration criterion shall not apply.

2.2 Experience and Technical Capacity

2.2.1 Bidder's Experience

Criteria	Compliance Requirements				Documents
	Single Entity	Joint Venture			Submission Requirements
<p>(A) Work Experience Requirements for Train Control and Signalling Systems: The Bidder (or the concerned member of JV/Consortium) should have successfully carried out the following work(s) in the last 10 (TEN) years ending 31.12.17 as given below:</p> <p>(i) At least one work of Design, Supply, Installation, Testing and commissioning of Signalling & Train Control system using radio based CBTC with moving block including CBI & ATP subsystem in Metro Rail of value not less than INR 3583 millions</p> <p style="text-align: center;">OR</p> <p>At least two works, each of Design, Supply, Installation, Testing and commissioning of Signalling & Train Control system using radio based CBTC</p>	must meet requirement	must meet requirement	not applicable	not applicable	Section-4: Bidder's Qualification: Form EXP - 1

<p>with moving block including CBI & ATP subsystem in Metro Rail of value not less than INR 2239 millions.</p> <p style="text-align: center;">OR</p> <p>At least three works, each of Design, Supply, Installation, Testing and commissioning of Signalling & Train Control system using radio based CBTC with moving block including CBI & ATP subsystem in Metro Rail of value not less than INR 1791 millions.</p> <p>(ii) At least two CATC works (out of which at least one CBTC) shall be outside the country of origin/country of manufacture or in India.</p> <p>(iii) In the above CBTC work(s) under Clause (A) (i), CBI & ATP subsystem shall be from OEMs under same parent company. Bidder must have experience of integration of all major subsystems (Interlocking, ATP, ATS and Radio) in a CBTC project.</p> <p>(iv) Bidder must have experience of integration of Signalling system with all subsystems</p>					
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<p>(Civil, Tunnel Ventilation, Rolling stock, Telecommunication, Track, Traction, Platform screen door) in at least one CBTC work out of the work(s) submitted in support of work experience under Clause (A) (i).</p> <p>(v) At least one 10 Route Km of UTO have been commissioned and proven for one year with satisfactory operation by any of the group company under same parent company.</p> <p style="text-align: center;">AND</p> <p>(B) Work Experience Requirements for Telecommunication Systems:</p> <p>The Bidder (or the concerned member of JV/Consortium) should have successfully carried out the following work(s) in the last 10 (TEN) years ending 31.12.17 as given below:</p> <p>(i) At least one work of Design, Supply, Installation, Testing and commissioning of Telecommunication Systems of value of</p>					
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<p>minimum INR 1612 millions or over a set of at least 42 stations.</p> <p>If above work of INR 1612 millions has been done by a foreign bidder or foreign partner of JV/consortium and the work was done in the country of a foreign bidder or foreign partner then in addition to this, the foreign partner must have done works costing INR 806 millions outside the country of the foreign partner.</p> <p style="text-align: center;">OR</p> <p>At least two works, each of Design, Supply, Installation, Testing and commissioning of Telecommunication Systems of value of minimum INR 1008 millions or over a set of at least 26 stations.</p> <p>If above two works each of INR 1008 millions have been done by a foreign bidder or foreign partner of JV/consortium and the work was done in the country of a foreign bidder or foreign partner then in addition to this, the foreign partner must</p>					
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<p>have done works costing INR 806 millions or more outside the country of the foreign partner.</p> <p style="text-align: center;">OR</p> <p>At least three works, each of Design, Supply, Installation, Testing and commissioning of Telecommunication Systems of value of minimum 806 millions or over a set of at least 21 stations.</p> <p>If above three works each of 806 millions have been done by a foreign bidder or foreign partner of JV/consortium and the work was done in the country of a foreign bidder or foreign partner then in addition to this, the foreign partner must have done works costing INR 806 millions or more outside the country of the foreign partner.</p> <p>Notes:</p> <p>i. The Bidder shall mention the name of the projects to be used for each of point of Attachment to Form EXP - 1 along with documentary evidence in the form</p>					
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<p>of client certificate(s).</p> <p>ii. Signal and Train Control Equipment namely, CBI and ATP shall be from same OEM or OEMs under same parent company. Also, the Telecom System Integrator should be part of the JV or Consortium and not a sub-contractor. Individual telecom sub-systems (supply portion) may be sub-contracted but the overall responsibility for the systems including the system and software integration of all the telecom sub-systems will vest with the telecom partner of the JV / Consortium who should have necessary expertise for the same.</p> <p>ii. The Bidder shall submit details of work executed by them in the Performa of EXP-1 for the works to be considered for qualification of work experience criteria. Documentary proof such as completion certificates from</p>					
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<p>client clearly indicating the nature/scope of work, actual completion cost and actual date of completion for such work should be submitted. The offers submitted without this documentary proof shall not be evaluated. In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client shall also be submitted.</p> <p>v. Value of successfully completed portion of any on-going work up to 31.12.2017 will also be considered for qualification of work experience criteria.</p> <p>v. For completed works, value of work done shall be updated to 31.12.2017 price level assuming 5%</p>					
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<p>inflation for Indian Rupees every year and 2% for foreign currency portions per year. The exchange rate of foreign currency shall be applicable 28 days before the submission date of tender.</p> <p>vi. In case of joint venture / Consortium, full value of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the value of work as per their percentage participation in such JV/Consortium shall be considered.</p> <p>ii. Lead partner / Non-substantial partner / Change in JV / Consortium</p> <p>a) Lead partner must have a minimum of 26% participation in the JV / Consortium.</p> <p>b) Each Partner shall have minimum 26% participation. Partners having less than 26% participation will be</p>					
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<p>termed as non-substantial partner and will not be considered for evaluation which means that their financial soundness and work experience shall not be considered for evaluation of JV / Consortium except to the extent brought out point (A) of attachment to Form EXP - 1. Thus, all the requirements shall be met by substantial partners only.</p> <p>c) All members combined shall meet 100% requirement.</p> <p>d) In case of JV / Consortium, change in constitution or percentage participation shall not be permitted at any stage after their submission of application otherwise the Bidder shall be treated as non-responsive. Lead partner shall be one of the substantial partners based on whose strength work experience is accounted for in meeting the criteria</p>					
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<p>of point (A) of attachment to Form EXP - 1.</p> <p>C) Length of Time in Business :</p> <p>Minimum length of time in Business shall be 10 years. In case of JV/Consortium formation, at least one of the substantial members should be in business for minimum 10 years.</p>					
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2.3 Financial Situation

2.3.1 Historical Financial Performance

Criteria	Compliance Requirements			Documents	
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
<p><u>Net Worth</u></p> <p>The minimum requirements to 'Pass' this criteria is that the Balance sheets should indicate that the Net Worth of the Bidder (to be obtained from latest audited Balance Sheet/ Form FIN -1: Historical Financial Performance mentioned above) shall be 'positive'.</p> <p>The financial year as applicable in the country of origin of the bidders would be considered. The 'last financial year' will be the latest financial year that ended on or before 31.03.2018.</p> <p>In case of a Joint Venture/Consortium, the evaluation against the above eligibility criteria will be done in totality (i.e. algebraic aggregate of evaluation of each member) and not as individual member.</p>	must meet requirement	not applicable	must meet requirement	not applicable	Section-4: Bidder's Qualification: Form FIN - 1

2.3.2 Size of Operation (Average Annual Turnover)

Criteria	Compliance Requirements			Documents	
Requirement	Single Entity	Joint Venture		Submission Requirements	
		All Partners Combined	Each Partner	One Partner	
<p><u>Average Annual Turn Over</u></p> <p>The minimum requirements to 'Pass' this criteria is that the Average Annual Turn Over for the last five financial years (in terms of rupee equivalent adjusted to last date of the financial year that ended on or before 31.03.2018, by assuming 5% escalation for Indian Rupee and 2% for foreign currency per year) shall not be less than INR 2598 million.</p> <p>The value of annual turnover shall be calculated as total certified payments received for Contracts in progress and/or completed, within last Five Financial years divided by Five years.</p> <p>The financial year as applicable in the country of origin of the bidders would be considered. The 'last financial year' will be the latest financial year that ended on or before 31.03.2018.</p> <p>In case of a Joint Venture/Consortium, the above evaluation will be done in totality after applying pro-rata percentage participation of each member and not as individual member. For e.g., if there are three members in a Joint Venture/Consortium with pro-rata percentage participation of 'A%', 'B%' and 'C%' and the Average Annual Turnover of the respective members are 'X', 'Y' and 'Z', then the evaluation for the above criteria will be based on the pro-rata percentage applied algebraic aggregate i.e. 'AX+BY+CZ'.</p>	<p>must meet requirement</p>	<p>not applicable</p>	<p>must meet requirement</p>	<p>not applicable</p>	<p>Section-4: Bidder's Qualification: Form FIN - 2</p>

2.3.3.1 Cash Flow Capacity

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
<p><u>Liquidity</u></p> <p>It is necessary that the firm can withstand the Cash Flow that the contract will require until payment received from Employer. Liquidity therefore becomes an important consideration.</p> <p>This can be seen from the balance sheets and/or from the banking reference. Net current assets {(Current assets + loans & advances) – (current liabilities + provision)} or documents including banking reference, should show that the Bidder has access to or has available liquid assets, lines of credit and other financial means to meet cash flow INR 289 million for this contract, net of Bidder's commitments for other Contracts. Banking reference should contain in clear terms the amount that bank will be in a position to lend for this work to the Bidder/member of the Joint Venture/Consortium in the form given in “Section-4, Form FIN - 3: Cash Flow Capacity”. In case the Net Current Assets (as seen from the Balance Sheets) are negative, only the Banking references will be considered. Otherwise the aggregate of the Net Current Assets and submitted Banking references will be considered for working out the Liquidity.</p> <p>Liquidity of INR / 289 million available: Pass</p> <p>Liquidity of INR / 289 million not available: Fail</p> <p>In case of a Joint Venture/Consortium, the above</p>	<p>must meet requirement</p>	<p>not applicable</p>	<p>must meet requirement</p>	<p>not applicable</p>	<p>Section-4: Bidder's Qualification: Form FIN-1 and FIN - 3</p>

<p>evaluation will be done intotality after applying pro-rata percentage participation of each member and not as individual member. For e.g., if there are three members in a Joint Venture/Consortium with pro-rata percentage participation of 'A%', 'B%' and 'C%' and the calculated liquidity of the respective members are 'X', 'Y' and 'Z', then the evaluation for the above criteria will be based on the pro-rata percentage applied algebraic aggregate i.e. 'AX+BY+CZ'.</p> <p>However, in case the Bidder is a Joint Venture/Consortium and if Banking Reference is issued by the Bank in favour of the Joint Venture/Consortium for this Contract, then it will be considered for the amount stated in the banking reference without applying pro-rata % participation of each member.</p>					
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2.3.3.2 Bid Capacity

Criteria	Compliance Requirements			Documents	
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
<u>Available Bid Capacity</u> As per below mentioned methodology.	must meet requirement	not applicable	must meet requirement	not applicable	Section-4: Bidder's Qualification: Form FIN-2 and FIN – 4

Methodology for Working out the Available Bid Capacity

The Bidders will be qualified only if their available bid capacity is more than the estimated cost of work. Available bid capacity will be calculated as under:

Available Bid Capacity = 2AN-B

Where,

A = Maximum value of Design, Manufacture, Supply, Installation, Testing and Commissioning of Train Control & Signalling and Telecommunication System in any one (1) year during the last five (5) years

N = No. of years prescribed for completion of the Design, Manufacture, Supply, Installation, Testing and Commissioning of Train Control & Signalling and Telecommunication System

B = Value of existing commitments for on-going works during period of 45 months w.e.f. 07.06.2018.

The estimated cost of work may be taken as Rs. 6494 Million (excluding Taxes and duties).

Note:

- In case of a Joint Venture/Consortium, the above formula will be applied to each member to the extent of his proposed percentage (%) participation in the execution of the work. The Bid Capacity of the Joint Venture/Consortium will be the sum total of the Bid Capacity of each member of the Joint Venture/Consortium as calculated above.
- Value of 'A':**
The maximum value of work in any one year during last five (5) years ('A' in the above formula) shall be the maximum turnover of work in any one(1) financial year during the last five(5) financial years. Financial year as applicable in the country of origin of the bidders would be considered. The turnover to be furnished in response to "Form Fin-2: Size of Operation (Average Annual Turnover)" above shall be considered for evaluating the value 'A' in above formula and the details furnished by the Bidder shall be supported with audited copies, duly certified by independent chartered accountant/CPA with his stamp and signature, indicating Annual turnover only.

3. Value of 'B':

The value of existing commitments for on-going works as furnished in response to "Form Fin-4: Available Bid Capacity" above. These data shall be certified by the by independent chartered accountant/CPA with his stamp and signature.

Here "existing commitments for on-going works" means Bidders and each member of JV/Consortium shall provide information on their current commitments on all Contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for Contracts approaching completion but for which an unqualified full completion certificate has yet to be issued.

Note:

1. 'Ten (10) years'/'Last ten(10) years' means the period of last ten (10) years counted from the twenty eight days prior to 'date for Bid submission' (refer Form of Bid –Appendix FB-1). 'Five (5) years'/'Last five years' means the period of last five(5) years counted from the twenty-eight days prior to 'date for Bid submission'. 'Three(3) years'/'Last three years' means the period of last three (3) years counted from the twenty eight days prior to 'date for Bid submission'. eg: Say, if date for Bid submission is 05.07.2018, then 'twenty eight days prior to date for Bid submission' will be 07.06.2018 and last ten (10) years would mean from 05.07.2008 to 05.07.2018 and last five (5) years would mean from 05.07.2013 to 05.07.2018 and last three(3) years would mean from 05.07.2015 to 05.07.2018.
In case of postponement(s) in 'date for Bid submission', if any, last ten(10) years would mean from 25.06.2008 to twenty eight days prior to postponed 'date for Bid submission' and last five(5) years would mean from 25.06.2013 to twenty eight days prior to postponed 'date for Bid submission' and last three(3) years would mean from 25.06.2015 to twenty eight days prior to postponed 'date for Bid submission'.
2. The 'Bidder' would include Joint Venture/ Consortium submitting the bid as well as members of such Joint Venture/ Consortium.

3. SUMMARY OF REQUIREMENTS FOR THE QUALIFICATION CRITERIA

An Bidder would **Pass** Requirements for the Qualification Criteria, if he meets the following independently:

- a) Pass in 'Eligibility'.(Clause 2.1 above)
- b) Pass in 'Experience and Technical Capacity'.(Clause 2.2 above)
- c) Pass in 'Financial Situation'.(Clause 2.3)