

E-TENDER

FOR

Name of Work: Selection of System Integrator for Network Revamp at

Various MCGM Offices

STANDARD BID DOCUMENT

Website: portal.mcgm.gov.in/tenders

Office of: Chief Engineer (Mechanical & Electrical),

Engineering Hub Building, Dr. E. Moses Road,

Worli Naka, Worli, Mumbai- 400 018.

INDEX

SECTION	DESCRIPTION	PG - NO
1	E-TENDER NOTICE	3-7
2	ELIGIBILITY CRITERIA	8-11
3	DISCLAIMER	12-14
4	INTRODUCTION	15-17
5	E-TENDER ONLINE SUBMISSION PROCESS	18-21
6	INSTRUCTIONS TO APPLICANTS	22-43
7	SCOPE OF WORK	44-45
8	BILL OF QUANTITIES	46-49
9	GENERAL CONDITIONS OF CONTRACT	50-99
10	SPECIFICATIONS	100-126
11	FRAUD AND CORRUPT PRACTICES	127-130
12	PRE-BID MEETING	131-132
13	LIST OF APPROVED BANKS	133-135
14	APPENDIX	136-152

SECTION 1 E-TENDER NOTICE

MUNICIPAL CORPORATION OF GREATER MUMBAI

Chief Engineer (Mechanical & Electrical)
No. Ch. Eng. / M & E / 2242MC of 20.03.17

e-TENDER NOTICE

(e-tender no. 7100098269)

Subject: Selection of System Integrator for Network Revamp at Various MCGM Offices

The Municipal Corporation of Greater Mumbai (MCGM) invites e-tender to appoint Contractor for the aforementioned work from contractors of repute, multidisciplinary engineering organizations i.e. eminent firm, Proprietary/Partnership Firms/ Private Limited Companies/ Public Limited Companies/Companies registered under the Indian companies' act 2013, the contractors registered with the Municipal Corporation of Greater Mumbai, (MCGM) in M&E category in Class "AA" under old registration rules '1992', Class "A" as per new registration rules '2015 or in Class "A" as per new registration rules '2016' and from the contractors/firms equivalent and superior classes registered in Central or State Government/Semi Govt. Organization/Central or State Public Sector Undertakings, will be allowed subject to condition that, the contractors who are not registered with MCGM will have to apply for registering their firm within three months time period from the award of contract, otherwise their Bid Security i.e. E.M.D (Earnest Money Deposit) will be forfeited/recovered and an amount equal to Registration Fee of respective class will be recovered as penalty.

Bidding Process will comprise of THREE stages.

The application form can be downloaded from MCGM's portal (http://portal.mcgm.gov.in) on payment of Rs. 7420/- (Rs. 7000/- + 6.00% **VAT**). The applicants not registered with MCGM are mandated to get registered (Vendor Registration) with MCGM for e-tendering process & obtain login credentials to participate in the online bidding process.

- i) To download the application form, for those applicants not having vendor registration, need to apply first for vendor registration at the office of Account Officer (FAR), 3rd floor, Municipal Headquarter.
- ii) Followed by SRM login ID and password to be obtained from Central Purchase Department (CPD), Office at Byculla, Bakariadda, Mumbai
- iii) For e-Tendering registration, enrollment for digital signature certificates and user manual, please refer to respective links provided in 'Tenders' tab. Vendors can get digital signature from any one of the Certifying Authorities (CA's) licensed by controller of certifying authorities namely, Safes crypt, IDRBT, National informatics center, TCS, CUSTOMS, MTNL, GNFC and e- Mudhra CA.

Name and location of work	Contract period	Estimated Cost of Project
Selection of System Integrator for Network Revamp at Various MCGM Offices	12 Weeks + Five years CMC	Item Rate Tender

In terms of the 3 stage system of e-tendering, a Bidder will be required to deposit, along with its Bid, an Earnest Money Deposit of **Rs. 19,67,000.00** (**Rs. Nineteen Lac Sixty Seven Thousand only**) (the "EMD"), refundable in accordance to the relevant clause of bid document, from the Bid Due Date, except in the case of the selected Bidder whose Bid Security/EMD shall be retained. The Bidders will have to provide Earnest Money Deposit through the payment gateways while submitting the bids. The Bid shall be summarily rejected if it is not accompanied by the Earnest Money Deposit. The e-tender is available on MCGM portal (http://portal.mcgm.gov.in) as mentioned in the Header Data of the tender.

As per THREE Packet systems, the document for Packet A & B is to be uploaded by the bidder in vendors' document online in Packet A, B. Packet A, B & C shall be opened on dates as mentioned in header data. All the responsive and eligible bidders if they so wish can be present at the time of opening of bids, in the office of Chief Engineer (M&E). The Packet C shall be opened if bids submission in Packet A & B satisfies/includes all the requirements and same are found acceptable to the Authority.

The Municipal Commissioner reserves the right to reject all or any of the e- tender(s) without assigning any reasons at any stage.

The dates and time for submission and opening the bids are as shown in the Header Data. If there are any changes in the dates the same will be displayed on the MCGM Portal. (http://portal.mcgm.gov.in)

The Applicants interested for the above referred works may contact the Chief Engr. (Mechanical and Electrical) at the following address on any working day during office hours.

Office of: Chief Engr. (M & E), MCGM

1st Floor, Engineering Hub Building, Dr. E. Moses Road, Worli Naka,

Worli, Mumbai- 400 018,

The applicants may wish to visit the site under reference located at Various Ward offices, Hospital Etc. Mumbai and can collect the information of the present status from the department who has invited the bids.

The MCGM reserves the rights to accept any of the application or reject any or all the application received for above works, without assigning any reasons thereof. The information regarding above subject matter is available on Website of MCGM. (http://portal.mcgm.gov.in/tenders)

Dy.Ch. E (M&E) P&C

Header Data

Tender Document No	7100098269	
Name of Organization	Municipal Corporation of Greater Mumbai	
Subject	Selection of System Integrator for Network	
	Revamp at Various MCGM Offices	
Cost of Tender	Rs. 7000.00 + 6% VAT	
Cost of E-Tender (Estimated Cost)	Item rate tender	
Bid Security Deposit/ EMD	Rs. 19,67,000.00	
Valid Bank Solvency (Validity 6 months only)	60.00 lakhs	
Date of issue and sale of tender	21.03.2017 from 11:30 Hrs.	
Last date & time for sale of tender & Receipt of Bid Security Deposit	19.04.2017 upto12:00 Hrs	
Submission of Packet A, B & Packet C(Online)	19.04.2017 upto16:00Hrs	
Pre-Bid Meeting	3.04.2017 at 11:00 Hrs in Chamber of DMC(E)	
Opening of Packet A	20.04.2017 after 15.00 Hrs	
Opening of Packet B	20.04.2017 after 15:02 Hrs.	
Opening of Packet C	9.05.2017 after 15:00 Hrs.	
	Office of the:-	
Address for communication	Ch. E. (M & E), MCGM, 1st floor, Engineering	
Address for communication	Hub Building, Dr. E. Moses Road, Worli Naka,	
	Worli, Mumbai-400018.	
Venue for opening of bid	On line in Ch. Eng. (M & E)'s office.	

This tender document is not transferable.

The MCGM reserves the rights to accept any of the application or reject any or all the application received for above subject without assigning any reason thereof.

Dy.Ch. E (M&E) P&C

SECTION 2 ELIGIBILITY CRITERIA

ELIGIBILITY CRITERIA

1.1 Technical Capacity (For Routine Work)

The tenderer(s) in their own name should have satisfactorily executed the work of similar nature MCGM /Semi Govt. /Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had involved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

1. Three similar completed works each of value not less than 3.00 Lakh.

OR

2. Two similar completed works each of value not less than 3.60 Lakh.

OR

3. One similar completed work of value equal and or not less than 5.65 Lakh.

=

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

1.2 Financial Capacity

Achieved an average annual financial turnover as certified by 'Chartered Accountant' (in all elasses of civil engineering construction works only) equal to 30% of the estimated cost of work in last three (3) financial years immediately preceding the Financial Year in which bids are invited.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

1.3 Similar Experience:

For assessing the technical capacity of Regular, Routine and Maintenance works; Similar work shall mean, the completed or ongoing works in Building Construction OR Building Maintenance such as repairs/retrofitting/structural repairs OR construction/repairs of Asphalt/ Concrete roads OR laying/rehabilitation of sewer lines along with allied components OR laying/rehabilitation of water pipe lines in Cast Iron/ M.S. pipes / HDPE/ MDPE pipes OR repairs/maintenance/ construction of culverts over nullah. 'Similar work' means System Integrator involving Active and Passive Networking Components (involving Core Switches, Core Routers, Distribution/Access Switches and Structural Cabling, etc.

2.1 Technical Capacity (Project Experience):

The tenderer(s) in their own name should have satisfactorily executed the work of similar nature MCGM /Semi Govt. /Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had in-volved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

a) Three similar completed works or currently executing three works of similar nature each eosting 30% of estimated cost.*

OR-

b) Two similar completed works or currently executing two works of similar nature each costing 40% of estimated cost.*

OR-

e) One completed work or currently executing one work of similar nature of aggregate 60% of estimated cost.*

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

*In case of ongoing works to be considered, the bidder must have received payment bills of 80% of the contract sum for the work/works executed last day of month previous to the one in which bids are invited.

2.2 Financial Capacity

Achieved a average annual financial turnover as certified by 'Chartered Accountant' (in all classes of civil engineering construction works only) equal to 30% of the estimated cost of work in last three (3) financial years immediately preceding the Financial Year in which bids are invited.

- To ascertain this, tenderer(s) shall furnish /upload the financial statement (Audited balance sheet) duly certified by Chartered Accountant.
- The turnover can be enhanced by 10% every year to bring the present level.

2.3 Similar work experience:

C) Bid Capacity:

The bid capacity of the prospective bidders will be calculated as under:

Assessed Available Bid Capacity = (A* N* 2 - B)

Where,

A = Maximum value of Civil Engineering works executed in any one year (year means Financial year) during the last five years (updated to the price level of the Financial year in which bids are received at a rate of 10% per year) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the Project/Works, excluding monsoon period, for which these bids are being invited. (E.g. 7 months = 7/12 year) For every intervening monsoon 0.33 shall be added to N.

B = Value of existing commitments (only allotted works) on the last date of submission of bids as per bidding document and on-going works to be completed during the period of completion of the Project/Works for which these bids are being invited.

Note: The statement showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be attached along with certificates duly signed by the Engineer-in Charge, not below the rank of an Executive Engineer or equivalent.

Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc

Pre qualification criteria

- 1) The Bidder must be authorized by OEM (Original Equipment Manufacturer) of Active Networking Components in India.
- 2) Only one consortium is allowed along with lead bidder. All PQ conditions of lead bidder will only be eligible for qualification
- 3) The OEM for Active Networking Components should be featuring in latest Gartner/IDC reports for "Active networking / Ethernet Switching" category
- 4) The OEM for Active Networking Components should have an established service center in Mumbai Metropolitan Region (MMR) (Mumbai / Thane/ Navi Mumbai)
- 5) The bidder should have an average annual turnover of **Rs. 30** Crores from IT Services / System Integration Business (which includes Active and Passive Networking Components, maintenance and support) over the last three financial years (FY 2013-14, 2014-15 and 2015-16).
- 6) The bidder should have **positive net-worth** as of 31/03/2016.
- Passive Networking Components (involving Core Switches, Core Routers, Distribution/Access Switches and Structural Cabling, etc. with a value of Rs. 10 Crores each within last three calendar years from the date of bid publishing. One of such project should have supply and installation of at least 450 L2 or L3 switches, as part of single purchase order or repeat purchase orders (within a span of 1 year) of the same tender.
- 8) The bidder must have at least 25 nos. Of technical support staff (employees) on its payroll at the time of bidding, that are engaged in IT Infrastructure installation and maintenance
- 9) The Bidder should possess ISO 9001:2008 valid certificate or latest.

SECTION 3 DISCLAIMER

DISCLAIMER

The information contained in this e-tender document or provided to Applicant(s), whether verbally or in documentary or any other form, by or on behalf of the Municipal Corporation of Greater Mumbai (MCGM), hereafter also referred as "The Authority", or any of its employees or advisors, is provided to Applicant(s) on the terms and conditions set out in this e-tender and such other terms and conditions subject to which such information is provided.

This e-tender includes statements, which reflect various assumptions and assessments arrived at by the Municipal Corporation of Greater Mumbai (MCGM) in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Applicant may require. This e-tender may not be appropriate for all persons, and it is not possible for the Municipal Corporation of Greater Mumbai (MCGM), its employees or advisers to consider the investment objectives, financial situation and particular needs of each party who reads or uses this e-tender. The assumptions, assessments, statements and information contained in this e-tender may not be complete, accurate, adequate or correct. Each Applicant should therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this e-tender and obtain independent advice from appropriate sources.

Information provided in this e-tender to the Applicant(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Municipal Corporation of Greater Mumbai (MCGM) accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed here.

The Municipal Corporation of Greater Mumbai(MCGM), its employees and advisors make no representation or warranty and shall have no liability to any person, including any Applicant or Bidder, under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this e-tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the e-tender and any assessment, assumption, statement or information contained therein or deemed to form part of this e-tender or arising in any way with pre-qualification of Applicants for participation in the Bidding Process. The Municipal Corporation of Greater Mumbai (MCGM) also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Applicant upon the statements contained in this e-tender.

The Municipal Corporation of Greater Mumbai (MCGM) may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this e-tender.

The issue of this e-tender does not imply that the Municipal Corporation of Greater Mumbai (MCGM) is bound to select and short-list pre-qualified Applications for Bid Stage or to appoint the

selected Bidder or Concessionaire, as the case may be, for the Project and the Municipal Corporation of Greater Mumbai (MCGM) reserves the right to reject all or any of the Applications or Bids without assigning any reasons whatsoever.

The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by The Municipal Corporation of Greater Mumbai (MCGM) or any other costs incurred in connection with or relating to its Application. All such costs and expenses will remain with the Applicant and the Municipal Corporation of Greater Mumbai(MCGM) shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the Bidding Process.

SECTION 4 INTRODUCTION

INTRODUCTION

1. Background:

The Municipal Corporation of Greater Mumbai covers an area of 437.71sq.kms.with a population of **1.24 Crores as per census of 2011**. The metropolis accounts major portion of India's international trade and government's revenue, from being one of the foremost centers of education, science and technological research and advancement.

The Mumbai Metropolis has historic tradition of strong civic activism dedicated to the cause of a better life for all its citizens. And it's the Municipal Corporation of Greater Mumbai (MCGM), hereafter called the "corporation", the primary agency responsible for urban governance in Greater Mumbai.

MCGM (The Authority) is one of the largest local self-governments in the Asian Continent. In observance of historic traditions of strong civic activism, with the change in time and living conditions to match with the urbanization, MCGM has mainly focused in providing almost all kinds of engineering services viz, Hydraulics, storm water drain, sewerage, water supply projects, roads, bridges, solid waste management, and environmental services. Beside this, the MCGM is also providing dedicated services in various segments such as Health, Primary Education as well as the construction and maintenance of Public Markets and Slaughter Houses.

MCGM is an organization having different departments, right from engineering depts. to health depts. Moreover we have other dept. like education, market, fire brigade dept., Octroi and other such departments where quite a good number of staff members are working.

Scope of Work:

The Municipal Commissioner for and on behalf of Municipal Corporation of Greater Mumbai (MCGM), invites bids for the Supply of Active and Passive Networking Components with On site Support according to the specifications and bill of quantities in the bid document.

This project envisages the following broad outcomes

- (1) Replacement of branch level switches & revamping of access and distribution level networking
- (2) Replacement of L2 level switches & revamping of access and distribution level networking for its head office (MHO)
- (3) Integration with MPLS network being provided and managed by FMS, though two ISPs

SECTION 5 E-TENDERING ONLINE SUBMISSION PROCESS

E-TENDERING ONLINE SUBMISSION PROCESS

The terminology of e-Tendering is solely depending upon policies in existence, guidelines and methodology adopted since decades. The SRM is only change in process of accepting and evaluation of tenders in addition to manual. The SAP module to be used in this E-tendering is known as Supplier Relationship Module (SRM).SRM is designed and introduced by ABM Knowledge ware Ltd. who will assist MCGM in throughout the tendering process for successful implementation.

NOTE: This tendering process is covered under Information Technology ACT & Cyber Laws as applicable

(1) In e-tendering process some of the terms and its definitions are to be read as under wherever it reflects in online tendering process.

Start Date read as "Sale Date"

End Date read as "Submission Date"

Supplier read as "Contractor/bidder"

Vendor read as "Contractor/bidder"

Vendor Quotation read as "Contractors Bid/Offer"

Purchaser read as "Department/MCGM"

I. Before entering in to online tendering process, the contractors should complete the registration process so as to get User ID for E-tendering links. For this, the contractors can access through Supplier registration via MCGM Portal.

There are two methods for this registration: (II and III)

- II. Transfer from R3 (registered contractors with MCGM) to SRM
 - a. Contractors already registered with MCGM will approach to Vendor Transfer cell.
 - b. Submit his details such as (name, vendor code, address, registered Email ID, pan card etc.) to Vendor transfer cell.
 - MCGM authority for Vendor Transfer, transfers the Vendor to SRM application from R3 system to SRM system.
 - d. Transferred Vendor receives User ID creation link on his supplied mail Id.
 - e. Vendor creates his User ID and Password for e-tendering applications by accessing link sent to his mail ID.
- **III.** Online Self Registration (Temporary registration for applicant not registered with MCGM)
 - a. Vendor fills up Self Registration form via accessing MCGM portal.

- Vendor Transfer cell (same as mentioned above) accesses Supplier Registration system and accepts the Vendor request.
- Accepted Vendor receives User ID creation email with Link on his supplied mail Id.
- d. Vendor creates his User ID and Password for e-tendering application.

IV. CONTRACTORS BIDDING: Applicant will Quote and Upload Tender Documents

- 1. Access e-tender link of SRM Portal
- 2. Log in with User ID and Password
- 3. Selects desired Bid Invitation (he wants to bid)
- 4. To download tender documents contractors will have to pay online Tender fee. The same can be done by accessing Pay Tender Fees option. By this one will be able to pay Tender fee through Payment Gateway-If transaction successful, Contractors can register his interest to participate. Without Registration one cannot quote for the Bid/Tender.
- Applicant will download Tender Documents from Information from purchaser tab by accessing Purchaser document folder through collaboration 'C' folder link.
- 6. Applicant will upload Packet **A** related and Packet **B** related Documents in Packet **A** and Packet **B** folder respectively by accessing these folders through "My Notes" Tab and collaboration folder link.
- 7. All the documents uploaded have to be digitally signed and saved. Contractors can procure there digital signature from any certified CA's in India.
- 8. Bid security deposit/EMD and ASD, if applicable, should be paid online as mentioned in tender.
- 9. For commercial details (in Packet C) contractors will fill data in Item Data tab in Service Line Item via details and quotes his "Percentage Variation" (i.e.% quoted) figure.(If entered '0' it will be treated as at par. By default the value is zero only.
- 10. Applicants to check the bid, digitally signs & save and submit his Bid Invitation.
- 11. Applicants can also save his uploaded documents/commercial information without submitting the BID for future editing through 'HOLD' option.
- 12. Please note that "Hold" action do not submit the Bid.
- 13. Applicants will receive confirmation once the Bid is submitted.

14. Bid creator (MCGM) starts Bid Opening for Packet **A** after reaching End Date and Time and Bid Evaluation process starts.

As per Three Packet system, the document for Packet A & B are to be uploaded by the tenderer in 'Vendor's document' online in Packet A & B. Before purchasing/ downloading the tender copy, tenderer may refer to post- Qualification criteria mentioned in e-Tender Notice.

The tenderer shall pay the EMD/Bid Security through payment gateways before submission of Bid and shall upload the screenshot of receipt of payment in Packet 'A' instead of paying the EMD at any of the CFC centers in MCGM Ward Offices.

The e-tender is available on MCGM portal, http://portal.mcgm.gov.in, as mentioned in the Header Data of the tender. The tenders duly filled in should be uploaded and submitted online on or before the end date of submission. The Packet 'A', Packet 'B' & Packet 'C' of the tenderer will be opened as per the time-table shown in the Header Data in the office of Ch. E. (M & E), MCGM, 1st floor, Engineering Hub Building, Dr. E. Moses Road, Worli Naka, Worli, Mumbai-400018.

The Municipal Commissioner reserves the right to reject all or any of the e-Tender(s) without assigning any reason at any stage. The dates and time for submission and opening the tenders are as shown in the Header Data. If there are any changes in the dates the same will be displayed on the MCGM Portal (http://portal.mcgm.gov.in).

SECTION 6 INSTRUCTIONS TO APPLICANTS

INSTRUCTIONS TO APPLICANTS

> Scope of Application

The Authority wishes to receive Applications for Qualification in order to SELECT experienced and capable Applicants for the Bid Stage.

> Eligibility of Applicants

The Municipal Corporation of Greater Mumbai (MCGM) invites e-tender to appoint Contractor for the aforementioned work from contractors of repute, multidisciplinary engineering organizations i.e. eminent firm, Proprietary/Partnership Firms/ Private Limited Companies/ Public Limited Companies/Companies registered under the Indian companies' act 2013, the contractors registered with the Municipal Corporation of Greater Mumbai, (MCGM) in the contractors registered with the Municipal Corporation of Greater Mumbai, (MCGM) in M&E category in Class "AA" under old registration rules '1992', Class "A" as per new registration rules '2015 or in Class "A" as per new registration rules '2016' and from the contractors/firms equivalent and superior classes registered in Central or State Government/Semi Govt. Organization/Central or State Public Sector Undertakings, will be allowed subject to condition that, the contractors who are not registered with MCGM will have to apply for registering their firm within three months' time period from the award of contract, otherwise their Bid Security i.e. E.M.D (Earnest Money Deposit) will be forfeited/recovered and an amount equal to Registration Fee of respective class will be recovered as penalty.

To be eligible for pre-qualification and short-listing, an Applicant shall fulfill the following conditions of eligibility:

1.1 Technical Capacity

The tenderer(s) in their own name should have satisfactorily executed the work of similar nature MCGM /Semi Govt. /Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had involved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

a) Three similar completed works each of value not less than the value equal to 20% of estimated cost put to tender

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b) Two similar completed works each of value not less than the value equal to 25% of estimated cost put to tender

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e) One similar completed work of value equal and or not less than the 40% of estimated eost put to tender

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

1.2 Financial Capacity

Achieved an average annual financial turnover as certified by 'Chartered Accountant' (in all classes of civil engineering construction works only) equal to 30% of the estimated cost of work in last three (3) financial years immediately preceding the Financial Year in which bids are invited.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

1.3 Similar Experience:

For assessing the technical capacity of Regular, Routine and Maintenance works; Similar work shall mean, the completed or ongoing works in *Building Construction OR Building Maintenance such as repairs/retrofitting /structural repairs OR construction/repairs of Asphalt/Concrete roads OR laying/rehabilitation of sewer lines along with allied components OR laying/rehabilitation of water pipe lines in Cast Iron/ M.S. pipes / HDPE/ MDPE pipes OR repairs/maintenance/ construction of culverts over nullah. System Integrator involving Active and Passive Networking Components (involving Core Switches, Core Routers, Distribution/Access Switches and Structural Cabling, etc.*

2.1 Technical Capacity (Project Experience):

The tenderer(s) in their own name should have satisfactorily executed the work of similar nature MCGM /Semi Govt. /Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had in-volved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

a) Three similar completed works or currently executing three works of similar nature each costing 30% of estimated cost.*

OR-

b) Two similar completed works or currently executing two works of similar nature each costing 40% of estimated cost.*

OR-

e) One completed work or currently executing one work of similar nature of aggregate 60% of estimated cost.*

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

*In case of ongoing works to be considered, the bidder must have received payment bills of 80% of the contract sum for the work/works executed last day of month previous to the one in which bids are invited.

2.2 Financial Capacity

Achieved a average annual financial turnover as certified by 'Chartered Accountant' (in all elasses of civil engineering construction works only) equal to 30% of the estimated cost of work in last three (3) financial years immediately preceding the Financial Year in which bids are invited.

- To ascertain this, tenderer(s) shall furnish /upload the financial statement (Audited balance sheet) duly certified by Chartered Accountant.
- The turnover can be enhanced by 10% every year to bring the present level.

C) Bid Capacity:

The bid capacity of the prospective bidders will be calculated as under:

Assessed Available Bid Capacity = (A* N* 2 - B)

Where,

A = Maximum value of Civil Engineering works executed in any one year (year means Financial year) during the last five years (updated to the price level of the Financial year in which bids are received at a rate of 10% per year) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the Project/Works, excluding monsoon period, for which these bids are being invited. (E.g. 7 months = 7/12 year) For every intervening monsoon 0.33 shall be added to N.

B = Value of existing commitments (only allotted works) on the last date of submission of bids as per bidding document and on-going works to be completed during the period of completion of the Project/Works for which these bids are being invited.

Note: The statement showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be attached along with certificates duly signed by the Engineer-in Charge, not below the rank of an Executive Engineer or equivalent.

Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc

D. Equipment Capabilities as required for this work

- a) Regular and Routine works: The successful bidder will make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge. The successful bidder and, to that effect he will ensure commitment on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of MCGM.
- New and Original Works: The bidder should, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with assessment study of requirements of equipment/plants & machineries to allow the employer to review their proposal. The bidder will ensure his commitment to make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of MCGM.
- c) Special Works: The concerned Ch. Eng. shall enlist the equipments in the tender document justified for the project and ensure the capacity of the bidder for the same with the approval of concerned AMC.

Note:

- 1. Bidders shall submit the undertaking for equipment capability and other undertakings as such on a single Rs.500/- stamp paper.
- 2. Insistence of availability of equipments/plants at a particular distance from site should not be made in the tender document.

E. Technical Personnel

(B) General Guidelines for Fixing Requirement of Technical Staff

	Cost of work	Requirement of Technical Staff		Minimum	Designation
	(Rs in			Experience(year)	-
	Crore)				
Ī		Qualification	Number		

10 to 20	i)Project Manager with degree in corresponding discipline of Engineering	1	10	Principal Technical Representative
	ii)Graduata Enginaar	1	5	Technical Representative
	ii)Graduate Engineer	1	3	Project/Site Engineer and
	iii) Graduate			Project Planning/ billing
	Engineer or	2	2	Engineer
	Diploma			
	Engineer	2	5 5	
5 to 10	i) Graduate Engineer	1	5	Principal Technical
	ii) Cradwata			Representative
	ii) Graduate Engineer	2	2	Project/Site Engineer
	or	<u> </u>	2	Troject/Site Eligilieer
				Engineer
	Diploma			
	Engineer	2	<u> </u>	
More than 1.5 to 5	i) Graduate Engineer	1	5	Principal Technical Representative
	ii) Graduate			Project/Site Engineer
	Engineer	1	2	
	or			
	D: 1			Billing Engineer
	Diploma	1	5	
Up to 1.5	Engineer i) Graduate Engineer	1	<u>5</u> 	Principal Technical
Op 101.3	or	1	2	Representative
	Diploma			Project/Site Engineer/
	Engineer	1	5	Billing Engineer

Notes- 1. "Cost of work", in table above, shall mean the agreement amount of the work.

2. Rate of recovery in case of non-compliance of the clause be stipulated at following rates:-

Sr.	Qualification	Experience(years)	Rate of Recovery
No			
1	Project Manager with degree	10	Rs.30000/-p.m.
2	Graduate Engineer	5	Rs.25000/-p.m.
3	Graduate Engineer	2	Rs.15000/-p.m.
4	Diploma Engineer	5	Rs.15000/-p.m.

F. TIME PERIOD OF THE PROJECT:

Entire project should be completed and delivered in 12 weeks SITC+ 5 years CMC of time from the date of award of contract that includes/excludes Monsoon.

The time allowed for carrying out the work as entered in the Tender shall be strictly observed by the Contractor and shall be reckoned from the date on which the Letter of Acceptance is given to the Contractor. The work shall throughout the stipulated period of the Contract be proceeded with all due diligence as time being deemed to be the essence of the contract on the part of the Contractor. On

failing to do so, the Contractor shall pay as compensation an amount which shall be governed as per Clause - 8(e) of Standard General Conditions of Contract.

The Contractor should complete the work as per phase given below:

½ of the work in... ½ of the time½ of the work in... ½ of the time¾ of the work in... ¾ of the timeFull of the work in... Full of the time

Full work will be completed in 12 weeks + Five years including monsoon.

The programme for completion of work shall be a part of the Contract Document in the form of Bar Chart / GANTT Chart. The Contractor is supposed to carry out the work and keep the progress as per Bar Chart/GANTT Chart. The Contractor shall complete the work as per the Schedule given in the Contract and the programme submitted by the Contractor.

G. Contract Execution

All required documents for execution of the contract shall be submitted within 30 days from the date of issue of letter of acceptance. If the documents are not submitted within the stipulated time a penalty of Rs 5000/- per day will be applicable to the contractor. All contract documents need to be duly affixed with stamp duty properly signed along with evidence/proof of payment of security/contract deposit/ within 30 days from the date of letter of acceptance received by him

- **H.** If the amount of the Contract Deposit to be paid above is not paid within 30 days from the date of issue of Letter of Acceptance, the Tender / Contractor already accepted shall be considered as cancelled and legal steps be taken against the contractor for recovery of the amounts.
- I. The amount of Security Deposit retained by the MCGM shall be released after expiry of period up to which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete the rectification work within the period up to which the contractor has agreed to maintain the work in good order, the amount of security deposit retained by MCGM shall be adjusted to-wards the excess cost incurred by the Department on rectification work.

The contract deposit may be allowed in any form i.e. in cash or Demand Draft or Government securities or fixed deposit receipts or in the form of Bank guarantee. (Cicular MDD/9945 Date 30.01.2017)

J. Action when whole of security deposit is forfeited:

In any case in which under any Clause of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by installments or in the case of abandonment of the work owning to serious illness or death of the contractor or any other cause, the Engineer on behalf of the Municipal

Commissioner shall have power to adopt any of the following process, as he may deem best suited to the interest of MCGM -

- (a) To rescind the contract (for which recession notice in writing to the contractor under the head of Executive Engineer shall be conclusive evidence) and in that case, the security deposit of the contract shall stand forfeited and be absolutely at the disposal of MCGM.
- (b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work-charged establishment employed for getting the un-executed part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor
- (c) To order that the work of the contractor be measured up and to take such part thereof as shall be un-executed out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the un-executed work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under Clause (a) above, the contractor shall not be entitled to recover or be paid any sum for any work there for actually performed by him under this contract unless and until the Executive Engineer shall have certified in writing the performance of such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in Clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors amount of excess shall be deducted from any money due to the contractor, by MCGM under the contract or otherwise, howsoever, or from his security deposit or the sale proceeds thereof provided, however, the contractor shall have no claim against MCGM even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clauses (a), (b) or (c) is adopted by the Executive Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchase or procured any materials or entered in to any engagements or made any advance on account of or with a view to the execution of the work or the performance of the contract.

K. Contract may be rescinded and security deposit forfeited for bribing a public officer or if contractor becomes insolvent

If the contractor assigns or sublets his contracts or attempt so to do, or become insolvent or commence any proceeding to get himself adjudicated and insolvent or make any composition with his creditors, or attempt so to do or if bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given promised or offered by the contractor or any of his servants or agents through any public officer, or person in the employ of MCGM/Govt. in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract the Engineer In-charge may thereupon, by notice in writing rescind the contract and the Security Deposit of the Contractor shall thereupon stand forfeited and be absolutely at the disposal of MCGM and the same consequences shall ensure as if the contract had been rescinded under above clause J hereof; and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

> Submission of Tenders

PACKET - A

The Packet 'A' shall contain scanned certified copies of the following documents-

Scrutiny of this packet will be done strictly with reference to only the scanned copies of Documents uploaded online in packet 'A'

- a) Valid Registration Certificate.
- b) Valid Bank Solvency Certificate of Minimum Solvency amount as governed by Registration Rules in force for respective Class of Contractor for Civil and M&E works.
- c) A document in support of Registration under Maharashtra 'VAT' Act 2002. Sales Tax Registration Certificate in Maharashtra (or equivalent requirement under VAT). Those not registered in Maharashtra shall submit an undertaking to the effect that if they are successful tenderer, they shall submit Sales Tax Registration Certificate in Maharashtra within 15 days of issue of work order, failing which payment for the work executed will not be released
- d) Certified copies of valid 'PAN' documents and photographs of the individuals, owners, Karta of Hindu undivided Family, firms, private limited companies, registered co-operative societies, partners of partnership firms and at least two Directors, if number of Directors are more than two in case of Private Limited Companies, as the case may be. However, in case of Public Limited companies, Semi Government Undertakings, Government Undertakings, no 'PAN' documents will be insisted.
- e) Latest Partnership Deed in case of Partnership firm duly registered with Chief Accountant (Treasury) of MCGM.

The bidders shall categorically provide their Email-ID in packet 'A'.

NOTE:

- If the tenderer(s) withdraw tender offer during the tender validity period, his entire E.M.D shall be forfeited.
- If it is found that the tenderer has not submitted required documents in Packet "A" then, the shortfalls will be communicated to the tenderer **through e-mail only** and compliance required to be made within a time period of **three working days** otherwise they will be treated as non-responsive.

PACKET – B

The Packet 'B' shall contain scanned certified copies of the following documents -

- a) The list of similar type of works as stated in para 'A' of Post qualification successfully completed during the last five years in prescribed proforma, in the role of prime contractor. Information furnished in the prescribed proforma (Proforma I) shall be supported by the certificate duly self-attested. Documents stating that it has successfully completed during the last five years at least one contract of similar works as stated in para 'A' of Post qualification.
- b) Annual financial turnover for preceding three financial years as certified by Chartered Accountant preceding the Financial Year in which bids are invited. Copies of Applicants duly audited balance sheet and profit and loss account for the preceding three financial years preceding the Financial Year in which bids are invited. (Proforma II)
- Documents stating that, it has access to or has available liquid assets, unencumbered assets, lines of credit and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements for the subject contract in the event of stoppage, start-up, or other delay in payment, of the minimum 15% of the cost of the work tendered for, net of the tenderer's commitment of other contracts (Certificate from Bankers / C.A./Financial Institution shall be accepted as a evidence).
- d) The bidder shall give undertaking on Rs 500/-stamp paper that it is his/their sole responsibility to arrange the required machineries either owned/on lease or hire basis, at site before start of the work
- i) Regular and Routine works: The successful bidder shall make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge. The successful bidder and, to that effect he will ensure commitment on an undertaking on Rs.500 stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of MCGM.
- ii) New and Original Works: The bidder should, undertake their own studies and furnish with their bid, a detailed construction planning and methodology sup-ported with assessment study of requirements of equipment/plants & machineries to allow the employer to review their proposal. The bidder shall ensure his commitment to make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge on an undertaking on Rs.500 stamp paper to be sub-mitted along with the Bid in Packet

B. However, this condition in no way shall dilute the respective condition in Registration Rules of MCGM.

- iii) Special Works: The concerned Ch.Eng. shall enlist the equipments in the tender document justified for the project and ensure the capacity of the bidder for the same with the approval of concerned AMC.
- iv) Details of works in hand (Proforma VI-A & VI-B) (original), along with copies of work orders & attested copies of percentage of works completed or part thereof.
 - v) Statement showing assessed available Bid Capacity.
 - vi) The undertaking of Rs.500/- stamp paper as per the proforma annexed in 'Annexure B & C'

Note: Bidders shall submit the undertaking for equipment capability and other undertakings as such on a single Rs.500/- stamp paper.

- vii) The tenderers shall upload work plan as per the following outline:
 - 1. GANTT chart/ PERT/ CPM chart showing the completion of work within prescribed time period, considering major activities.
 - 2. Organizational set up envisaged by the contractors.
 - 3. Plant & equipment proposed to be deployed for this work.
 - 4. Site Offices and Laboratories proposed to be set up.
 - 5. A note on how the whole work will be carried out (work plan including methodology).
 - 6. Quality management plan.
 - 7. All the activities included in the Scope of Work shall be covered in the work plan.

Note:

- i. The Electrical / Mechanical work shall be got carried out by the civil contractors through the contractors registered with MCGM in Electrical Category. Information about the registered contractors shall be obtained from the office of the Ch.E. (M&E) / E.E. (Monitoring & Registration Cell). Attested scanned copy of the valid registration certificate in Electrical Category shall be uploaded with the tender along with the undertaking from the registered Electrical Contractor stating his willingness to carry out the tender work.
- **ii.** The successful bidder shall submit valid registration certificate under E.S.I.C., Act 1948, if the tenderer has more than 10 employees /persons on his establishment (in case of production by use of energy) and 20 employees/persons on his establishment (in case of production without use of energy) to MCGM as and when demanded. In case of less employees/persons mentioned above then

the successful bidder has to submit an undertaking to that effect on Rs. 200 stamp paper as per circular u/no. CA/FRD/I/65 of 30.03.2013.

iii. The successful bidder shall submit valid registration certificate under E.P.F. & M.P., Act 1952, if tenderer has more than 20 employees/persons on his establishment, to MCGM as and when demanded. In case if the successful bidder has less employees/persons mentioned above then the successful bidder has to submit an undertaking to that effect on Rs. 200 stamp paper as per circular u/no. CA/FRD/I/44 of 04.01.2013.

Note:

• If it is found that the tenderer has not submitted required documents in Packet "B" then, the shortfalls will be communicated to the tenderer through **e-mail only** and compliance required to be made within a time period of three working days otherwise they will be treated as non-responsive.

PACKET - C

a. Online tender filled in either percentage plus or minus (above or below), or at par. (There is no separate provision to quote % in physical form, this is a part in Header Data of online Tendering). For Packet 'C' tenderer(s) will fill data in 'Item Data Tab' in Service Line Item via Details and quotes his percentage variation figures. (If entered '0' it will be treated as 'at par'. By default the value is zero only).

Note: In case of rebate/premium of 15% and above as quoted by the tenderer, the rate analysis of major items shall be submitted by L1 and L2 bidder after demand notification by email to bidders by concerned Dy. Ch. Eng. The format for rate analysis is annexed at Annexure D.

BID SECURITY OR EMD

- The Bidder shall furnish, as part of the Bid, Bid Security/EMD, in the amount specified in the Bid Data Sheet. This bid security shall be in favor of the authority mentioned in the Bid Data Sheet and shall be valid till the validity of the bid.
- The tenderers shall pay the EMD online instead paying the EMD at any of the CFC centres in MCGM Ward Offices.
- Any bid not accompanied by an acceptable Bid Security and not secured as indicated in sub-clause mentioned above, shall be rejected by the Employer as non-responsive.
- The Bid Security of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the required Security Deposits.

- The Bid Security/ EMD of L-3 and bidder shall be refunded immediately after open-ing of financial bid but, the EMD/ASD submitted by the L-2 bidder will be returned after obtaining Standing Committee Resolution.
- The Bid Security may be forfeited:
 - **a**. if the Bidder withdraws the Bid after bid opening (opening of technical qualification part of the bid during the period of Bid validity;
 - b. in the case of a successful Bidder, if the Bidder fails within the specified time limit to:
 - i. sign the Agreement; and/or
 - ii. Furnish the required Security Deposits.
- 1. The cases wherein if the shortfalls are not complied by a contractor, will be informed to Registration and Monitoring Cell. Such non-submission of documents will be considered as 'Intentional Avoidance' and if three or more cases in 12 months are re-ported, shall be viewed seriously and disciplinary action against the defaulters such as banning/de-registration, etc. shall be taken by the registration cell with due approval of the concerned AMC.
- 2. No rejections and forfeiture shall be done in case of curable defects. For non-curable defects the 10% of EMD shall be forfeited and bid will be liable for rejection.

Note:

- I. Curable Defect shall mean shortfalls in submission such as:
 - a. Non-submission of following documents,
 - i. Valid Registration Certificate
 - ii. Valid Bank Solvency
 - iii. Sales Tax Registration Certificate (VAT)
 - iv. Certified Copies of PAN documents and photographs of indi-viduals, owners, etc
 - v. Partnership Deed and any other documents
 - vi. Undertakings as mentioned in the tender document.
 - b. Wrong calculation of Bid Capacity,
 - c. No proper submission of experience certificates and other documents, etc.
- II. Non-curable Defect shall mean
 - a. In-adequate submission of EMD/ASD amount,
 - b. In-adequacy of technical and financial capacity with respect to Eligibility criteria as stipulated in the tender.

BID VALIDITY

- Bids shall remain valid for a period of not less than one eighty (180) days after the deadline date for bid submission specified in Bid Data Sheet. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the re-quest will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for a period of the extension.

DEFECT LIABILITY PERIOD

- The Contractor is expected to earry out the construction work in Workmen like manner so as to meet the requirement and specification for the project. It is expected that the Workmanship and materials will be reasonably fit for the purpose for which they are required.
- Defects or defective work is where standard and quality of workmanship and materials as specified in the contract is deficient. Defect is defined as a failure of the completed project to satisfy the express or implied quality or quantity obligations of the construction contract. Defective construction works are as the works which fail short of complying with the express descriptions or requirements of the contract, especially any drawings or specifications with any implied terms and conditions as to its quality, workmanship, durability, aesthetic, performance or design. Defects in construction projects are attributable to various reasons.
- Some of the defects are structural defects results in cracks or collapse of faulty defective
 plumbing, inadequate or faulty drainage system, inadequate or faulty ventilation, cooling or
 heating systems, inadequate fire systems etc. The defects could be various on accounts of
 different reasons for variety of the projects.
- The Engineering In charge/Project Officer shall issue the practical completion certificate for the project. During the Defect Liability Period which commences on completion of the work, the Engineering In charge shall inform or the contractor is expected to be informed of any defective works by the Employer's representative of the defects and make good at contractor's cost with an intention of giving opportunity to the contractor of making good the defects appeared during that period. It is the contractor's obligation under the contract to rectify the defects that appear during Defect Liability Period and the contractor shall within a reasonable time after receipt of such instructions comply with the same at his own cost. The Engineering In charge/Project Officer shall issue a certificate to that effect and completion of making good defects shall be deemed for all the purpose of this contract to have taken place on the day named in such defect liability certificate.

- If defective work or workmanship or design have been knowingly covered-up or conceived so as to constitute fraud, commencement of the Defect Liability Period may be delayed. The decided period may be delayed until discover actually occurs on at least the defect could have been discovered with reasonable diligence, whichever is earlier.
- •—The DLP shall be as below:

Dept-	Type of works	DLP
Roads / Bridge	For cement concrete road/	5 years
	Mastic works	
	Asphalt work	3 years
	Paver Block	3 years
	Structural work	5 years
	General works	5 years
BM/SIC/HIC	General works	3 years
	Structural works	5 years
	Waterproofing works	5 years
Ward Works	All ward level works	2 years
Other Works	Pot holes and pre-monsoon	1 year
	bad patch repair work	
For other	HE, WSP, SP, SWD,	3 years
departments	Garden	
M & E	System Integrator for	5 Years
Department	Network Revamp at Various	Comprehensive
	MCGM Offices	on site
		warranty and
		support

- Also, in ease of defect, the Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at. The Defects Liability Period shall be extended for as long as Defects remain to be corrected. Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice. The Engineer may issue notice to the Contractor to carry out removal of defects or deficiencies, if any, noticed in his inspection, or brought to his notice. The Contractor shall remove the defects and deficiencies within the period specified in the notice and submit to the Engineer a compliance report.
- It is the Completion Stage when the contractor has completed all of the works and fixed all of the defects that were on the list of issue by Engineer-in-charge. When this happens, the engineer must issue a 'Certificate of Completion'. On the issue of 'Certificate of Completion', the 'Defect Liability Period 'starts. The contractor also must issue a 'Certificate statement' as an acknowledgment to the engineer not later than 14 days after the 'Certificate of Completion' has been issued. During the 'Defect Liability Period', the contractor has to obey all written instructions from the engineer to carryout repairs and fix any defects which appear in the Permanent Works. If the contractor does not ,due to his own faults finish the repair

works or fix the defects by the end of 'Defect Liability Period', the 'Defect Liability Period' will continue until all works instructed by engineer is done.

As per details in technical specification

SECURITY DEPOSIT AND PERFOMANCE GUARANTEE

A. Security Deposit

The security deposit shall mean and comprise of

- I. Contract Deposit and
- II. Retention Money.
- I. Contract Deposit The successful tender, here after referred to as the contractor shall pay an amount equal to two (2) percent of the contract sum shall be paid within thirty days from the date of issue of letter of acceptance.
- II. Retention Money The contractor shall pay the retention money an amount equal to five (5) percent of the Contract Sum which will be recovered from the contractors every bill i.e. interim / running / final bill. The clause of retention money will not be applicable to M. & E. Department.

B. Additional Security Deposit

The additional security deposit will be applicable when a rebate of more than of 12 % at the rate of with no maximum limit. The ASD is calculated as follows:

Additional security deposit = (X/100) x office estimated cost,

Where X=percentage rebate quoted above 12%

The ASD shall be paid online in the ASD tab for bidders in e-tendering system before submission of the bid-

C. Performance Guarantee

The successful tender, here after referred to as the contractor shall pay in the form of "Performance Guarantee" at different rates for different slabs as stated below:

Offer	PG applicable %
For premium, at par and rebate	PG= 0.92% x contract sum
0 to 12%	applicable for rebate of 12%
For rebate of 12.01%	$P.G. = \{0.92\% \text{ x contract sum}\}$
	applicable for rebate of 12%} +
	(X) x contract sum
	where-
	X= percentage rebate quoted
	more than 12%

Note: Contract sum shall mean amount after application of rebate/premium as quoted by the contractor with contingencies only and excluding price variation.

The PG shall be paid in one the following forms.

- t. Cash (In case guarantee amount is less than Rs.10,000/-
- 11. Demand Draft (In case guarantee amount is less than Rs.1,00,000/-)
- 111. Government securities
- ιω. Fixed Deposit Receipts (FDR) of a Schedule Bank.
- σ. An electronically issued irrevocable bank guarantee bond of any Schedule bank or f in the prescribed form given in Annexure.

Performance Guarantee is applicable over and above the clause of Security Deposit. Performance Guarantee will have to be paid & shall be valid till the defect liability period or finalization of final bill whichever is later.

This deposit will be allowed in the form of I to V as mentioned above and shall be paid within 15 days after receipt of Letter of Acceptance.

Note: Following exceptions shall be adopted for 'Demolition Tenders':

- Irrespective of the offer (Rebate/ at par/ premium), ASD shall be differed and only PG of 10% of contract sum be taken from the successful bidder on award of contract only.
- MCGM departments shall ensure to incorporate specific condition regarding above in bid document and e-tender notice.

D) Refund of Security Deposit

I. Refund of Contract Deposit

The Contract Deposit shall be released within 30 days after completion of 3rd year of DLP (in case of 5 years DLP) and after issue of 'Defect Liability Certificate' (in case of 1 or 2 or 3 years DLP) subject to no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor. No claim shall be made against the Balance Contract Deposit after the issue of Defects Liability Certificate.

II. Refund of Retention Money

One-half (50%)of the Retention Money shall be released within 30 days of issue of 'Certificate of Completion' with respect to the whole of the Works. In the event the Engineer issues a Taking-over Certificate for a section or part of the Permanent Works, only such proposition thereof as the Engineer determines (having regard to the relative value of such section or part of the Works) shall be considered by the Engineer for payment to the Contractor.

The balance Retention Money shall be released within 30 days after completion of 3rd year of DLP (in case of 5 years DLP) and after issue of 'Defect Liability Certificate' (in case of 1 or 2 or 3 years DLP) provided that the Engineer is satisfied that there is no demand outstanding against the Contractor. In the event of different Defects Liability Periods have been specified or become applicable to different sections or parts of the Permanent Works, the said moneys will be released within 30 days on expiration of the latest of such Defects Liability Periods.

Payment of the above mentioned 50% is exclusive of the amounts to be withheld as stated in and that amount shall be paid as per condition stated therein.

III. Refund of Additional Security Deposit

The additional security deposit shall be released within 30 days of issue of 'Certificate of Completion' with respect to the whole of the Works. In the event the Engineer issues a Taking-over Certificate for a section or part of the Permanent Works, only such proposition thereof as the Engineer determines (having regard to the relative value of such section or part of the Works) shall be considered by the Engineer for payment to the Contractor.

IV. Refund of Performance Guarantee

The Deposit on account of performance guarantee shall be released within 30 days of completion of Defects Liability Certificate subject finalization of final bill whichever is later and no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor.

Summary of time of Refund of deposit is tabulated as follows:

a. Time of Refund for works having 5 years DLP Comprehensive on site warranty and support

Deposits refunded after completion	After 3 yrs of DLP Comprehensive on site warranty and support	After Completion of DLP Comprehensive on site warranty and support
ASD + 50% of RM	CD+50% of RM	PG

b. Time of Refund for works having 1 or 2 or 3 years DLP

Deposits refunded after completion	After Completion of DLP
ASD + 50% of RM	CD+50% of RM+PG

*Note:

- a) It shall be clearly mentioned that the BG shall be applicable for individual work/contract and clubbing of various contracts of the said contractor will not be allowed. In case of obtaining Bank Guarantee, it is necessary to mention that the same shall be valid further 6 months from the completion of defect liability period/ warranty period.
- b) It shall be the responsibility of the bidder to keep the submitted B.G. "VALID" for the stipulated time period in the tender & in case of its expiry it will attract penalization.
- c) Bank Guarantee should be issued by way of General Undertaking and Guarantee issued on behalf of the Contractor by any of the Nationalized or Scheduled banks or branches of foreign banks operating under Reserve Bank of India regulations located in Mumbai up to Virar & Kalyan. List of approved Banks is appended at the end of Instructions to Bidders (ITB). The Bank Guarantee issued by branches of approved Banks beyond Kalyan and Virar can be accepted only if the said Bank Guarantee is countersigned by the Manager of a Regional Branch of the same bank within the Mumbai City Limit categorically endorsing thereon that the said Bank Guarantee is binding on the endorsing Branch of the Bank or the Bank itself within Mumbai Limits and is liable to be enforced against the said Branch of the Bank or the bank itself in case of default by the Contractors furnishing the Bank Guarantee. The Bank Guarantee shall be renewed as and when required and/or directed from time to time until the Contractor has executed and completed the works and remedied any defects therein.

E) Legal + Stationary Charges: (As per applicable circular)

Successful tender shall pay the Legal Charges +Stationary charges as per Circular no CA/FRG/38 dtd. 21.12.2015

Contract \	Legal+ Stationery Charges					
Up to	Rs.	3,00,000/-	То	Rs.		Nil
from	Rs.	3,00,001/-	То	Rs.	20,00,000/-	Rs. 680
from	Rs.	20,00,001/-	To	Rs.	1,00,00,000/-	Rs. 2670/-
from	Rs.	1,00,00,001/-	To	Rs.	Any amount	Rs. 6660/-
						(Maximum)

The tenderers are requested to note that stationary charges as given in the table above will be recovered from the successful tenderer for supply of requisite prescribed forms for preparing certificate bills in respect of the work.

F) Stamp Duty: (As per applicable circular)

It shall be incumbent on the successful tenderer to pay stamp duty on the contract.

i. As per the provision made in Article 63, Schedule I of Bombay Stamp Act 1958, stamp duty is payable for "works contract" that is to say, a contract for works and labour or services

volving transfer of property in goods (whether as goods or in some other form) in its execution and includes a sub-contract, as under:

(a)	Where the amount or value	Five Hundred rupees stamp duty
	set forth in such contract	
	does not exceed rupees ten	
	lakhs.	
(b)	Where it exceeds rupees ten	Five hundred rupees plus 0.1% of the
	lakhs	amount above rupees ten lakh subject to
		maximum of rupees twenty five lakh
		stamp duty.

- ii. The successful bidder shall enter into a contract agreement with M.C.G.M. within 30 days from the date of issue of Work Order and the same should be adjudicated for payment of Stamp Duty by the successful bidder.
- iii. Further shortfall if any, in amount of stamp duty paid as against prescribed amount for the documents executed in Mumbai City & Mumbai Suburban District be recovered from the concerned work contractors and to deposit the deficit or unpaid Stamp Duty and penalty by two separate Demand Draft or Pay Order in favour of "Superintendent of Stamp, Mumbai" within 15 days from intimation thereof.
- iv. All legal charges and incidental expenses in this respect shall be borne and paid by the successful tenderer.

Stamp Duty is payable on BG – Minimum ₹ 500/- or 0.5% of total BG amount.

IMPORTANT DIRECTIONS

All the information uploaded shall be supported by the corroborative documents in absence of
which the information uploaded will be considered as baseless and not accepted for
qualification criteria. All the documents shall be uploaded with proper pagination. The page
No. shall be properly mentioned in the relevant places.

The information shall be uploaded in the sequence as asked for with proper indexing etc. The Bidder shall be fully responsible for the correctness of the information uploaded by him.

2. Applicants/Bidders shall refer portal.mcgm.gov.in\tenders for "The Manual of Bid-Submission for Percentage Rate/Item Rate Tender Document." The detail guidelines for creation and submission of bid are available in the referred document.

Any	queries	or	reques	for	additio	nal	inforn	nation	conc	erning	this	TEN	DER	shall	be
subm	submitted by e-mail to The subject shall clearly bear the following														
ident	ification/	ti	tle: "C	ueri	es/ Req	luest	for	Addi	tional	Info	rmati	ion:	ΓENI	DER	for
								A	ny c	hanges	in	mail	ID	will	be
intim	ated on t	he r	ortal												

3. In case of Equal Percentage of lowest bidders (L1), the allotment of work shall be done by giving 48 hrs (2 working days) from the day of opening of packet C on same BID-Document number for re-quoting and such development needs to done by IT department in MCGM's SRM system. Till such development is made; 'Sealed Bids' shall be called from the bidders quoting the same rates i.e. L1.

In case of equal percentage of lowest bidders is obtained even after re-quoting, then the successful bidder will be decided by lottery system by concerned Ch. Eng.

The bidder shall need to submit the additional ASD if applicable within 7 days after receipt of notification issued by concerned Chief Engineer.

Also, the Performance Guarantee shall be paid in 15 days after receipt of Letter of Acceptance.

SECTION 7 SCOPE OF WORK

Scope of Work

7.1) Project Objective

The Municipal Commissioner for and on behalf of Municipal Corporation of Greater Mumbai (MCGM), invites bids for the Supply of Active and Passive Networking Components with Onsite Support according to the specifications and bill of quantities in the bid document. This project envisages the following broad outcomes

- 1) Replacement of branch level switches & revamping of access and distribution level networking.
- 2) Replacement of L2 level switches & revamping of access and distribution level networking for its head office (MHO)
- 3) Integration with MPLS network being provided and managed by FMS, though two ISPs

7.2) Summary of Scope

MCGM's current network comprises of Network equipment from Cisco and HP OEMs, majority of which has reached End of Life and/or End-of-Support. Also, the Current FMS Vendor is implementing MPLS network.

Sr No	Project Objectives	Broad scope/ Network Equipment
1	Replacement of branch level switches	Installation and configuration of distribution and
		access switching, structured cabling, ensuring
		smooth connectivity at end user level
2	Revamping of Access and Distribution level	Installation and configuration of distribution and
	networking for its head office (MHO)	access switching, structured cabling, ensuring
		smooth connectivity at end user level
3	Integration with MPLS network being	Ensuring seamless integration with MPLS
	provided and managed by FMS, though two	network connectivity for redundancy and network
	ISPs	load balancing

Network Equipment:

For various MCGM offices and MHO

1	L2 Switch - 24 GE Ports
2	Transreceiver (Muiti Mode)
3	Transreceiver (Single Mode)
4	Transreceiver (RJ 45)
5	CAT 6 Cable per mtr
6	24 Ports Patch Panel
7	I/O Cat 6 Points
8	RJ 45 Connectors Dual information outlet with dual port SMB having shutter facility
9	CAT 6 Patch Cords 1 mtr
10	CAT 6 Patch Cords 2 mtr
11	CAT 6 Patch Cords 3 mtr
12	Media Convertor
13	Single Mode Fiber Optics Connector LC/SC (SM)
14	Single Mode Fiber Patch Cord LC to LC/SC 3 mtr
15	Single Mode Fiber Patch Cord LC to LC/SC 10 mtr
16	Single Mode Fiber Patch Cord LC to LC/SC 20 mtr
17	Light Interface Unit (LIU) 24 Fiber Wall Mount
18	Pigtail LC MM
19	Cassing Capping 2 mtr (30x12)
20	Cassing Capping 1 mtr (25x12)
21	2 C Class GI Pipe mtr (50 mm)
22	1 C Class GI Pipe mtr (25 mm)

23	6 core Fiber Optics Cable mtr
24	Optical Fiber Connectors LC/SC (MM)
25	Fiber Duplex Patch Cords LC to LC/SC (MM) 3mtr
26	Fiber Duplex Patch Cords LC to LC/SC (MM) 10mtr
27	Fiber Duplex Patch Cords LC to LC/SC (MM) 20mtr
28	9 U Wall Mount Rack with all necessary accessories
29	18 U Wall Mount Rack with all necessary accessories
30	1 KVA UPS with 30 min backup
31	2/3 pin independent plug point

Notes:

- a. Bidders shall carry out site survey, for better understanding of the existing environment.
- b. Bidder shall ensure that the equipment/components/solution offered in this RFP should be able to integrate with all the existing IT Infrastructures at MCGM integration.

SECTION 8 BILL OF QUANTITIES

Sr. No.	Fair Item	Short Description	Qty	Unit	
1	IT- RV-1	L2 Switch - 24 GE Ports	1000	Nos	To be filled in online e- Tendering system
2	IT- RV-2	Transreceiver (Multi Mode)	100	Nos	To be filled in online e- Tendering system
3	IT- RV-3	Transreceiver (Single Mode)	100	Nos	To be filled in online e- Tendering system
4	IT- RV-4	Transreceiver (RJ 45)	100	Nos	To be filled in online e- Tendering system
5	Me-12-4-b	Cat 6 Gigabyte	650000	Mtr	To be filled in online e- Tendering system
6	Me-12-9-j	24 port patch panel (SP-ME-TS-85)	900	Nos	To be filled in online e- Tendering system
7	Me-12-5-c	PVC box & cover plate with RJ-45 for LAN access only	8000	Nos	To be filled in online e- Tendering system
8	IT- RV-5	RJ 45 Connectors	8000	Nos	To be filled in online e- Tendering system
9	Me-12-9-o	3 feet patch cord (SP-ME-TS-88)	200	Nos	To be filled in online e- Tendering system
10	Me-12-9-n	7 feet patch cord	200	Nos	To be filled in online e- Tendering system
11	IT- RV-6	CAT 6 Patch Cords 3 mtr	8000	Nos	To be filled in online e- Tendering system
12	IT- RV-7	Single Mode Fiber connector LC/SC (SM)	300	Nos	To be filled in online e- Tendering system
13	IT- RV-8	Single Mode Fiber Patch Cord LC to LC/SC 3 mtr	50	Nos	To be filled in online e- Tendering system
14	Me-12-9-h	Light interface unit (LIU) (SP-ME-TS-83)	50	Nos	To be filled in online e- Tendering system
15	IT- RV-9	Pigtail LC MM	50	Nos	To be filled in online e- Tendering system
16	IT- RV-10	Cassing Capping 2 mtr (30x12)	81250	Nos	To be filled in online e- Tendering system
17	Me-12-7-a	25mmX12mm- only casing capping laying	162500	Mtr.	To be filled in online e- Tendering system
18	Me-12-7-p	2" C class GI pipe	2500	Nos.	To be filled in online e- Tendering system
19	IT- RV-11	1" C Class GI pipe Mtr. (25mm)	2500	Mtr.	To be filled in online e- Tendering system
20	ME2-13- 002	Fiber Optic cable (SP-ME-TS-79)	325000	Mtr.	To be filled in online e- Tendering system
21	IT- RV-12	Optical Fiber connector (LC/SC(MM)	200	Nos	To be filled in online e- Tendering system
22	IT- RV-13	Fiber Duplex Patch Cords LC to LC/SC (MM) 3mtr	100	Nos	To be filled in online e- Tendering system
23	IT- RV-14	Fiber Duplex Patch Cords LC to LC/SC (MM) 10mtr	50	Nos	To be filled in online e- Tendering system
24	IT- RV-15	Fiber Duplex Patch Cords LC to LC/SC (MM) 20mtr	50	Nos	To be filled in online e- Tendering system
25	IT-RV-16	9 U Wall Mount Rack with all necessary accessories	105	Nos	To be filled in online e- Tendering system
26	IT-RV-17	18 U Wall Mount Rack with all necessary accessories	70	Nos	To be filled in online e- Tendering system
27	IT-RV-18	1 KVA UPS with 30 min backup	230	Nos	To be filled in online e- Tendering system
28	Me-3-6-b	2/3 pin independent plug point	230	Nos.	To be filled in online e- Tendering system

ME-28		1	T	T	1 -	
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SECTION 9 GENERAL CONDITIONS OF CONTRACT

General Conditions of Contract

A. General

1. **Definitions**

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

The "Contract" shall mean the tender and acceptance thereof and the formal agreement if any, executed between the Contractor, Commissioner and the Corporation together with the documents referred to therein including these conditions and appendices and any special conditions, the specifications, designs, drawings, price schedules, bills of quantities and schedule of rates. All these documents taken together shall be deemed to form one Contract and shall be complementary to one another.

The Contract Data defines the documents and other information which comprise the Contract.

The "Contractor" shall mean the individual or firm or company whether incorporated or not, whose tender has been accepted by the employer and the legal successor of the individual or firm or company, but not (except with the consent of the Employer) any assignee of such person.

The Bidder is a person or corporate body who has desired to submit Bid to carry out the Works, including routine maintenance till the tender process is concluded.

The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.

The "Contract Sum" means the sum named in the letter of acceptance including Physical contingencies subject to such addition thereto or deduction there-from as may be made under the provisions hereinafter contained.

Note: The contract sum shall include the following –

- In the case of percentage rate contracts the estimated value of works as mentioned in the tender adjusted by the Contractor's percentage.
- In the case of item rate contracts, the cost of the work arrived at after finalization of the quantities shown in schedule of items / quantities by the item rates quoted by the tenderers for various items and summation of the extended cost of each item.
- In case of lumpsum contract, the sum for which tender is accepted.
- Special discount / rebate / trade discount offered by the tenderer if any and accepted by the Corporation.
- Additions or deletions that are accepted after opening of the tenders.

The "Contract Cost" means the Contract Sum plus Price Variation. This cost shall be included in the letter of acceptance.

A Defect is any part of the Works not completed in accordance with the Contract.

The Defects Liability Certificate is the certificate issued by the Engineer, after the Defect Liability Period has ended and upon correction of Defects by the Contractor.

Drawings means all the drawings, calculations and technical information of a like nature provided by the Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation & maintenance manual and other technical information of like nature submitted by the Contractor and approved by the Engineer.

The Authority shall mean Municipal Corporation of Greater Mumbai (MCGM)

The "Employer" shall mean the Municipal Corporation for Greater Mumbai / Municipal Commissioner for Greater Mumbai, for the time being holding the said office and also his successors and shall also include all "Additional Municipal Commissioners, Director (Engineering Services & Projects)" and the Deputy Municipal Commissioner, to whom the powers of Municipal Commissioner, have been deputed under Section 56 and 56B of the Mumbai Municipal Corporation Act.

The Engineer in-charge shall mean the Executive Engineer in executive charge of the works and shall include the superior officers of the Engineering department i.e. Dy.Ch.Eng/Ch.Eng. and shall mean and include all the successors in MCGM

The Engineer's Representative shall mean the Assistant Engineer, Sub. Engineer/Jr. Engineer in direct charge of the works and shall include Sub Eng./ Jr. Eng of Civil section/ Mechanical section/ Electrical section appointed by MCGM.

The "Engineer" shall mean the City Engineer / the Hydraulic Engineer / the Chief Engineer / the Special Engineer, appointed for the time being or any other officer or officers of the Municipal Corporation who may be authorized by the commissioner to carry out the functions of the City Engineer / the Hydraulic Engineer / the Chief Engineer / the Special Engineer or any other competent person appointed by the employer and notified in writing to the Contractor to act in replacement of the Engineer from time to time.

Contractor's Equipment means all appliances and things of whatsoever nature required for the execution and completions of the Works and the remedying of any defects therein, but does not include plant material or other things intended to form or forming part of the Permanent Works.

The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.

The Intended Completion Date is the date on which it is intended that the Contractor shall complete the construction works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works and works of routine maintenance.

Plant is any integral part of the Works that shall have a mechanical, electrical, electronic, chemical, or biological function.

Routine Maintenance is the maintenance of activities of the competed structure for five years as specified in the Contract Data.

The "Site" shall mean the land and other places including water bodies more specifically mentioned in the special conditions of the tender, on, under in or through which the permanent works or temporary works are to be executed and any other lands and places provided by the Municipal Corporation for working space or any other purpose as may be specifically designated in the contract as forming part of the site.

Site Investigation Reports are those that were included in the bidding documents and are reports about the surface and subsurface conditions at the Site.

"Specification" shall mean the specification referred to in the tender and any modification thereof or addition or deduction thereto as may from time to time be furnished or approved in writing by the Engineer.

The Start Date/Commencement Date is given in the Contract Data. It is the date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

A Nominated Sub-Contractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the construction work and/or routine maintenance in the Contract, which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

Variation means a change to the:-

- i. Specification and /or Drawings (if any) which is instructed by the Employer.
- ii. Scope in the Contract which is instructed by the Employer.
- iii. Price in the Contract which is instructed by the Employer.

The Works, as defined in the Contract Data, are what the Contract requires the Contractor to construct, install, maintain, and turn over to the Employer. Routine maintenance is defined separately.

Jurisdiction: In case of any claim, dispute or difference arising in respect of a contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only.

2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about these Conditions of Contract.
- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following documents: (1) Agreement, (2) Letter of Acceptance, (3) Notice to Proceed with the Work, (4) Contractor's Bid, (5) Contract Data, (6) Special Conditions of Contract Part (7) General Conditions of Contract Part I, (8) Specifications, (9) Drawings, (10) Bill of Quantities, and (11) Any other document listed in the Contract Data.

3. Engineer's Decisions

- 3.1 Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer. However, if the Engineer is required under the rules and regulations and orders of the Employer to obtain prior approval of some other authorities for specific actions, he will so obtain the approval, before communicating his decision to the Contractor.
- 3.2 Except as expressly stated in the Contract, the Engineer shall not have any authority to relieve the Contractor of any of his obligations under the contract.

4. Delegation

4.1 The Engineer, with the approval of the Employer, may delegate any of his duties and responsibilities to other person(s), except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

5. Communications

All certificates, notices or instructions to be given to the Contractor by Employer/ Engineer shall be sent on the address or contact details given by the Contractor of Bid. The address and contact details for communication with the Employer/ Engineer shall be as per the details given in Contract Data. Communications between parties that are referred to in the conditions shall be in writing. The Notice sent by facsimile (fax) or other electronic means shall be effective on confirmation of the transmission. The Notice sent by Registered post or Speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service.

6. Subcontracting

6.1 Unless specifically mentioned in the contract subletting will not be allowed. Subletting, where otherwise provided by the contract shall not be more than 25% of the contract price.

- 6.2 The Contractor shall not be required to obtain any consent from the Employer for:
 - a. the sub-contracting of any part of the Works for which the Subcontractor is named in the Contract;
 - b. The provision for labour, or labour component.
 - c. The purchase of Materials which are in accordance with the standards specified in the Contract.
- 6.3 Beyond what has been stated in clauses 6.1 and 6.2, if the Contractor proposes sub contracting any part of the work during execution of the Works, because of some unforeseen circumstances to enable him to complete the Works as per terms of the Contract, the Employer will consider the following before according approval:
 - a.—The Contractor shall not sub-contract the whole of the Works.
 - b.—The permitted subletting of work by the Contractor shall not establish any contractual relation-ship between the sub-contractor and the MCGM and shall not relieve the Contractor of any responsibility under the Contract.
- 6.4 The Engineer should satisfy himself before recommending to the Employer whether
 - a. the circumstances warrant such sub-contracting; and
 - b. The sub-Contractor so proposed for the Work possesses the experience, qualifications and equipment necessary for the job proposed to be entrusted to him.

7. Other Contractors

- 7.1 The Contractor shall cooperate and share the Site with other Contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the Contract Data. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.
- 7.2 The Contractor should take up the works in convenient reaches as decided by the Engineer to ensure there is least hindrance to the smooth flow and safety of traffic including movement of vehicles and equipment of other Contractors till the completion of the Works.

8. Personnel

8.1 The Contractor shall employ for the construction work and routine maintenance the key personnel including technical personnel named in the Contract Data or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to those of the personnel stated in the Contract Data.

- 8.2 The Contractor's personnel shall appropriately be qualified, skilled and experienced in their respective trades or occupations. The Engineer shall have authority to remove, or cause to be removed, any person employed on the site or works, who carries out duties incompetently or negligently and persists in any conduct which is prejudicial to safety, health or the protection of the environment.
- 8.3 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Works in the Contract.
- 8.4 The Contractor shall not employ any retired Gazetted officer who has worked in the Engineering Department of the MCGM /State Government and has either not completed two years after the date of retirement or has not obtained MCGM/State Government's permission to employment with the Contractor.

9. Employer's and Contractor's Risks

9.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

10. Employer's Risks

10.1 The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot, commotion or disorder (unless restricted to the Contractor's employees) and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

11. Contractor's Risks

11.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks, referred to in clause 11.1, are the responsibility of the Contractor.

12. Insurance

- 12.1 The Contractor at his cost shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:
 - a) Loss of or damage to the Works, Plant and Materials;
 - c. Loss of or damage to Equipment;
 - d. Loss of or damage to property (other than the Works, Plant, Materials, and Equipment) in connection with the Contract; and

- e. Personal injury or death.
- 12.2 Insurance policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 12.3 Alterations to the terms of insurance shall not be made without the approval of the Engineer.
- 12.4 Both parties shall comply with any conditions of the insurance policies.
- 12.5 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid, from payments otherwise due to the Contractor or if no payment is due, the payment of premiums shall be debt due.

13. Site Investigation Reports

13.1 The Contractor, in preparing the Bid, may rely, at his own risk, on any Site Investigation Reports referred to in the Contract Data, supplemented by any other information available to him, before submitting the bid.

14. Queries about the Contract Data

14.1 The Engineer will clarify queries on the Contract Data.

15. Contractor to Construct the Works and Undertake Maintenance (if specified in the tender)

- 15.1 The Contractor shall construct, and install and maintain the Works in accordance with the Specifications and Drawings and as per instructions of the Engineer.
- 15.2 The Contractor shall construct the works with intermediate technology, i.e., by manual means with medium input of machinery required to ensure the quality of works as per specifications. The Contractor shall deploy the equipment and machinery as required in the contract.
- 15.3 The Contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and byelaws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in future by the State or Central Government or the local authority. Salient features of some of the major laws that are applicable are given below:

• The Water (Prevention and Control of Pollution) Act, 1974, this provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or such alteration of the physical, chemical or

biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

- The Air (Prevention and Control of Pollution) Act, 1981, this provides for prevention, control and abatement of air pollution. 'Air Pollution' means the presence in the atmosphere of any 'air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.
- The Environment (Protection) Act, 1986, this provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. 'Environment' includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.
- The Public Liability Insurance Act, 1991, This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

16. The Works and Routine Maintenance to be completed by the Intended Completion Date

16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works and Routine Maintenance, if specified in the tender, in accordance with the Programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

17. Approval by the Engineer

- 17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.
- 17.2 The Contractor shall be responsible for design and safety of Temporary Works.
- 17.3 The Engineer's approval shall not alter the Contractor's responsibility for design and safety of the Temporary Works.
- 17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

18. Safety

- **18.1** The Contractor shall be responsible for the safety of all activities on the Site. He shall comply with all applicable safety requirements and take care of safety of all persons entitled to be on the site and the works. He shall use reasonable efforts to keep the site and the works, both during construction and maintenance, clear of unnecessary obstruction so as to avoid danger to the persons and the users.
 - Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Power warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
 - The workers engaged for cleaning the manholes/sewers should be properly trained before allowing working in the manhole.

18.2 Safety Programs:-

- **I.** Have adequate safety supervision in place to ensure that safety programs set up by the firms/agencies are in compliance with prevalent laws and regulations.
- **II.** Review safety programs developed by each of the trade firms, prepare and submit a comprehensive safety program.
- **III.** Monitor day to day implementation of safety procedures.

18.3 First Aid Facilities: -

- i. At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- ii. The first-aid box shall be distinctly marked with a red cross on white back ground.
- **iii.** Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- iv. Nothing except the prescribed contents shall be kept in the First-aid box.
- **v.** The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- vi. A person in charge of the First-aid box shall be a person trained in First-aid treatment, in the work places where the number of contract labour employed is 150 or more.

19. Discoveries

19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

20. Possession of the Site

20.1 The Employer shall handover complete or part possession of the site to the Contractor 7 days in advance of construction programme. At the start of the work, the Employer shall handover the possession of at-least 75% of the site free of all encumbrances, the remaining 25 % of the possession as per contractor's construction programme.

21. Access to the Site

21.1 The Contractor shall allow access to the Site and to any place where work in connection with the Contract is being carried out, or is intended to be carried out to the Engineer and any person/persons/agency authorized by: a. The Engineer b. The Employer or authorized by the Employer.

22. Instructions

- 22.1 The Contractor shall carry out all instructions of the Engineer, which comply with the applicable laws where the Site is located.
- 22.2 The Contractor shall permit the appointed and/or authorized persons to inspect the Site and/or accounts and records of the Contractor and its subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed, if so required. The Contractor's attention is invited to Clause of 'Fraud and Corruption', which provides, inter alia, that acts intended to materially impede the exercise of the inspection and audit rights provided for under the Clause & constitute a obstructive practice subject to contract termination.

22.3 Engineer to have power to issue further drawings or instructions:

The Engineer shall have the power and authority from time to time and at all times to make and issue such further drawings and to give such further instructions and directions as may appear to him necessary or proper for the guidance of the contractor and the good and sufficient execution of the works according to terms of the specifications and Contractor shall receive, execute, obey and be bound by the same, according to the true intent and meaning thereof, as fully and effectually as though the same had accompanied or had been mentioned or referred to in the specification, and the Engineer may also alter or vary the levels or position of nature of works contemplated by the specifications, or may order any of the works contemplated thereby to be omitted, with or without the substitution of any other works in lieu thereof, or may order any work or any portion of work executed or partially executed, to be removed, changed or altered, added if needful, may order that other works shall be substituted instead thereof and difference of expense occasioned by any such

diminution or alteration so ordered and directed shall be added to or deducted from the amount of this Contract, as provided under condition no.10(a) hereinafter.

No work which radically changes the original nature of the Contract shall be ordered by the Engineer and in the event of any deviation being ordered which in the opinion of the Contractor changes the original nature of Contract he shall nevertheless carry it out and disagreement as to the nature of the work and the rate to be paid therefore shall be resolved in accordance with condition no.13d.

The time for completion of the Works, shall be in even of any deviations resulting in additional cost over the contract price being ordered, be extended or reduced reasonably by the Engineer. The Engineer's decision in this case shall be final.

B. Time Control

23. Programme

23.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme, including Environment Management Plan showing the general methods, arrangements, order, and timing for all the activities in the Works, along with monthly cash flow forecasts for the construction of works.

After the completion of the construction works, the programme for the Routine Maintenance Work, showing the general methods, arrangements, order and timing for all the activities involved in the Routine Maintenance will also be submitted by the Contractor to the Engineer for approval if specified in the tender. The programme for Routine Maintenance will be submitted in each year for the period of Maintenance.

- 23.2 The Contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/ equipments being placed in field laboratory and the location of field laboratory along with the Programme. The Engineer shall cause these details to be verified at each appropriate stage of the programme.
- 23.3 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
- 23.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
- 23.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme shall show the effect of Variations and Compensation Events.

24. Extension Of Time In Contracts:

Subject to any requirement in the contract as to completion of any portions or portions of the works before completion of the whole, the contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:

8. Extension attributable to MCGM

- i. Extension Due To Modification: If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise and in any case should not be less than 30 days before the expiry of the date fixed for completion of the works.
- ii. Extension For Delay Due To MCGM: In the event of any failure or delay by the MCGM to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the MCGM due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefore, but in any such case, the MCGM may grant such extension(s) of the completion date as may be considered reasonable.

Note: For extension of time period as governed in (i) and (ii) above, any modifications in design/drawings, specifications, quantities shall be needed to be justified with recorded reasons with approval of Ch.Eng. for not anticipating the same while preparing estimates and draft tender.

9. Extension Of Time For Delay Due To Contractor: The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed no later than the date(s) / the programme for completion of work as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in above as (a.i) and (a.ii), the MCGM may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor for further extension of time as the Engineer may decide. On such extension the MCGM will be entitled without prejudice to any other right and remedy available on that behalf, to recover the compensation as governed by Clause 8(e) of GCC.

For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued.

Further, competent authority while granting extension to the currency of contract under Clause (b) of as above may also consider levy of penalty, as deemed fit based on the merit of the case. Also, the reasons for granting extension shall be properly documented.

25. Delays Ordered by the Engineer

25.1 The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works. Delay/delays totaling more than 30 days will require prior written approval of the DMC/AMC.

26. Management Meetings

26.1 The Engineer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the plans for progress of the Works.

26.2 The Engineer shall record the business of management meetings and provide copies of the record to those attending the meeting. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting.

C. Quality Control

27.1. Work to be open to Inspection and Contractor or Responsible agent to be present

All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Eng-in-charge and his subordinates and the contractor shall at all times during the usual working hours, at all other times, during the usual working hours and at all other times at which reasonable notice of the intention of the Eng-in-charge and his subordinates to visit the works shall have been given to the contractor, either himself be present to receive orders and instruction or have responsible agent duly accredited in writing present for that purpose. Order given to the contractors' duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

27.2. Notice To Be Given Before Work Is Covered Up

The contractor shall give not less than ten days' notice in writing to the Eng-In-Charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimension thereof taken before the same is so covered up or placed beyond the reach of measurements and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Eng-In-Charge or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given or consent obtained the same shall be uncovered at the contractors expenses, and in default thereof no payment or allowance shall be made for such work or for the materials with which the same was executed

27.3 Works to be executed in accordance with specifications / drawings / orders etc.:

The contractor shall execute the whole and every part of the work the most substantial and workman like manner and both has regards material and every other respect in strict accordance with specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer In-charge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site or work during office hours. The contractor shall be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost.

27.4 Ready Mix Concrete/ Asphalt Mix-

- i. The contractor shall have to arrange Ready Mix concrete (RMC)/Asphalt from RMC/ASPHALT producing plants registered with MCGM
- ii. The contractor shall, with in a 7 days of award of the work, submit a list of at least three RMC/Asphalt producers with details of such plants including details and number of transit, mixers & pumps etc. to be deployed indicating name of owner/company, its location, eapacity, technical establishment.
 - The Engineer-in-charge will reserve right to inspect at any stage and reject the concrete if he is not satisfied about quality of product at the user's end.
- iii. The Engineer-in-charge reserves the right to exercise control over the:
 - a. Calibration check of the RMC/Asphalt plant.
 - b. Weight and quantity check on the ingredients, water and admixtures added for batch mixing for RMC plants-
 - e. Time of mixing of concrete/grade of asphalt.
 - d. Testing of fresh concrete/asphalt mix, recording of results and declaring the mix fit or unfit for use. This will include continuous control on the work ability during production and taking corrective action, if required.
 - e. For exercising such control, the Engineer-in-charge shall periodically depute his authorized representative at the RMC/Asphalt plant. It shall be responsibility of the contractor to ensure that all necessary equipment, manpower & facilities are made available to Engineer-in-charge and or his authorized representative at RMC/Asphalt plant.
 - f. All required relevant records of RMC/Asphalt mix shall be made available to the Engineer-in-charge or his authorized representative. Engineer-in-charge shall, as required, specify guidelines & additional procedures for quality control & other parameters in respect of material production& transportation of concrete mix which shall be binding on the contractor & the RMC/Asphalt plant. Only concrete as approved in design mix by Engineer-in-charge shall be produced in RMC plant and transported to the site.

g. The contactor shall have to produce a copy of chalan receipts/SCADA reports/VTS reports as issued by the RMC/Asphalt plant as a documentary proof in lieu of supply of RMC/Asphalt mix before releasing payment.

28. Identifying Defects

28.1 The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

28.2 The Contractor shall permit the Employer's technical person(s) to check the Contractor's work and notify the Engineer and Contractor if any defects that are found.

29. Tests

29.1 For carrying out mandatory tests as prescribed in the specifications, the Contractor shall establish field laboratory at the location decided by Engineer. The field laboratory will have minimum of equipments as specified in the Contract Data. The contractor shall be solely responsible for:

- a. Carrying out the mandatory tests prescribed in the Specifications, and
- **b.** For the correctness of the test results, whether preformed in his laboratory or elsewhere.

29.2 If the Engineer instructs the Contractor to earry out a test not specified in the Specification/ Quality Assurance Handbook to cheek whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no defect, the test shall be a compensation event.

When required by the Engineer-in-charge the contractor(s) shall supply for the purpose of testing samples of all materials proposed to be used in the works. Samples submitted either to govern bulk supplies or required for testing before use shall be in suitable packages to contain them and shall be provided free of charge by the contractor. The cost of testing shall be borne by the contractor even if the result of the sample confirm or do not confirm to the relevant BIS code specifications.

- i. All expenditure required to be incurred for taking the samples conveyance, packing shall be borne by the contactor himself.
- ii. The failed material shall be removed from the site by the contractor at his own cost within a week time of written order of the Engineer-in-charge.

29.3 Setting of Site Laboratories:

Contractors shall set up a laboratory at site before commencement of work at their cost for performing various tests and at least the following machines and equipments shall be provided therein—

- 1. Set of Sieves as per I.R.C. /I.S.
- 2. Compressive Testing Machine(For new works)

- 3. Oven, Electrically Operated
- 4. Weighing Balance (20 kg capacity)
- 5. 3 m straight edge
- 6. Sieve shaker
- 7. First Aid Box
- 8. Measuring Jar (for silt content)
- 9. Other Machines/apparatus as may be directed by the Engineer-
- 10. Vernier Caliber

11. Level / Theodolite

All the test records shall be maintained in the site office and made available as and when required. The laboratory must be established within 15 days from the date of receipt of the orders from Engineer In charge. On failure to do so, a penalty of Rs 1000/- per day shall be imposed.

The contractor shall install testing equipment at site. The contractor shall ensure and certify the ealibration of the equipment so installed and shall maintain the same in working order throughout the period of construction. The contractor shall also provide necessary technically qualified experienced trained staff for carrying out such tests for using such equipment. The tests shall be carried out under the supervision of the Engineer-in-charge. The calibration shall be checked every twelve months as directed by Engineer-in-charge.

30. Correction of Defects noticed during the Defects Liability Period.

- 30.1 (a) The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and ends after five years. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- (b) Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice.
- (c) The Engineer may issue notice to the Contractor to carry out removal of defects or deficiencies, if any, noticed in his inspection, or brought to his notice. The Contractor shall remove the defects and deficiencies within the period specified in the notice and submit to the Engineer a compliance report.

31. Uncorrected Defects and Deficiencies

31.1 If the Contractor has not corrected a Defect pertaining to the Defect Liability Period under clause and deficiencies in maintenance, to the satisfaction of the Engineer, within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect or deficiency corrected, and the Contractor shall pay this amount, on correction of the Defect or deficiency by another agency.

D. Cost Control

32. Variations

The Engineer shall, having regard to the scope of the Works and the sanctioned estimated cost, have power to order, in writing, Variations within the scope of the Works he considers necessary or advisable during the progress of the Works. Such Variations shall form part of the Contract and the Contractor shall carry them out and include them in updated Programmes produced by the Contractor. Oral orders of the Engineer for Variations, unless followed by written confirmation, shall not be taken into account.

33. Payments for Variations

- 33.1 If rates for Variation items are specified in the Bill of Quantities, the Contractor shall carry out such work at the same rate.
- 33.2 The rate for Extra/Excess shall be governed by clause 10.A of Standard General Condition of Contract

34. Cash Flow Forecasts

When the Programme is updated, the Contractor shall provide the Engineer with an updated cash flow forecast.

35. Payment Certificates

The payment to the Contractor will be as follows for construction work:

- In-charge for all works executed in the previous month, and the Engineer In-charge shall take or cause to be taken requisite measurement for the purpose of having the same verified and the claim, so far as it is admissible, shall be adjusted, if possible, within 10 days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer In-charge may depute a subordinate to measure up the said work in the presence of the contractor or his duly authorized agent whose counter signature to the measurement list shall be sufficient warrant, and Engineer In-Charge may prepare a bill from such list which shall be binding on the contractor in all respects.
- **b.** The Engineer shall check the Contractor's fortnightly/monthly statement within 14 days and certify the amount to be paid to the Contractor.
- **c.** The value of work executed shall be determined, based on measurements by the Engineer.
- **d.** The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- **e.** The value of work executed shall also include the valuation of Variations and Compensation Events.

f. The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information. (g) The contractor shall submit all bills on the printed forms at the office of Engineer In-charge. The charges to be made in the bills shall always be entered at the rates specified in tender.

Payment as per condition in general specifications

36. Payments

- 36.1 Payments shall be adjusted for deductions for advance payments, retention, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Engineer within 15 days of the date of each certificate.
- 36.2 All sums payable by a contractor by way of compensation under any of these conditions, shall be considered as a reasonable compensation to be applied to the use of MCGM without reference to the actual loss or damage sustained and whether any damage has or has not been sustained.
- 36.3 No payment shall be made for any work estimated to cost less than Rupees One Thousand till after the whole of work shall have been completed and the certificate of completion given. But in the case of works estimated to cost more than Rs. One Thousand, the contractor shall on submitting a monthly bill therefore be entitled to receive payment proportionate to the part of the work than approved and passed by the Engineer In-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actual done and completed and shall not preclude the Engineer In-charge from requiring any bad, unsound, imperfect or unskillful work to be removed or taken away and reconstructed or reerected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the offering of any claim not shall it conclude, determine or effect in any other way, the powers of the Engineer In-charge as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or effect the contract. The final bill shall be submitted by the Contractor within one month of the date fixed for the completion of the work otherwise the Engineer In-charge's certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.
- **37.** The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor for not having given early warning or not having cooperated with the Engineer.

38. Tax

All taxes, duties, cess and charges such as Octroi, Service Tax, Terminal or Sales Tax, VAT etc. and other duties on material obtained for the work from any source including the tax applicable as per Maharashtra Sales Tax Act, on the transfer of property in goods involved in the execution of work

contract (re-enacted) Act 1989 or as amended shall be borne by tenderer. The tenderer will not be reimbursed the taxes, duties, cess and charges whether now in force or that may be enforced in future.

Rates accepted by MCGM shall hold good till completion of work and no additional individual claim shall be admissible on account of fluctuations in market rates; increase in taxes/any other levies/tolls etc. except that payment/recovery for overall market situation shall be made as per Price Variation.

39. Currencies

All payments will be made in Indian Rupees.

40. Liquidated Damages

Both, the Contractor and the Employer have agreed that it is not feasible to precisely estimate the amount of losses due to delay in completion of works and the losses to the public and the economy, therefore, both the parties have agreed that the Contractor shall pay liquidated damages to the Employer and not by way of penalty, at the rate per week or part thereof stated in the Contract Data for the period that the Completion Date is later than the Intended Completion Date. Liquidated damages at the same rates shall be withheld if the Contractor fails to achieve the milestones prescribed in the Contract Data. However, in case the Contractor achieves the next milestone, the amount of the liquidated damages already withheld shall be restored to the Contractor by adjustment in the next payment certificate. The Employer and the contractor have agreed that this is a reasonable agreed amount of liquidated damage. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's other liabilities.

41. Cost of Repairs

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at his cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

42. Completion of Construction and Maintenance

42.1 The Contractor shall request the Engineer to issue a certificate of completion of the construction of the works, and the Engineer will do so upon deciding that the works is completed. This shall be governed as per clause no. 8(g) of Standard General Conditions of Contract.

43. Taking Over

43.1 The Employer shall take over the works within seven days of the Engineer issuing a certificate of completion of works. The Contractor shall continue to remain responsible for its routine maintenance during the maintenance period if specified in the contract.

44. Final Account

Final joint measurement along with the representatives of the contractor should be taken recorded and signed by the Contractors. Contractors should submit the final bill within 1 month of physical completion of the work.

If the contractor fails to submit the final bill within 1 month, the MCGM staff will prepare the final bill based on the joint measurement within next 3 months.

Engineer's decision shall be final in respect of claims for defect and pending claims against contractors.

No further claims should be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bills in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by the Commissioner shall be made within a reasonable period as may be necessary for the purpose of verification etc.

After payment of the final bill as aforesaid has been made, the contractor may, if he so desires, reconsider his position in respect of a disputed portion of the final bills and if he fails to do so within 84 days, his disputed claim shall be dealt with as provided in the contract.

A percentage of the retention money, over and above the actual retention money as indicated below shall be held back from payments till the finalization of final bill to be submitted as per above and will be paid within 30 days of acceptance of the final bill.

Sr.	Amount of Contract Cost	Minimum Payable Amount in final
no.		bill-
1	Upto Rs.5 Crs.	Rs.10 Lacs or final bill whichever is
		more-
2	Upto Rs.25 Crs.	Rs.1 Crore or final bill amount
	_	whichever is more
3-	Upto Rs. 50 Crs.	Rs.2 Crores or final bill amount
		whichever is more
4	Upto Rs.100 Crs.	Rs.4 Crore or final bill amount
		whichever is more-
5-	More than Rs.100 Crs	Rs.7 Crore or final bill amount
		whichever is more-

The contractor have to submit the bill for the work carried out within 15 days from the date of completion of the work to the respective executing department. If the contractor fails to submit their bills to concerned executing department, penalty or action as shown below will be taken for each delayed bill:-

After 15 days from the date of	Equal to 5% of bill amount
completion/running bill up to certain date,	
up to next 15 days i.e. up to 30 days	
Next 15 days up to 45 days from the date	Equal to 10% of bill amount
of completion/running bill up to specified	
date	
If not submitted wit in 45 days from the	Bill will not be admitted for
date of completion/ R.A. bill	payment.

45. Operating and Maintenance Manuals

- 45.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
- 45.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

46. Termination

- 46.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 46.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - a. the Contractor stops work for 30 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
 - b. the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
 - c. the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
 - d. the Contractor does not maintain a Security, which is required;
 - e. ethe Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in relevant clause.
 - f. the Contractor fails to provide insurance cover as required under relevant clause.
 - g. if the Contractor, in the judgment of the Employer, has engaged in the corrupt or fraudulent practices as defined in GCC in competing for or in executing the Contract.
 - h. if the Contractor fails to set up a field laboratory with the prescribed equipment, within the period specified in the Contract Data; and
 - i. any other fundamental breaches as specified in the Contract Data.
 - j. if the Contractor fails to deploy machinery and equipment or personnel as specified in the Contract Data at the appropriate time.
- 46.3 When either party to the contract gives notice of a breach of contract to the Engineer for a cause other than those listed above, the Engineer shall decide whether the breach is fundamental or not.
- 46.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

46.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

47. Payment upon Termination

47.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for value of the work done and materials ordered less liquidated damages, if any, less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the Contract Data. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered from the security deposit, and performance security. If any amount is still left unrecovered it will be a debt due from the Contractor to the Employer

47.2 If the Contract is terminated at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract, and less taxes due to be deducted at source as per applicable law.

48. Property

48.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer for use for completing balance construction work if the Contract is terminated because of the Contractor's default, till the Works is completed after which it will be transferred to the Contractor and credit, if any, given for its use.

49. Release from Performance

If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

E. Other Conditions of Contract

50. Labour

50.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

50.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the number of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

51. Compliance with Labour Regulations

- a. During continuance of the Contract, the Contractor and his sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority.
- **b.** Furthermore, the Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance guarantee. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.
- **c.** The Contractor shall require his employees to obey all applicable laws, including those concerning safety at work.
- **d.** The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

52. Drawings and Photographs of the Works

- 52.1 The Contractor shall do photography/video photography of the site firstly before the start of the work, secondly mid-way in the execution of different stages of work as required by Engineer Incharge and lastly after the completion of the work. No separate payment will be made to the Contractor for this.
- 52.2 The Contractor shall not disclose details of Drawings furnished to him and works on which he is engaged without the prior approval of the Engineer in writing. No photograph of the works or any part thereof or plant employed thereon, except those permitted under above clause, shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his sub-Contractors without the prior approval of the Engineer in writing. No photographs/ Video photography shall be published or otherwise circulated without the approval of the Engineer in writing.

53. The Apprentices Act, 1961

The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961), the rules made there under and the orders that may be issued from time to time under the said Act and the

said Rules and on his failure or neglect to do so, he shall be subject to all liabilities and penalties provided by the said Act and said Rules.

54 Contract Document

The documents forming the contract are to be taken as mutually explanatory of one another. Unless otherwise provided in the contract, the priority of the documents forming the contract shall be, as follows:

- 1) Contract Agreement (if completed)
- 2) The letter of Acceptance
- 3) The Bid:
- 4) Addendum to Bid; if any
- 5) Tender Document
- 6) The Bill of Quantities:
- 7) The Specification:
- 8) Detailed Engineering Drawings
- 9) Standard General Conditions of Contracts (GCC)
- 10) All correspondence documents between bidder/contractor and MCGM.

55. Conflict of Interest

The Applicant shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Applicant found to have a Conflict of Interest shall be disqualified. An Applicant shall be deemed to have a Conflict of Interest affecting the Bidding Process, if

- 1. A constituent of such Applicant is also a constituent of another Applicant; or
- 2. Such Applicant has the same legal representative for purposes of this Application as any other Applicant; or
- 3. Such Applicant, or any Associate thereof has a relationship with another Applicant, or any Associate thereof, directly or through common third party/ parties, that puts either or both of them in a position to have access to each other's information about, or to influence the Application of either or each other; or
- 4. The Applicant shall be liable for disqualification if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Applicant, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Applicant, its Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this TENDER. Nor will this

disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the Project.

56. Applications and costs thereof

No Applicant shall submit more than one Application for the Project. An applicant applying individually shall not be entitled to submit another application either individually. The Applicant shall be responsible for all of the costs associated with the preparation of their Applications and their participation in the Bid Process. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

57. Acknowledgment by Applicant

It shall be deemed that by submitting the Application, the Applicant has:

- a. made a complete and careful examination of the tender;
- **b.** received all relevant information requested from the Authority;
- **c.** accepted the risk of inadequacy, error or mistake in the information provided in the tender or furnished by or on behalf of the Authority relating to any of the matters referred; and
- **d.** Agreed to be bound by the undertakings provided by it under and in terms hereof.

"The Authority" shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the TENDER or the Bidding Process, including any error or mistake therein or in any information or data given by the Authority.

58. Right to accept or reject any or all Applications/ Bids

Notwithstanding anything contained in this TENDER, "The Authority" reserves the right to accept or reject any Application and to annul the Bidding Process and reject all Applications/ Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore. In the event that the Authority rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder.

"The Authority" reserves the right to reject any Application and/ or Bid if:

- (a) at any time, a material misrepresentation is made or uncovered, or
- (b) the Applicant does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Application.

In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof including the concession thereby granted by "The Authority", that one or more of the pre-qualification conditions have not been met by the Applicant, or the Applicant has made material misrepresentation or has given any materially incorrect

or false information, the Applicant shall be disqualified forthwith if not yet appointed as the Successful Bidder either by issue of the LOA (Letter of Approval) or entering into of the Agreement, and if the Applicant has already been issued the LOA or has entered into the Concession Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this TENDER, be liable to be terminated, by a communication in writing by "The Authority" to the Applicant, without the Authority being liable in any manner whatsoever to the Applicant and without prejudice to any other right or remedy which the Authority may have under this TENDER, the Bidding Documents, the Concession Agreement or under applicable law.

"The Authority" reserves the right to verify all statements, information and documents submitted by the Applicant in response to the TENDER. Any such verification or lack of such verification by the Authority shall not relieve the Applicant of its obligations or liabilities hereunder nor will it affect any rights of the Authority there under.

59 The bid shall be rejected if the bidder-

- **A.** Stipulates the validity period less than 180 days.
- **B.** Stipulates own condition/conditions.
- C. Does not fill and (digital) sign undertaking forms, which are incorporated, in the document.

60 Clarifications

Applicants requiring any clarification on the tender may notify "the Authority" in writing or by fax or e-mail. They should send in their queries before the date specified in the header data. "The Authority" shall Endeavor to respond to the queries within the period specified therein. The responses will be sent by fax and/or e-mail. The Authority will forward all the queries and its responses thereto, to all purchasers of the TENDER without identifying the source of queries.

"The Authority" shall Endeavor to respond to the questions raised or clarifications sought by the Applicants. However, the Authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring the Authority to respond to any question or to provide any clarification, but not later than the date provided in header data.

"The Authority" may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Applicants. All clarifications and interpretations issued by the Authority shall be deemed to be part of the tender. Verbal clarifications and information given by Authority or its employees or representatives shall not in any way or manner be binding on the Authority.

61 Amendment of tender

At any time prior to the deadline for submission of Application, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by an Applicant, modify the tender by the issuance of Addendum.

Any Addendum thus issued will be sent in writing/ Fax/ Email to all those who have purchased the tender.

In order to afford the Applicants a reasonable time for taking an Addendum into account, or for any other reason, the Authority may, in its sole discretion, extend the Application Due Date.

Preparation and Submission of Application

62. Language

The Application and all related correspondence and documents in relation to the Bidding Process shall be in English language. Supporting documents and printed literature furnished by the Applicant with the Application may be in any other language provided that they are accompanied by translations of all the pertinent passages in the English language, duly authenticated and certified by the Applicant. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Application, the English language translation shall prevail.

63 Format and signing of Application

The Applicant shall provide all the information sought under this TENDER. The Authority will evaluate only those Applications that are received in the required formats and complete in all respects. Incomplete and /or conditional Applications shall be liable to rejection.

The Applicant will upload bid in One Folder in electronic form which shall contain the scanned certified copies of the documents given below and the documents uploaded has to be digitally signed by the bidder. These copies shall be certified by Practicing Notary approved by the Govt. of Maharashtra or Govt. of India with his stamp, clearly stating his name & registration number, except where original documents are demanded

64. Marking of Applications

The Applicant shall submit the Application in the format specified at Appendix-I, together with the documents, upload in folder as "VENDOR" together with their respective enclosures

Applications submitted by fax, telex, telegram shall not be entertained and shall be rejected outright.

65 Late Applications

Applications received by the Authority after the specified time on the Application Due Date shall not be eligible for consideration and shall be summarily rejected.

66. Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the short-listed qualified Applicants shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising the Authority in relation to or matters arising out of, or concerning the Bidding Process. The Authority will treat all information, submitted as part of Application, in confidence and will require all those who have access to such material to

treat the same in confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Authority or as may be required by law or in connection with any legal process.

67. Clarification Of Financial Bids

To assist in the examination, evaluation and comparison of Bids, the Engineer may, at his discretion, ask any bidder for clarification of his Bid, including breakdown of unit rates. The request for clarification and the response shall be in writing or by post/facsimile/e-mail. No Bidder shall contact the Engineer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. Any effort by the Bidder to influence the Engineer in the Engineer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

68 Inspection of site and sufficiency of tender:

- 1. The Contractor shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the quantities and nature of the work and materials necessary for the completion of the works and means of access to the site, the accommodation he may require and in general shall himself obtain all necessary information as to risk, contingencies and other circumstances which may influence or affect his tender. He shall also take into consideration the hydrological and climatic conditions.
- 2. The Employer may make available to the Contractor data on hydrological and sub-surface conditions as obtained by or on his behalf from investigations relevant to the works but the Contractor shall be responsible for his own interpretation thereof. The contractor shall engage his investigating agency with prior approval of the Engineer from the approved list of such agencies by MCGM or Govt. at his cost initially before commencing actual work and which shall be reimbursed immediately subject to satisfaction of the Engineer for faithful compliance and submission of required data regarding such investigation within specified time.
- 3. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of works / items / quantities, or in Bill of Quantities, which rates and prices shall, except as otherwise provided cover all his obligations under the Contract and all matters and things necessary for proper completion and maintenance of the works. No extra charges consequent on any misunderstanding.
- 4. **Not Foreseeable Physical Obstructions or Conditions:** If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic conditions on the Site, which obstructions or conditions were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have

been reasonably foreseen by an experienced contractor, after due consultation with the Contractor, determine:

- any extension of time to which the Contractor is entitled and
- The amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price.
- and shall notify the Contractor accordingly. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer. However such costings shall be got approved by the competent authority as governed vide rules prevailing with authority.

5. Office for the Engineer (Works costing up to Rs.50 Lakhs)

The Contractor shall at his own cost and to satisfaction of the Engineer provide a small temporary office, at the work-site which will include tables, chairs and lockers for keeping the records. He shall also make necessary arrangements for drinking water, telephone with a pre-requisite of e-governance and electronic communication. These offices are not to be allowed on public roads without the written instruction of the Engineer. These offices should be preferably located within 50 to 500 m of the worksite. In case the office is more than 500m away from the worksite, the contractor is to provide conveyance for Municipal Staff.

6. Office for the Engineer (Works costing above Rs.50 lakhs)

The Contractor shall at his own cost and to satisfaction of the Engineer provide a temporary office at the work-site which will include tables, chairs and lockers for keeping the records. He shall also make necessary arrangements for drinking water, latrines, with doors, windows, locks, bolts and fastenings sufficient for security for the Engineer, and his subordinates, as close to the works from time to time in progress as can be conveniently arranged, and shall at his own cost furnish the office with such ehairs, tables, lockers, locks and fastenings as may be required by the Engineer, and no expense of any kind in connection with the erection or upkeep of the offices or fittings shall be borne by the Corporation, but all such work shall be earried out by the Contractor and the expenses thereof defrayed by him. The Contractor shall also make water connections and fit up stand pipe with a bib tap at each office. The latrines and the water connections shall be subject to all the conditions herein elsewhere laid down for temporary water connection and latrines generally with all requisite equipments for e-governance and electronic and digital communication. These offices are not to be allowed on public roads without the written instruction of the Engineer. These offices should be preferably located within 50 to 500 m of the worksite. In case the office is more than 500m away from the worksite, the contractor is to provide conveyance. Also, for staff working beyond working hours the contractor has to provide conveyance.

- 7. Permission for provision and removal of office on completion of work: The tenderer shall obtain permission for provision of site office, cement go-down, store, etc. on payment of necessary cost implication. The cement go-down, Watchman cabins, etc. shall be provided as directed and shall be removed by the Tenderers on completion of the work at their cost. It is binding on the Tenderer to fulfill requirements of Environmental Authorities. The location of such office shall be finalized and got approved from the Engineer before crection/commencement work.
- 8. Contractor's office near works: The Contractor shall have an office near the works at which notice from the Commissioner or the Engineer may be served and shall, between the hours of sunrise and sunset on all working days, have a clerk or some other authorized person always present at such office upon whom such notices may be served and service of any notices left with such clerk or other authorized person or at such office shall be deemed good service upon the Contractor and such offices shall have pre-requisite facilities for e-governance.

69. Official Secrecy:

The Contractor shall of all the persons employed in any works in connection with the contract that the India Official Secrets Act 1923 (XIX of 1923) applies to them and will continue to apply even after execution of the said works and they will not disclose any information regarding this contract to any third party. The contractor shall also bring into notice that, any information found to be leaked out or disclosed the concern person as well as the Contractor will be liable for penal action; further the Corporation will be at liberty to terminate the contract without notice.

70. Subsequent Legislation:

If on the day of submission of bids for the contract, there occur changes to any National or State stature, Ordinance, decree or other law or any regulation or By-laws or any local or other duly constituted authority or the introduction of any such National or State Statute, Ordinance, decree or by which causes additional or reduced cost to the Contractor, such additional or reduced cost shall, after due consultation with the Contractor, be determined by the concerned Engineering Department of MCGM and shall be added to or deducted from the Contract Price with prior approval of competent authority and the concerned Engineering Department shall notify the Contractor accordingly with a copy to the Employer. MCGM reserve the right to take decision in respect of addition/reduction of cost in contract.

71. Patent, Right and Royalties:

The contractor shall save harmless and indemnify the Corporation from and against all claims and proceedings for or on account of infringement of any Patent rights, design trademark or name of other protected rights in respect of any constructional plant, machine work, or material used for or in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the contractor shall pay all tonnage and other royalties, rent and other payments

or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the works or any of them.

72. Payments, Tax and Claims:

•—The limit for unforeseen claims

Under no circumstances whatever the contractor shall be entitled to any compensation from MCGM on any account unless the contractor shall have submitted a claim in writing to the Eng-in-change within 1 month of the case of such claim occurring.

•—No interest for delayed payments due to disputes, etc:

It is agreed that the Municipal Corporation of Greater Mumbai or its Engineer or Officer shall not be liable to pay any interest or damage with respect of any moneys or balance which may be in its or its Engineer's or officer's hands owing to any dispute or difference or claim or misunderstanding between the Municipal Corporation of Greater Bombay or its Engineer or Officer on the one hand and the contractor on the other, or with respect to any delay on the part of the Municipal Corporation of Greater Bombay or its Engineer or Officers in making periodical or final payments or in any other respect whatever.

73. Settlement of Disputes:

•—Termination of contract for death

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the legal representative of the individual Contractor or the proprietor of the proprietary concern and in case of partnership, the surviving partners, are capable of carrying out and completing the contract, the Commissioner shall be entitled to cancel the contract as to its uncompleted part without the Corporation being in any way liable to payment of any compensation to the estate of the deceased Contractor and or to the surviving partners of the Contractor's firm on account of the cancellation of the contract. The decision of the Contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation the Commissioner shall not hold estate of the deceased Contractor and or surviving partners of the Contractor's firm liable in damages for not completing the contract.

Settlement of Disputes:

If any dispute or differences of any kind whatsoever other than those in respect of which, the decision of any person is, by the Contract, expressed to be final and binding) shall arise between the Employer and the Contractor or the Engineer and the Contractor in connection with or arising out of the Contract or carrying out of the Works (Whether during the progress of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract) it, the aggrieved party may refer such dispute within a period of 7 days to the concerned Addl. Municipal Commissioner who shall constitute a committee comprising of three officers i.e. concerned Deputy

Municipal Commissioner or Director (ES&P), Chief Engineer other than the Engineer of the Contract and concerned Chief Accountant. The Committee shall give decision in writing within 60 days. Appeal on the Order of the Committee may be referred to the Municipal Commissioner within 7 days. Thereafter the Municipal Commissioner shall constitute a Committee comprising of three Addl. Municipal Commissioners including Addl. Municipal Commissioner in charge of Finance Department. The Municipal Commissioner within a period of 90 days after being requested to doso shall give written notice of committee's decision to the Contractor. Save as herein provided such decision in respect of every matter so referred shall be final and binding upon both parties until the completion of the works, and shall forthwith be given effect to by the Contractor who shall proceed with the works with due diligence, whether he requires arbitration as hereinafter provided or not. If the Commissioner has given written notice of the decision to the Contractor and no Claim to arbitration has been communicated within a period of 90 days from receipt of such notice the said decision shall remain final and binding upon the Contractor.

74. Arbitration and Jurisdiction:

If the Commissioner shall fail to give notice of the decision as aforesaid within a period of 90 days after being requested as aforesaid, or if the Contractor be dissatisfied with any such decision, then and in any such case the Contractor may within 90 days after receiving notice of such decision or within 90 days after the expirations of the first named period of 90 days (as the case may be) require that the matter or matters in dispute be referred to arbitration as herein after provided. All disputes or differences in respect of which the decision (if any) of the Commissioner has not become final and binding as aforesaid shall be finally settled by

Arbitration as follows:

Arbitration shall be effected by a single arbitrator agreed upon the parties. The arbitration shall be conducted in accordance with the provisions of the Arbitration Act, 1996 or any statutory modifications thereof, and shall be held at such place and time within the limits of Brihan Mumbai as the arbitrator may determine. The decision of the arbitrator shall be final and binding upon the parties hereto and the expense of the arbitration shall be paid as may be determined by the arbitrator. Performance under the Contract shall, if reasonably be possible, continued during the arbitration proceedings and payment due to the Contractor by the Employer shall not be withheld unless they are the subject matter of arbitration proceedings. The said arbitrator shall have full power to open up, review and revise any decision, opinion, direction, certification or valuation of the Commissioner and neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the Commissioner for the purpose of obtaining his said decision. No decision given by the Commissioner in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator on any matters whatsoever relevant to the disputes or difference referred to the arbitrator as aforesaid. All awards shall be in writing and for claims equivalent to 5,00,000 or more such awards shall state reasons for amounts awarded. The expenditure of arbitration shall be paid as may be determined by arbitrator.

In case of any claim, dispute or difference arising in respect of a contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only.

75 Copyright:

The copyright of all drawings and other documents provided by the Contractor under the contract shall remain vested in the Contractor or his sub-contractors as the case may be the employer shall have a license to use such drawings and other documents in connection with the design, construction, operation, maintenance of the works. At any time the Employer shall have further license without additional payment to the Contractor to use any such drawings or documents for the purpose of making any improvement of the works or enlargement or duplication of any part thereof, provided that such improvement, enlargement, or duplication by itself or in conjunction with any other improvements, enlargements or duplications already made in accordance with the further license does not result in the duplication of the whole works.

76. Receipts to be signed in firm's name by any one of the partners:

Every receipt for money which may become payable or for any security which may become transferable to the Contractor under these present shall, if signed in the partnership name by any one of the partners, be a good and sufficient discharge to the Commissioner and Municipal Corporation in respect of the money or security purporting to be acknowledged thereby, and in the event of death of any of the partners during the pendency of this contract, it is hereby expressly agreed that every receipt by any one of the surviving partners shall, if so signed as aforesaid, be good and sufficient discharge as aforesaid provided that nothing in this clause contained shall be deemed to prejudice or effect any claim which the Commissioner or the Corporation may hereafter have against the legal representatives of any partners so dying or in respect of any breach of any of the conditions thereof, provided also that nothing in this clause contained shall be deemed prejudicial or affect the respective rights or obligations of the Contractors and of the legal representatives of any deceased Contractors interest.

77 Proprietary data

All documents and other information supplied by the Authority or submitted by an Applicant to the Authority shall remain or become the property of the Authority. Applicants are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Application. The Authority will not return any Application or any information provided along therewith.

78. Correspondence with the Applicant

Save and except as provided in this TENDER, the Authority shall not entertain any correspondence with any Applicant in relation to the acceptance or rejection of any Application.

79. Price Variation Clause

The Contractor shall be reimbursed or shall refund to the Corporation as he case may be the variation in the value of the work carried out from time to time, depending on whether the prices of material and labour as a whole rise or fall, and the method adopted for such computations shall be as given below, it being clearly understood that the contractor shall have no claim for being reimbursed on the ground that the price of a particular material or group of materials have risen beyond the limits of the presumptions made in the following paras, however, no price variations shall be made applicable for contracts up to 12 months:

- A) Controlled materials: Price variations shall be permitted in respect of these materials the price level of which is controlled by the Government or its agency. The rate ruling on the date of submission of the tender shall be considered as the basic price of such material for adjustment. Any variation in this rate shall be considered for reimbursement to the contractor or refund to be claimed from the contractor as the case may be. The contractor shall, for the purpose of adjustment submit in original the relevant documents from the suppliers.
- B) Labour and other materials: For the purpose of this contract and for allowing reimbursement of refund on account of variation of prices of (i) labour, and (ii) materials other than materials mentioned in A above, computation will be based on the formula enunciated below which is based on the presumptions that:
 - **t.** The general price level of labour, rises or falls in proportion to the rise or fall of consumer price index number 9 (general) for working class in Mumbai.
 - **u.** The general price level of materials rises or falls in proportion to rise or fall of whole-sale price index as published by 'Economic Adviser to Govt. of India'.
- us. And that the component of labour is to the extent of 30 percent of 88 percent and the component of materials is to the extent of 70 percent of 88 percent of the value of the work carried out. The remaining 12 percent being the presumptive profit of the contractor.
 - a. Formula for Labour component:

$$VL = \frac{(0.88 \text{ R}) \times 30}{100 \text{ IO}} \quad X \quad \frac{(I - IO)}{}$$

b. Formula for Material component:

$$VM = \frac{(0.88 \text{ R x 70 - C})}{100} \quad X \quad W-WO)$$

Where -

VL = Amount of price variation to be reimbursed or claimed as refund on account of general rise or fall of index referred to above.

I = Consumer Price Index number of working class for Mumbai (declared by the Commissioner of Labour and Director of Employment, Mumbai) applicable to the period under reference (base year ending 2004-05 as 100 i.e. new series of indices).

IO = Consumer price index number for working class for Mumbai (declared by the Commissioner of labour and Director of Employment, Mumbai) prevailing, on the day of 28 days prior to the date of submission of the tender.

VM = The amount of price variation to be reimbursed or claimed as refund on account of general rise or fall of wholesale price index for period under reference.

W = Average wholesale price index as published by Economic Adviser to Govt. of India applicable to the period under reference.

WO = Wholesale price index as stated above prevailing on the day of 28 days prior to the date of submission of the tender.

R = Total value of the work done during the period under reference as recorded in the Measurement Book excluding water charges and sewerage charges but including cost of excess in respect of item upto 50 percent

C = Total value of Controlled materials used for the works as recorded in Measurement Book and paid for at original basic rate plus the value of materials used.

- i. The quantity of the Controlled material adopted in working out the value of 'C' shall be inclusive of permitted wastages as / if mentioned in specifications.
- ii. The basic rate for the supply of controlled material shall be inclusive of all the components of cost of materials excluding transport charges incurred for bringing the material from place of delivery to the site.

Computations based on the above formula will be made for the period of each bill separately and reimbursement will be made to (when the result is plus) and refund will claimed from (when the result is minus) the contractor's next bill. The above formulae will be replaced by the formulae in Annexure-I as and when mentioned in special conditions of contract

The operative period of the contract for application of price variation shall mean the period commencing from the date of commencement of work mentioned in the work order and ending on the date when time allowed for the work order and ending on the date when time allowed for the work specified in the contract for work expires, taking into consideration, the extension of time, if any, for completion of the work granted by Engineer under the relevant clause of the conditions of contract in cases other than those where such extension is necessitated on account of default of the contractor.

The decision of the Engineer as regards the operative period of the contract shall be final and binding on the contractors.

- iii. Where there is no supply of controlled items to contractor the component 'C' shall be taken as zero.
- C) Adjustment after completion: If the Contractor fails to complete the works within the time for completion adjustment of prices thereafter until the date of completion of the works shall be made using either the indices or prices relating to the prescribed time for completion, or the current indices or prices whichever is more favorable to the employer, provided that if an extension of time is granted, the above provision shall apply only to adjustments made after the expiry of such extension of time.
- D) Price variation will be calculated similarly and separately for extra items and / or excess quantities and provisional sums calculated under Sub Clause 10 (b)A (i)&(ii) and Sub Clause 10 (b) B(ii) based on the above formula/formulae in Annexure-I as and when mentioned in Special conditions of contract; IO and WO being the indices applicable to the date on which the rates under Sub Clause 10 (a)A (i)&(ii) and Sub Clause 10 (a) B(iii) are fixed. No price variation shall be admissible for FAIR items created during execution.

80. Maximum Price Variation shall be as follows:

Time Period of Project	Maximum limit of Price Variation
Up to 12 months	No variation allowed
Above12 months to 24	5%
months	
Above 24 months	10%

^{*}Approval of AMC/MC shall be obtained before invitation of tender in case of any changes in above.

Note:

- 1) The extension in time period for the projects originally estimated including monsoon results in change of price variation slabs as mentioned above i.e.from first slab to second slab or from second slab to third slab, then the maximum limit of original slab will prevail.
- 2) Operative period shall mean original or extended time period of contract.

For example:

Extension of Time period	Maximum Price Variation
If original period of 11 months	No variation allowed
including monsoon extends to 16.	
The operative period will be 11+5	
months.	
If original period of 11 months	Maximum 5% variation
excluding monsoon extends to 16.	allowed
The operative period will be 11+5	
months.	

Price Variation during Extended Period of Contract:

i. Extension Due To Modification & Extension for delay due to MCGM:

The price variation for the period of extension granted shall be limited to the amount payable as per the Indices. In case the indices increases or decreases, above/below the indices applicable, to the last month of the original or extended period vide clause8(l)(a)(i) and (ii) of standard GCC

- ii. Extension Of Time For Delay Due To Contractor:
 - a. The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increase, above the indices applicable, to the last month of the original completion period or the extended period vide above clause 8(l)(a)(i) and (ii) of standard GCC.
 - b. The price variation shall be limited to the amount payable as per the indices, in case the indices decrease or fall below the indices applicable, to the last month of original / extended period of completion period vide above clause 8(l)(b) of standard GCC, then lower indices shall be adopted.
- iii. Extension of Time For Delay due to reasons not attributable to MCGM and Contractor (Reference Cl.8(d) of Standard GCC):

The price variation for the period of extension granted shall be limited to the amount payable as per the Indices in case the indices increases or decreases, above/below the indices applicable, to the last month of the original period.

81. Payment:

Interim Payment:

- i. Interim bills shall be submitted by the Contractor from time to time (but at an interval of not less than one month) for the works executed. The Engineer shall arrange to have the bill s verified by taking or causing to be taken, where necessary, the requisite measurement of work.
- ii. Payment on account for amount admissible shall be made on the Engineer certifying the sum to which the Contractor is considered entitled by way of interim payment for all the work executed, after deducting there from the amount already paid, the security deposit / retention money and such other amounts as may be deductible or recoverable in terms of the contract.
- iii. On request, the contractor will be paid upto 75 percent of the value of the work carried out as an adhoc payment in the first week of next month after deducting there from recoveries on account of advances, interest, retention money, income tax etc. The balance payment due will be paid thereafter.

- iv. No interim payment will be admitted until such time the Contractor have fully complied with the requirement of the Condition no.8 (g) and 8 (h) concerning submission and approval of Network Schedule for the works, as detailed in Condition 8 (h). A fixed sum shall be held in abeyance at the time of next interim payment for non-attainment of each milestone in the network and shall be released only on attainment of the said milestone.
- v. An interim certificate given relating to work done or material delivered may be modified or corrected by a subsequent interim certificate or by the final certificate. No certificate of the Engineer supporting an interim payment shall of itself be conclusive evidence that any work or materials to which it relates is / are in accordance with the contract.

82. Banning/De-Registration of Agencies of Construction works / SITC of M&E Works in MCGM

The regulations regarding Demotion/ Suspension Banning for specific period or permanently / De-Registration shall be governed as per the respective condition in Contractor Registration Rules of MCGM.

83. JOINT VENTURE

In case if Joint Venture is allowed for the Project, the guidelines for JV as follows shall be incorporated in the Tender Document:

- a. Joint Venture should be allowed only when the number of identifiable different works is more than one and/or the estimated cost of tender is more than Rs.100 Crores. JV shall also be allowed for complex technical work below Rs.100 Crores with the approval of con-cerned AMC
- b. Separate identity/name shall be given to the Joint Venture firm.
- e. Number of members in a JV firm shall not be more than three in normal circumstances, if the work involves only one discipline (say Civil or Electrical). If number of members in JV is required to be more than three, then approval of concerned AMC needs to be sought.
- d. A member of JV firm shall not be permitted to participate either in individual capacity or asa member of another JV firm in the same tender.
- e. The tender form shall be purchased and submitted in the 'name of the JV firm or any constituent member of the JV.
- f. Normally EMD shall be submitted only in the name of the JV and not in the name of constituent member. However, EMD in the name of lead partner can be accepted subject to submission of specific request letter from lead partner stating the reasons for not submitting the EMD in the name of JV and giving written confirmation from the JV partners to the effect that the EMD submitted by the lead partner may be deemed as EMD submitted by JV firm.

- g. One of the members of the JV firm shall be the lead member of the JV firm who shall have a majority (at least 51%) share of interest in the JV firm. The other members shall have a share of not less than 20% each in case of JV firms with up to three members and not less than 10% each in case of JV firms with more than three members. In case of JV firm with foreign member(s), the lead member has to be an Indian firm with a minimum share of 51%.
- h. A copy of Letter of Intent or Memorandum of Understanding (MoU) executed by the JV members shall be submitted by the JV firm along with the tender. The complete details of the members of the JV firm, their share and responsibility in the JV firm etc. particularly with reference to financial technical and other obligation shall be furnished in the agree-ment.
- i. Once the tender is submitted, the agreement shall not be modified/altered/terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited. In case of successful tenderer, the validity of this agreement shall be extended till the currency of the contract expires.
- j. Approval for change of constitution of JV firm shall be at the sole discretion of the MCGM. The constitution of the JV firm shall not be allowed to be modified after submission of the tender bid by the JV firm except when modification becomes inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. In any case the Lead Member should continue to be the Lead Member of the JV firm. Failure to observe this requirement would render the offer invalid.
- k. Similarly, after the contract is awarded, the constitution of JV firm shall not be allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get viti-ated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract condition.
- I. On award of contract to a JV firm, a single Performance Guarantee shall be required to be submitted by the JV firm as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization advance, machinery Advance etc. shall be accepted only in the name of the JV firm and no splitting of guarantees amongst the members of the JV firm shall be permitted.
- m. On issue of LOA, an agreement among the members of the JV firm (to whom the work has been awarded) has to be executed and got registered before the Registrar of the Companies under Companies Act or before the Registrar / Sub-Registrar under the Registration Act, 1908. This agreement shall be submitted by the JV firm to the MCGM before signing the contract agreement for the work. (This agreement format should invariably be part of the tender condition). In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited and other penal actions due shall be taken against partners of the JV and the JV. This joint venture agreement shall have, inter-alia, following clauses:-

- i. Joint and several liability The members of the JV firm to which the contract is awarded, shall be jointly and severally liable to the Employer (MCGM) for execution of the pro-ject in accordance with General and Special conditions of the contract. The JV members shall also be liable jointly and severally for the loss, damages caused to the MCGM during the course of execution of the contract or due to no execution of the contract or part there-of.
- ii. Duration of the Joint Venture Agreement -It shall be valid during the entire period of the contract including the period of extension if any and the maintenance period after the work is completed.
- Governing Laws The Joint Venture Agreement shall in all respect be governed by and interpreted in accordance with Indian Laws.
- Authorized Member -Joint Venture members shall authorize one of the members on behalf of the Joint Venture firm to deal with the tender, sign the agreement or enter into con-tract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said ten-der/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the JV firm.

No member of the Joint Venture firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the employer in respect of the said tender/contract.

n. Documents to be enclosed by the JV firm along with the tender:

- i. In case one or more of the members of the JV firm is/are partnership firm(s), following documents shall be submitted:
 - a) Notary certified copy of the Partnership Deed,
 - b) Consent of all the partners to enter into the Joint Venture Agreement on a stamp paper of appropriate value (in original).
 - e) Power of Attorney (duly registered as per prevailing law) in favor of one of the partners to sign the MOU and JV Agreement on behalf of the partners and cre-ate liability against the firm.
- ii. In case one or more members is/are Proprietary Firm or HUF, the following documents shall be enclosed:
 - a) Affidavit on Stamp Paper of appropriate value declaring that his Concern is a Proprietary Concern and he is sole proprietor of the Concern OR he is in posi-tion of "KARTA" of Hindu Undivided Family and he has the authority, power and consent given by other partners to act on behalf of HUF.

- iii. In case one or more members is/are limited companies, the following documents shall be submitted:
 - a) Notary certified copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement, authorizing MD or one of the Directors or Managers of the Company to sign MOU, JV Agreement, such other doc-uments required to be signed on behalf of the Company and enter into liability against the company and/or do any other act on behalf of the company.
 - b) Copy of Memorandum and articles of Association of the Company.
 - e) Power of Attorney (duly registered as per prevailing law) by the Company au-thorizing the person to do/act mentioned in the para (a) above.
 - o. All the members of the JV shall certify that they have not been black listed or debarred by MCGM from participation in tenders/contract in the past either in their individual capacity or the JV firm or partnership firm in which they were members / partners.
 - p. Credentials & Qualifying criteria: Technical and financial eligibility of the JV firm shall be adjudged based on satisfactory fulfilment of the following criteria:

Technical eligibility criteria: In case of Work involving single discipline, the Lead member of the JV firm shall meet at least 35% requirement of technical capacity as stipulated in tender document.

OR

In case of composite works (e.g. works involving more than one distinct component such as Civil Engineering works, M&E works, Electrical works, etc. and in the case of major bridges, substructure and superstructure etc.), at least one member should have satisfactorily completed 35% of the value of any one component of the project work so as to cover all the components of project work or any member having satisfactorily completed 35% of the value of work of each component during last seven financial years.

In such cases, what constitutes a component in a composite work shall be clearly defined as part of the tender condition without any ambiguity.

Financial eligibility criteria: The contractual payments received by the JV firm or the arithmetic sum of contractual payments received by all the members of JV firm in any one of the previous three financial years and shall be at least 100% of the estimated value of the work as mentioned in the tender.

84. Compensation for delay:

If the Contractor fails to complete the works and clear the site on or before the Contract or extended date(s) / period(s) of completion, he shall, without prejudice to any other right or remedy of Municipal Corporation on account of such breach, pay as agreed compensation, amount calculated as stipulated below (or such smaller amount as may be fixed by the Engineer) on the contract value of the whole work or on the contract value of the time or group of items of work for which separate period of

completion are given in the contract and of which completion is delayed for every week that the whole of the work of item or group of items of work concerned remains uncompleted, even though the contract as a whole be completed by the contract or the extended date of completion. For this purpose the term 'Contract Value' shall be the value of the work at Contract Rates as ordered including the value of all deviations ordered:

- Completion period for projects (originally stipulated or as extended) not exceeding 6 months: to the extent of maximum 1 percent per week.
- Completion period for projects (originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: to the extent of maximum ½ percent per week.
- Completion period for projects (originally stipulated or as extended) exceeding 2 years: to the extent of maximum ¹/₄ percent per week.

When the delay is not a full week or in multiple of a week but involves a fraction of a week the compensation payable for that fraction shall be proportional to the number of days involved.

Provided always that the total amount of compensation for delay to be paid this condition shall not exceed the undernoted percentage of the Contract Value of the item or group of items of work for which a separate period of completion is given.

- i. Completion period (as originally stipulated or as extended) not exceeding 6 months: 10 percent.
- ii. Completion period (as originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: 7½ percent.
- iii. Completion period (as originally stipulated or as extended) exceeding 2 years: 5 percent.

The amount of compensation may be adjusted set off against any sum payable to the contractor under this or any other contract with the Municipal Corporation.

85. Action and Compensation Payable In Case Of Bad Work and Not Done As Per Specifications

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Vigilance Department of the MCGM or any organization engaged by the MCGM for Quality Assurance and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates in-charge of the work or to the officer of Vigilance Department, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 8.e. of the general condition of contract in section 9 of tender document (for Compensation for delay) for this default. In such case the Engineer-in Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Engineer in charge may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

If the penalisation amount exceeds maximum limit with respect to Clause 8.e of Standard General Conditions of Contract, then a show cause notice shall necessarily be issued to the contract as to why the contract should not be terminated.

86. Contractors remain liable to pay compensation:

In any case in which any of the powers conferred upon the Engineer In-charge by the **relevant clauses** in documents that form a part of contract as exercised or is exercisable in the event of any future case of default by the Contractor, he is declared liable to pay compensation amounting to the whole of his security deposit. The liability of the Contractor for past and future compensation shall remain unaffected.

In the event of the Executive Engineer taking action against these **relevant clauses**, he may, if he so desires, take possession of all or any tools and plant, materials and stores in or upon the work of site thereof or belonging to the Contractor or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the Executive Engineer, may after giving notice in writing to the Contractor or his staff of the work or other authorized agent require him to remove such tools and plants, materials or stores from the premises within a time to be specified in such notice and in the event of the Contractor failing to comply with any such requisition, the Executive Engineer may remove them at the contractors expense of sell them by auction or private sell on account of the Contractor at his risk in all respects and certificate of the

Executive Engineer as to the expense of any such removal and the amount of the proceeds an expense of any such sell be final and conclusive against the Contractor.

87. No Claim To Any Payment Or Compensation Or Alteration In Or Restriction Of Work

a) If at any time after the execution of contract documents, the Engineer shall for any reason whatsoever, desires that the whole or any part of the works specified in the Tender should be suspended for any period or that the whole or part of the work should not be carried out, at all, he shall give to the Contractor a Notice in writing of such desire and upon the receipt of such notice, the Contractor shall forthwith suspend or stop the work wholly or in part as required after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury the work already done or endanger the safety thereof, provided that the decision of the Engineer as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contractor.

The Contractor shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid, on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

- b) Where the total suspension of Work Order as aforesaid continued for a continuous period exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving 10 days prior notice in writing to the Engineer within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Engineering to record the final measurement of the work already done and to pay final bill. Upon giving such Notice, the Contractor shall be deem to have been discharged from his obligations to complete the remaining unexecuted work under his contract. On receipt of such notice the Engineer shall proceed to complete the measurement and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such Notice in respect of the work already done by the contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.
- c) Where the Engineer required to Contractor to suspend the work for a period in excess of 30 days at any time or 60 days in the aggregate, the Contractor shall be entitled to apply to the Engineer within 30 days of the resumption of the work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery remained ideal on the site of on the account of his having an to pay the salary of wages and labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect of any such suspension whatsoever occasion by unsatisfactory work or any other

default on his part, the decision of the Engineer in this regard shall be final and conclusive against the contractor.

88. Contractor to supply plant, ladder, scaffolding, etc and is liable for damages arising from non provision of lights, fencing, etc.

The Contractor shall supply at his own cost all material, plant, tools, appliances, implements, ladders, cordage, tackle scaffolding and temporary works requisite or proper for the proper execution of the work, whether, in the original altered or substituted form and whether included in the specification of other documents forming part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Eng-In-Charge as to any matter as to which under these conditions is entitled to be satisfied, or which is entitled to require together with the carriage therefore to and from the work.

The Contractor shall also supply without charge, the requisite number of person with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurements of examination at any time and from time to time of the work or materials, failing which the same may be provided by the Engineer In-charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or offers sufficient portion thereof.

The contractor shall provide all necessary fencing and lights required to protect the public from accident and shall also be bound to bear the expenses of defence of every suit, action or other legal proceedings, that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such person or which may with the consent of the contractor be paid for compromising any claim by any such person.

89. Prevention of Fire:

The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit from the Engineer In-charge. When such permit is given, and also in all cases when destroying cut or dug up trees brushwood, grass, etc., by fire, the contractor shall take necessary measure to prevent such fire spreading to or otherwise damaging surrounding property. The Contractor shall make his own arrangements for drinking water for the labour employed by him.

90. Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of MCGM property including any damage caused by spreading the fire shall be estimated by the Engineer In-charge or such other officer as he may appoint and the estimate of the Engineer in-charge to the decision of the Dy. Chief Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand failing which the same will be recovered from the Contractor as damages or deducted by the Engineer Incharge from any sums that may be due or become due from MCGM to contractor under this Contract or otherwise. Contractor shall bear the expenses of defending any action or other legal proceedings

that may be brought to prevent the spread of fire and he shall pay any damages and costs that may be awarded by the Court in consequence.

91. In the case of Tender by partners, any change in the constitution of the firm shall be forthwith, notified by the contractor through the Engineer In-charge for his information.

92. Action where no specifications:

In the case of any class of work for which there is no such specifications, such works shall be carried out in accordance with the specifications and in the event of there being no such specifications, then in such case, the work shall be carried out in all respects in accordance with all instructions and requirements of the Engineer In-charge.

93. Safety and medical help:

- i. The Contractor shall be responsible for and shall pay the expenses of providing medical help to any workmen who may suffer a bodily injury as a result of an accident. If such expenses are incurred by MCGM, the same shall be recoverable from the contractor forthwith and be included without prejudice to any other remedy of MCGM from any amount due or that may become due to the Contractor.
- ii. The contractor shall provide necessary personal safety equipment and first-aid box for the use of persons employed on the site and shall maintain the same in condition suitable for immediate use at any time.
- iii. The workers shall be required to use the safety equipments so provided by the contractor and the contractor shall take adequate steps to ensure the proper use of equipments by those concerned.
- iv. When the work is carried on in proximity to any place where there is risk or drawing all necessary equipments shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.
- **94.** No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance of works, on account of ant delay in according to sanction of estimates.

95. Anti-malaria and other health measures:

Anti-Malaria and other health measures shall be taken as directed by the Executive Health Officer of MCGM. Contractor shall see that mosquitogenic conditions are created so as to keep vector population to minimum level. Contractor shall carry out anti-malaria measures in the area as per the guidelines issued by the Executive Health Officer of MCGM from time to time.

In case of default, in carrying out prescribed anti-malaria measures resulting in increase in malaria incidence, contractor shall be liable to pay MCGM on anti-malaria measures to control the situation in addition to fine.

SECTION 10 SPECIFICATIONS & SELECTION OF MATERIAL

Specifications

General Specifications

The scope of work envisaged is described as follows:

As Is Study and Network Revamp Solution Design Report

- The service provider shall submit a project implementation plan within 15 working days after Acceptance of work order. Within 3 days of the submission of the implementation plan, the service provider shall mobilize the team to conduct site survey as a part of As-Is study and Network Revamp Solution Design. Any change if suggested by the MCGM in the project plan shall be accommodated by the service provider
- The selected bidder would be required to carry out an extensive As Is study as part of site survey and submit a comprehensive Site Survey Report for individual sites to the Executive Engineer Mech. (EI) P&D duly authorised by competent authority of respective user department. The As-Is study and Solution Design report would comprise of the outcome of the site survey, As-Is Study, Solution Design Report and Site-wise Action Plan to effectively revamp the existing setup and the improvement that would be made in Client Side network. The Solution Design Report would primarily capture the Active and Passive infrastructure requirements to be used for network Revamp
- The service provider shall prepare the (I) Client side design based on (a) all data contained in the Bidding Documents, Climatic and physical conditions and (b) all criteria of design contained in the Bidding Documents
- These As-IS and Solution Design reports should be submitted to MCGM for sign off. MCGM will analyse the reports and will review the suggestions submitted by the Bidder. MCGM may undertake the procurement, for the required quantities on the unit rates quoted by the Bidder. Bidder's consultation shall be required to consult and coordinate with other vendors to ensure procurement of right equipment and smooth execution.

The current WDC and MHO Network architecture schematic is given for reference in Annexture I & II..

The following equipments (partial list) illustrated in below table will be phased out according to their End of Support date and bidder shall offer revamped (new) network components. Bidder should visit field locations to get the complete list of network component along with their End of Life and End of Support and prepare their technical proposal accordingly. Tentative removal item list is provided in below table. This list needs to be validated with actual items removed and quantity over and above should be handed over to MCGM along with details of material. Any item/s not specified into the list should also be handed over to MCGM.

Sr No	Items	Quantity
1	L2 Switch - 24 GE Ports	337
2	CAT 6 Cable per mtr	300,000
3	24 Ports Patch Panel	337
4	I/O Cat 6 Points	3,000
5	RJ 45 Connectors	3,000
6	CAT 6 Patch Cords 1 mtr	200
7	CAT 6 Patch Cords 2 mtr	200
8	CAT 6 Patch Cords 3 mtr	3,000
9	Media Convertor	50
10	Light Interface Unit (LIU) 24 Fiber Wall Mount	50
11	Cassing Capping 2 mtr (30x12)	40,000
12	Cassing Capping 1 mtr (25x12)	80,000
13	6 core Fiber Optics Cable mtr	1,000
14	Optical Fiber Connectors LC/SC (MM)	200
15	9 U Wall Mount Rack with all necessary accessories	75
16	18 U Wall Mount Rack with all necessary accessories	50
30	1 KVA UPS with 30 min backup	100

Note: The bidder shall re-use the equipment in under warrantee and support, as MCGM plans to retain these equipment while revamping the network.

There is a phasing out plan of Field level routers (Cisco 2801) by MCGM FMS service provider, as network service providers of FMS are supposed to install their own routers along with network links. Bidder to support this phase out plan for the period of this contract.

Integration with Exiting Network

- For replacing field level switches (Cisco 2850), the bidder shall carry out in-place replacement, with minimum downtime, to the branch office. The bidder shall replace patch cords at all such places where field switches are being replaced.
- The bidder has to ensure minimum downtime for MCGM network duly approved by competent authority and submit the plan for it as part of Revamped Network Design Report
- Bidder to ensure that all the fiber/copper laid shall have to be underground through proper ducting as per Standards Guidelines wherever applicable.
- As part of the preventive maintenance support services the bidder shall be required to maintain the upkeep of the networking equipment, any other maintenance job required to meet the redundancy and SLAs as stipulated in the Network Security

Network Security

- Security being one of the most important aspects for the MCGM, it would be governed by stringent standards. Security incidents could consist of any of the following:
 - 1) **Denial of Service Attack:** This shall include non availability of service (Internet bandwidth, messaging service and other web services due attacks that consumes related network resources)
 - 2) Data Theft: Compromise of any kind of the network
 - **3) Intrusion:** Successful Unauthorized access to the Purchaser information system, resulting in loss of confidentiality/Integrity/availability of data.
 - **Malicious Traffic:** The bidder shall be responsible for isolation of the node/network in which malicious traffic is generated which may be due to virus, malware etc on detection.
- All active components shall have adequate security provisions, to protect itself from any security attack including but not limited to DoS, password break, malicious software, unauthorized access and recording of all access information in the active components.
- All the network solution offered by the bidder shall have the security provisions to prevent any unauthorized access to anybody including bidder or its partners. The MCGM may reserve the right to get testing of components/ equipment supplied under this contract by any designated Third Party Agency.
- During the project period, the bidder shall support FMS vendor of MCGM, to enable enforcing Network Security Policy of the MCGM on all network equipment supplied. If required the MCGM may adopt the security policies and guidelines as recommended by DIT, Government of Maharashtra and DEITY, Government of India from time to time.
- The current Fortigate Firewall (1000C/D) needs to be re-used in revamped network design as External (Internet facing) firewall. The solution provided must integrate seamlessly with the help of FMS with current hardware.
- In consultation with FMS, bidder to do configuration of switches.

LAN Communication Infrastructure

- The bidder shall be responsible for setting up of LAN Communication in existing location/setup design layouts comprising of details of placement of equipment, partitioning, access control. Such design layout would be approved by the MCGM user department for implementation. Based on the final implementation, bidder shall be responsible for submitting the latest layouts to the MCGM for its consideration
- The bidder is required to identify new UPS requirements. If the UPS quantity mentioned in tender consumed, MCGM should provide additional UPS required and bidder should do the necessary installation
- Apart from above, bidder is also required to configure and commission the network equipment along with rack at the LAN communication room.

• <u>Supply, Installation, Configuration (field level) and Commissioning of Network Infrastructure</u>

- The bidder shall procure, supply, install, configure, integrate and commission, all the required networking equipment including, active and passive networking components, structural cabling etc., conforming to the specifications as stipulated in this RFP.
- The Bidder to perform site inspection to verify the appropriateness of the sites before installation /commissioning of the equipment.
- The bidder shall ensure that all the equipment quoted in the bid shall be supported by the OEM for 5 years from the date of bid submission. A certification from OEM stating this support period details is required to be submitted along with the bid. In case any equipment having shorter life is found to be quoted in the bid, then the bid is liable to be rejected at the discretion of the MCGM.
- The bidder shall ensure that the equipment quoted have End of Sale date at least 2 years in future from the date of submission of the bid. A certification from OEM stating this support period details is required to be submitted along with the bid.
- The bidder shall ensure that the equipment have not reached End of Sale, at the time of FAT. The bidder shall also ensure that none of the equipment has reached End of Sale, at the time of PAT of last site before Go Live and if there is any such equipment then all such equipment installed in the project should be changed before offering for Go Live
- The bidder shall also ensure that the equipment have not reached End of Support for entire contract duration, and at the time of transfer of assets. Any equipment which has reached "End of Support" shall need to be replaced at no extra cost to the Purchaser. The equipment shall be replaced with equivalent or higher model
- The supply and installation of all connecting cables between routers, modems, switches and other equipment and any other items shall also be the bidder's responsibility. The bidder to also ensure proper structured cabling (of CAT 6A standards) at each office location/ wherever required. It shall be the responsibility of the bidder to bring all the tools required for the installation, upgrading and commissioning of the equipment/ network
- All structured cabling work shall be supplied with OEM certification and warranty of 20/25 years, as the case may be.
- All cabling up to CPE should be done with proper clamping. The cabling should be neat and structured with PVC pipe casing.
- It shall be the responsibility of the FMS Agency of MCGM, for providing required "Electrical ground" at all points, as required by the bidder, if necessary. MCGM will not take any responsibility of equipment going bad due to non-availability of proper earthling and unstable power.
- The system shall be subjected to inspection at various stages. Local regulation/ codes shall be followed at all times. The bidder shall follow all Safety Regulations and practices. At all times clean work area should be maintained which is free of debris and waste materials etc.
- The bidder shall not cause any damage to the MCGM's premises and property and shall perform restoration if any damage occurs. Trenches, path-cutting etc. shall be back-filled and restored to the original condition immediately after laying of the conduit/cable. The bidder shall plug conduits and entrance holes where the cabling has been installed with suitable sealing material to restore it to its original/best state. Wherever needed, the bidder shall have to retrofit existing facilities in order to install the new system.
- It shall be the responsibility of the FMS Service provider to provide conditioned power supply to all the WAN & LAN equipment installed at the MCGM premises.
- The bidder must ensure that all statutory and regulatory approvals are obtained within the building (building in-charge, owners of the building etc.) and from various other authorities such as municipal bodies. Bidder shall also be responsible to get required documentation completed for obtaining such approvals from time to time. This should not affect the timelines.
- Bidder shall supply equipment (installation material, accessories, consumables and toolset used for installation) as per the contract Bill of Material.
- Delivery reports shall comprise of at least the details of the installation, commissioning of each
 and every component of the agreed bill of material. Such delivery reports shall be approved by
 the concerned officers of the MCGM
- During the installation of LAN and other components required under this engagement, the bidder is required to perform the following activities:

- Installation of new LAN switches (wherever required)
- Fresh Structured cabling (wherever required). Please refer specifications): Since there may be modifications/relocation/additions in the terms of the LAN nodes, the bidder shall also require to modify/relocate/create additional nodes at the site.
- Replacement of old or faulty LAN cabling by new one wherever required. The existing cabling system shall be handed over to the bidder on as-is-where-is basis. It shall be the responsibility of the bidder to ensure that the present cabling system should also maintain the compliance and performance standards. The bidder shall ensure that the any fresh cabling and crimping is done in accordance with latest EIA/TIA standards and supported by OEM fully tested and certified for operations for a minimum period of 20 years. The LAN cable laying must follow structured routing.
- Bidder to submit Manufacturer Authorization Form for all active and passive components used for implementation of LAN

Testing Plan and Testing Methodology

• Before the installation and commissioning phase, the bidder shall prepare the test plan and test methodology for the internet / intranet connectivity at the MCGM offices. The same has to be approved by the MCGM. Any changes as suggested by the MCGM have to be incorporated. This testing plan and testing methodology adopted to test the internet / intranet connectivity at MCGM office once frozen has to be strictly abided by.

Partial Acceptance Test (PAT)

- Date of site offered for PAT shall be considered as the date of implementation at various client side offices, in case the site is accepted during the 1st visit for PAT. In case the site is accepted during the 2nd or 3rd or subsequent visits for PAT, the date of successful PAT will be the date of implementation for such sites. SLA shall be linked to the date of implementation and acceptance of PAT.
- The PAT shall be twofold: for **Site Installation Report and Successful connectivity Test** from **Data Centre Network Operations Centre.**
- The PAT shall be conducted as per below in three phases

	Phase	Type of Offices to be covered (100%)	Timelines for PAT (from the date of after acceptance of Contract Signing
1	I	Ward office	8 th Week
2	II	Other Location	8 th Week
4	III	МНО	8 th Week
3	IV	Hospitals	10 th Week

- MCGM may change the locations priorities in respective phases which Service Provider have to take into consideration. However, MCGM shall give in writing which locations priorities to be changed before the start of each phase
- The MCGM shall nominate an agency for conducting partial acceptance testing on its behalf
- The Service Provider is responsible for offering the sites for acceptance to the MCGM after the testing has been completed
- The Bidder shall be submitting the testing reports to the MCGM for their reference during the acceptance exercise for each location
- The bidder shall prepare the required test cases and test data to test each and every component as specified in the bill of material, such test data shall be approved by the concerned officers of the MCGM. In addition to test data, bidder should also provide test plan, testing methodology for each component
- On the successful acceptance of offices/ locations with operational LAN, configured WAN, Bandwidth & Quality Test and other components under this engagement, the MCGM shall provide approval to selected bidder for transitioning from existing network to the new network
- The MCGM or its representative may be carry out the functional and physical acceptance of some of the selective sites or all sites under the PAT. The bidder is expected to offer its full co operation in the process. Moreover, it is pertinent to mention testing would be conducted as and when new modifications are implemented by the bidder. The bidder shall be required to extend full support for such exercise throughout the currency of the Contract.

PAT for Site Installation

- The partial acceptance testing will involve testing by the MCGM for the operational LAN (new or existing), configured network equipment and all other components under this engagement
- The partial acceptance testing exercise shall commence at each site after the LAN is commissioned & made operational with existing WAN equipment
- The selected bidder shall be required to prepare the forms and formats for facilitating the acceptance exercise by the MCGM of each equipment being deployed or integrated by the bidder under this engagement

PAT for Network Connectivity from NOC

• The selected bidder shall conduct the Bandwidth & Quality test in the presence of the MCGM or a representative of the MCGM from the NOC. Some Sites shall be selected at random / all sites shall be selected and Bandwidth Test shall be conducted. The Quality Test shall be conducted to test Packet Drop, Latency and Bandwidth Availability etc. The NOC thus should have provision to conduct these tests for ensuring the success of the project

Final Acceptance Testing (FAT) and Go - Live

- After successful transitioning of all the sites from the existing (i.e. old) L2 switches to the new L2 switches, the FAT shall be conducted by the MCGM or its nominated agency for testing of complete equipment installed under this contract. Basic contours of the testing would be inclusive of but not limited to:
 - Availability and installation of all equipment shall be verified (Location verification)
 - The bidder shall provide list of offices ready for FAT which would include all the details
 of the equipment that has been installed at each and every office along with the
 connectivity provided.
 - Detailed test plan and test cases shall be defined by bidder which shall be verified by the MCGM/designated agency.
 - Bidder shall arrange the test equipment required for verification. The bidder shall also be responsible for providing documented test results.
 - Final Acceptance Testing report shall include the WAN integration report. It shall also include the plan by which bidder aims to achieve the SLAs. The report should at least cover the testing of all equipment and the results of the test required to pronounce it as successful/ unsuccessful testing. The reports should be dully signed by bidder and MCGM
 - The date on which Final Acceptance Certificate is issued shall be deemed date of the Go-Live of **MCGM Revamped network**.
- Central Testing shall be done using the appropriate tools and systems available with FMS and
 any additional tools offered by the bidder, compatibility of the tool needs to be pre-checked
 with FMS to avoid last minute surprises. The bidder shall be responsible for providing such
 tools and systems so that the Final Acceptance Testing can be conducted centrally without
 incurring any additional cost to MCGM.

Additional Supply of Networking Equipment for any new office location

Whenever MCGM opens a new office, order will be placed with the selected bidder at the contracted price.

The selected bidder shall carry out site-survey at new location and provide Detailed bill of material for active and passive networking equipment for such location. Bidder is required to implement and commission the all the equipment at the said location within 4 weeks from the date of work order, under same terms and conditions of this bid.

Comprehensive onsite warranty and support (AMC)

The service provider provide comprehensive onsite warranty and support (called AMC) for the networking equipment (including active and passive) and the bidder shall be bound by the Service Level Agreements (SLA) under the contract and is required to provide the support services during the 5 years of Operations & Maintenance period. This phase will commence from the successful Go-Live of the project as notified by the MCGM under this engagement. The FMS service provider shall monitor the health of the network using access to Enterprise

- Management System tools and provide report to the selected bidder of MCGM Network revamp project.
- During the contract period MCGM reserves all rights to increase or decrease no of equipment/components for AMC with Bidder.
- At any stage of the contract, the MCGM reserves the right to terminate AMC for any of the item(s), with prior notice to Bidder.

Service Level Indicators (SLA)

- **Call Registration Process**: FMS Service provider shall log call with the successful bidder via Web, Phone and Mail. Escalation of Matrix along with Email id and phone no. should be provided by the bidder.
- All spare parts to be used shall be genuine or compatible spare parts of that order and the same shall be procured from the authorized dealers or manufacturers.
- Service offered shall be in accordance with the service instructions and standard practice of the original manufacturers (OEMs)
- OEM shall provide patches / upgrade of IOS during the period of warranty whenever applicable without any extra costs.

Service Level Agreement (SLA) parameters and penalties applicable

Sr	Service Metric	Metric	Frequency	Penalty		
No	Parameter					
A. Iss	A. Issue Response & Resolution					
1	Severity 1 Issue	Response Time:	Daily	0.1% of total contract value per		
	(i.e. all users are	<= 2 Hrs from the time the		day for the first day,		
	affected priority	call is logged by end user.				
	user are			0.20% of total contract value		
	affected.)	Resolution Time:		per day every subsequent day,		
		<= 8 Hrs from the time the		subject to a maximum of 5.0 %		
		call is logged by end user.		post which MCGM may invoke		
				Annulment of the contract.		
2	Severity 2	Response Time:	Daily	0.1% of total contract value per		
	(i.e. users more	<= 4 Hrs from the time the		day for the first day,		
	than 10 are	call is logged by end user.		0.20% of total contract value		
	affected.)	Resolution Time:		per day every subsequent day,		
		<= 2Days from the time the		subject to a maximum of 5.0 %		
		call is logged by end user.		post which MCGM may invoke		
				Annulment of the contract.		
3	Severity 3 Issue	Response Time:	Daily	Rs. 10000 per day per instance,		
	(i.e. users	<= 1 Day from the time the		subject to a maximum of 5.0 %		
	between 2 to 9	call is logged by end user.		post which MCGM may invoke		
	are affected.)	Resolution Time:		Annulment of the contract.		
		<= 5 Days from the time the				
		call is logged by end user.				
4	Severity 4 Issue	Response Time:	Daily	Rs. 1000 per day per instance,		
	(i.e. Single user	<= 2 Days from the time the		subject to a maximum of 5.0 %		
	affected.)	call is logged by end user.		post which MCGM may invoke		
		Resolution Time:		Annulment of the contract.		
		<= 10 Days from the time				
		the call is logged by end				
		user.				
B. Ur	B. Up time					

1	Average System Uptime (Data Center Components) System Uptime to include: Switches Uptime, Routers Uptime, Any other IT component in the Infrastructure Architecture at Data Center	99.90%	Monthly	0.5% of total contract value for monthly deviations, subject to a maximum of 5.0 % post which MCGM may invoke Annulment of the contract.
2	Average System Uptime for client side Network Equipment (Such as L2 switches etc)	99.00%	Monthly	0.2% of total contract value for monthly deviations, subject to a maximum of 5.0 % post which MCGM may invoke Annulment of the contract.
	twork Equipment			
1	Critical Issue (Core Equipment)	Response Time: <= 2 Hours from the time the call is logged by end user. Resolution Time: <= 1 Day from the time the call is logged by end user.	Daily	Rs. 500 per day per instance per user for non-compliance
2	Urgent Issue (L2/L3 Switches at client side)	Response Time: <= 4 Hours from the time the call is logged by end user. Resolution Time: <= 2 Days from the time the call is logged by end user.	Daily	Rs. 200 per day per instance per user for non-compliance
3 D. B.	Non-urgent Issue The request involves Non-IT passive equipment, such as casing caping, Network rack etc.	Response Time: <= 1Day from the time the call is logged by end user. Resolution Time: <= 5 Days from the time the call is logged by end user.	Daily	Rs. 200 per day per instance per user for non-compliance
	oject execution Tin		Dan	0.10/ of total contract value non
1	Project Initiation and Site Survey	< T + 2 Weeks, Where T is date of issue of PO	Per Occurrence	0.1% of total contract value per week for the first week, 0.20% of total contract value per week every subsequent week, subject to a maximum of 5.0 % post which MCGM may invoke Annulment of the contract.
2	Submission of As-Is Report and Proposed Network Design Document	T+ 4 Weeks, Where T is date of issue of PO	Per Occurrence	0.1% of total contract value per week for the first week, 0.20% of total contract value per week every subsequent week, subject to a maximum of 5.0 % post which MCGM may invoke Annulment of the contract.

3	Partial Acceptance Testing (For client side Network Equipment)	1. Ward office T + 8 Weeks, 2. Other Location (T + 8 Weeks) 3. MHO (T + 8 Weeks) 4. Hospitals (T + 10 Weeks) Where T is date of issue of PO	Per Occurrence	0.1% of total contract value per week for the first week, 0.20% of total contract value per week every subsequent week, subject to a maximum of 5.0 % post which MCGM may invoke Annulment of the contract.
4	Final Acceptance Testing and Go Live	T + 12 Weeks, Where T is date of issue of PO	Per Occurrence	0.1% of total contract value per week for the first week, 0.20% of total contract value per week every subsequent week, subject to a maximum of 5.0% post which MCGM may invoke Annulment of the contract.
E. Ad	lditional Equipmen	t Purchase (Rate Contract Ba	sed)	
1	Provisioning of equipment listed on the rate contract	< T+3 weeks, where T is the time when MCGM makes a request (LoI/PO) for procurement of equipment on the rate contract	Per Occurrence	0.2% per day of value of subject matter of procurement from the rate contract subject to a maximum of 10% of value of subject matter of procurement from the rate contract
2	Installation of equipment listed on the rate contract	< T+4 weeks, where T is the time when MCGM makes a request (LoI/PO)for procurement of equipment on the rate contract	Per Occurrence	0.2% per day of value of subject matter of procurement from the rate contract subject to a maximum of 10% of value of subject matter of procurement from the rate contract

a. Site locations

No.	Site / Location	Address	Contact Details
1.	Will be provided at the time o	f Purchase Order. MGGM v	vill issue PO for individual
	sites		

b. Work Completion Timelines & Payment Terms

T=Date of Purchase order or Contract sign (whichever is earlier)

	Milestone	Deliverables	Timelines	Payment Terms *
1		Acceptance of PO/LoI&PBG of 10 % of total contract value	T*	None
	and Passive	Delivery Challans and Acceptance of Delivery of Hardware/Software	T+4 Weeks	50% of Total Contract Price for the equipment supplied
3	PAT Completion	PAT completion Report	Ward office-8 week Other Location-8 week MHO- 8 week Hospitals -10 week	10% of Total Contract Price for the equipment supplied
4	FAT and Go Live	FAT and Go-Live report	T+ 12 Weeks	10% of Total Contract Price for the equipment supplied

	Milestone	Deliverables	Timelines	Paymen	t Terms *
5	Support and Warranty	i. Version Description	Upto5years from Go-	Yearly payme	ent in
		Document	Live	instalments ba	alance 30% of
		ii. Post-Implementation		Total Price	
		Review Report		Year/	Payment
		iii. Monitoring Review		Instalment	(at year-
		Report Exception Report			end)
		iv. User Satisfaction		1	6%
		Certificates		2	6%
				3	6%
				4	6%
				5	6%

b.

c. Coordination and Cooperation with FMS Service provider of MCGM

- ❖ During all phases of the project, the Supplier Agency shall have coordination and full cooperation with the FMS server provider of MCGM. Since the project infrastructure has to be fully integrated with the MCGM IT Environment, the Supplier agency will require support and from FMS and vice versa.
 - ❖ MCGM shall ensure that FMS service provider shall cooperate with the supplier agency and provide all necessary support, configuration settings, access to requisite and necessary IT assets.

d. Technical Specifications

Active and Passive Components

A) Specifications for L2 Switch - 24 GE Copper Ports

Sr. No	Minimum Technical Specifications		
	General Features		
1	1 RU, L2 switch		
2	Minimum of 24 Gigabit Ethernet (TX) ports with 10/100/1000 Mbps auto-negotiation support switching capacity minimum 56 Gbps.		
3	Additional 4x1G SFP uplink ports for 24 port switch		
4	Switch should support stacking with dedicated stacking module/stacking ports apart from the uplink ports with 56 Gbps of stack throughput		
5	Full-Duplex Operation on Fast Ethernet		
6	Multiple Load Sharing Trunks		
7	128 MB DRAM and 16 MB Flash memory		
8	Configurable up to 8000 MAC addresses		
9	Configurable up to 255 IGMP groups		
10	Configurable maximum transmission unit (MTU) of up to 9000 bytes and jumbo frames		
11	High Mean Time Between Failure (Life Expectancy) values should be available to ensure long life of Switch hardware		
12	The Switches must be able to generate Syslog Messages with timestamp and Severity codes, which can be exported to a Syslog Server.		
13	The Switches must be able to build up inventory (like Device Name, Chassis, Type, Memory, Flash, Software ver. Etc) on its own or through management software		
14	Support for Local Proxy Address Resolution Protocol (ARP) to minimize broadcasts and maximize available bandwidth		
	IEEE Standard Compliance		
1	Support for IEEE 802.1d Spanning Tree Protocol for redundant backbone connections		
	and loop-free networks		
3	Support for IEEE 802.1s Multiple Spanning Tree Protocol		
	802.1Q VLAN tagging		
5	802.1p Priority 802.3u Fast Ethernet		
	802.3u Fasi Einemei		

(902 2v Flow Control
6 7	802.3x Flow Control 802.1x Authentication
8	
0	802.3ab Gigabit Interface Layer 1 Features: -
1	Support for 100 BASE-TX
1	Layer 2 Features: -
1	L2 Switching Support
2	Multi-Link Trunking
	Wulu-Link Hulking
3	Ability to manage individual switches as a group for VLANs configuration purposes
4	STP Fast Calculation features as uplink fast for faster convergence OR Equivalent to STP / MSTP / RSTP
5	Per-port broadcast, multicast, and storm control to prevent faulty end stations from degrading overall systems performance
	QoS Features:-
1	Support for Classification and scheduling based on 802.1p/Q
2	Support for 802.1p class-of-service (CoS). Ability to Mark/override 802.1P CoS per port
3	Eight queues per egress port and up-to 500 access control entries
	Weighted Tail Drop (WTD) Or Strict Priority (SP) queuing, weighted round robin
4	(WRR) or Shaped Round Robin (SRR) for congestion avoidance
5	The switch should support auto QoS/equivalent for certain device types and egress queue configurations
	Multicast Support:-
1	Multicast must be supported in hardware so that performance is not affected by multiple multicast instances
2	L2 Multicast Support – IGMP Snooping
3	Should support minimum of 512 Ipv4 and Ipv6 multicast groups
	Redundancy
1	Support for Link Aggregation Control Protocol (LACP)
2	Quick Failover over redundant links for improved network stability and reliability
	Security Features
1	Support for IEEE 802.1x for dynamic, port-based security and providing user authentication
2	Support for IEEE 802.1x with VLAN assignment
3	Support for IEEE 802.1x with voice VLAN
4	Support for IEEE 802.1x and port security
5	Support for IEEE 802.1x with an ACL assignment
	Support for IEEE 802.1x with Guest VLAN allows guests without 802.1x clients to
6	have limited network access on the guest VLAN
7	Support for SSH Protocol, Kerberos/SSHv2, and SNMPv3 to provide network
7	security by encrypting administrator traffic during Telnet and SNMP sessions
8	Support for Dynamic ARP Inspection to ensure user integrity by preventing malicious users from exploiting the insecure nature of the ARP protocol.
9	Support for DHCP Snooping to prevents malicious users from spoofing a DHCP server and sending out bogus addresses
1.0	Support for IP source guard to prevents a malicious user from spoofing or taking over
10	another user's IP address by creating a binding table between client's IP and MAC address, port, and VLAN.
11	Bidirectional data support on the Switched Port Analyzer (SPAN) port (or Port mirroring/RMON) to take action when an intruder is detected.
12	Support for RADIUS authentication

13	Switch should Support Ipv6 First hop Security with the following functions: IPv6 snooping, IPv6 dynamic host configuration protocol (DHCP) address gleaning, IPv6 device tracking, neighbour discovery (ND) Inspection, IPv6 DHCP guard, IPv6 router advertisement (RA) guard	
	Other Features	
1	The switch should have its own management software, which can be used remotely (through secured Web interface) to monitor, troubleshoot & manage the switch	
2	The management software should integrate with any EMS product suite	
3	e e ; i	
4	Should support Link layer Discovery Protocol	
5	Should Support DNS	
6	Secure access to switch management, limiting management applications from specific hosts only	
7	Unicast MAC filtering, unknown Unicast and multicast Port blocking	
8	The switch should support Unidirectional link detection protocol or equivalent	
Network Management (Management Feature)		
1	Embedded support for Web based management using standard secured web browser	
2	Support for SNMP v1, v2c and v3, Telnet interface and a CLI-based management console	
3	Support for TFTP based software download	
4	Support for port mirroring measurement using a network analyzer or RMON probe	
5	RMON: 4 Group (Statistics, Alarm, Events, History), on every port, no impact to performance	
6	Switch must be remotely managed via one telnet session for all module configuration	
7	Should have functionality to add new features like IOS/Firmware upgrades from central location, etc.	
8	Provisioned and Dynamic Policies/Advanced classifier-based QoS	
9	Support for Dynamic VLAN assignment	
10	Real Time Multi-Port Statistics	
11	Device and Port Groupings for Navigation and Policy Management	
12	Support for MIBs	
13	Administrative Access Right	
14	Traffic Volume/Error/Congestion Monitoring	
15	TFTP Download/Upload Software	
16	The Switch should be able to discover the neighbouring device of the same vendor giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems	
17	Switch should be supplied with NMS tool of the same OEM.	
18	Switch should be EAL3 or NDPP & IPv6 ready logo certified from day one	
_ 10	1 5 miles should be 121125 of 11211 at 11 to leady logo certified from any one	

B) Specifications for Transceivers (SFP):

Sr. No	Item	Minimum Specifications
1	Transreceiver for Multimode fibre	1 GE SFP, LC connector SX transceiver (with license and activation)
2	Transreceiver for Single Mode fibre	1 GE SFP, LC connector LX/LH transceiver (with license and activation)
3	Transreceiver for RJ 45	1000 BASE-T SFP (with license and activation)

C) Specifications for 9U Network Size Wall Mount Rack

Sr. No	Minimum Specification	
1	Wall mount unit	
2	9 U size to accommodate networking equipment at site	
3	 Rack Features Quick release, lockable front and back glazed door Ventilated top and bottom panels Adjustable 19" mounting angles In-built AC Power Strip with 5A/15A 230VAC plug points Top mounted fan for forced ventilation Cable Manager 	

D) Specifications for 18U Network Size Wall Mount Rack

Sr. No	Minimum Specification	
1	Wall mount unit	
2	18 U size to accommodate networking equipment at site	
3	Rack Features	

E) Specifications for 24 Ports Patch Panel

Sr.No	Minimum Specification
1	24 ports Patch Panel - 110 IDC type at rear end & RJ 45 jack on front panel, 19" rack mountable, Wire Manager, should confirm or exceed the EIA/TIA 568 C standards for CAT 6, Metallic high strength & IU height, confirm EIA/TIA 568 C wiring pattern, should have routing rings & ties and labeling strips for identification, UL listed & Verified. Ports should be individually replaceable.

F) Specifications for Fiber Optics Media Convertor

Sr. No	Minimum Specification	
1	Compliant with IEEE 802.3 10BaseT, IEEE802.3u 100BaseTX, IEEE 802.3ab	
	1000BaseT and IEEE 802.3z 1000BaseSX/LX Standards	
2	One 10/100/1000BaseT Gigabit Ethernet TP Port and One 1000BaseSX/LX Gigabit	
	Ethernet Fiber Port	
3	One 1000BaseSX/LX Fiber Port can support either Multi or Single Mode	
4	TP Port can support Half/Full-Duplex, Auto-MDI/MDI-X and Auto-Negotiation	
5	Multiple Fiber Connectors	

G) Specifications for 24 Ports Wall Mount LIU (Light Interface Unit)

Sr. No.	Minimum Specification
1	Suitable for interconnect in cables distribution or between cables and optical equipment
2	Space saving with its compact & small design of enclosure
3	Front door design is easy for operation & fibers expansion
4	Can manage both splices and terminations
5	Can include adapter panels for maximum 24 ports LC/SC and 12 ports ST/FC terminations
6	Rubber fiber slotted bracket built-in, metal splice shelf to protect the fibers
7	Snap-in locker design, easy to change adapter panels for flexible configuration & easy installation
8	Top & bottom cable entry is easy with rubber plug

H) Specifications for Information Outlet (I/O) Point

S	r. Io.	Minimum Specification
1		Category 6 Shielded Information Outlets with robust, cable-ready and installer-friendly design and should complied with ANSI/TIA/EIA 568 C standard.

I) Specifications for Structured Cabling Components

ANSI - TIA 568 C Commercial Buildings for all kind of cables and connectors including Cat 6 and Fibre Optics with 15 - 20 yrs warranty (actual warranty duration as per OEM).

J) The removed items shall be disposed of as per relevant guidelines for disposable of e-waste.

General conditions

- 1) The bidders may visit the site and obtain additional information at their own cost and responsibility. However, a prior appointment needs to be fixed by the bidder for the same.
- 2) The Bidder must possess the technical know-how and the financial wherewithal that would be required to successfully provide the services sought by MCGM, for the entire period of the contract. The Bidder's Bid must be complete in all respects, conform to all the requirements, terms and conditions and specifications as stipulated in the Bid Document.
- 3) The evaluation process of the Bid Document proposed to be adopted by MCGM is as follows
 - a) MCGM shall appoint a Bidder's Evaluation Committee (BEC) to scrutinize and evaluate the technical and commercial bids received. The BEC will examine the Bids to determine whether they are complete, response and whether the Bid format confirms to the Bid Document requirements. MCGM may waive any informality or nonconformity in a Bid which does not constitute a material deviation according to MCGM.
 - b) The Technical Bids of only those Bidders, who qualify in the Pre-Qualification stage, shall be considered and will be evaluated as per the PQC.
 - c) The Bid Evaluation Committee shall invite each Bidder to make a Technical presentation as part of the technical evaluation. The presentation shall cover the following aspects of the solution offered by the bidder:
 - Bidders understanding of the project and Scope of Work
 - As-Is study and Network Revamp Solution Document
 - Technical Solution, including Key Consideration for Revamp
 - Reasoning for Selection of OEMs and product qualities
 - Project Management Methodology
 - Testing Methodology, Tools and Techniques

- Sample Documentation deliverables
- d) The BEC may require written clarifications from the Bidders to clarify ambiguities and uncertainties arising out of the evaluation of the Bid documents (to be stated precisely as it should be in MCGM's interest). In order to qualify technically, all items offered must be technically compliant. Only the Bids qualifying the technical evaluation will be considered for commercial evaluation.
- 4) Performance Bank Guarantee The Bidder shall at his own expense, deposit with department, within 30 days of the notification of award (done through issuance of the Purchase Order/Letter of Acceptance), an unconditional and irrevocable Performance Bank Guarantee (PBG) from a list of approved banks as per the format given in this Bid Document, payable on demand, for the due performance and fulfillment of the contract by the bidder.
- 5) The Performance Bank Guarantee will be for an amount equivalent to 10% of contract value. All charges whatsoever such as premium, commission, & applicable stamp duty as per circular No-Ch.E/BM/17800/II Dt-7.1.2016 etc. with respect to the Performance Bank Guarantee shall be borne by the bidder.
- 6) The Performance Bank Guarantee will be Valid upto the entire contract period (including warranty period) or payment of final bill whichever is later.
- 7) The Performance Bank Guarantee may be discharged/returned by department upon being satisfied that there has been due performance of the obligations of the Bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.
- 8) In the event of the Bidder being unable to service the contract for whatever reason, department would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of department under the Contract in the matter, the proceeds of the PBG shall be payable to department as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. Department shall notify the Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the Bidder is in default.
- 9) Department shall also be entitled to make recoveries from the Bidder's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.
- 10) Factory Testing/Inspection
 - The factory testing will be done in the Factory premises/warehouse of the vendor
 with all the necessary testing facilities by the Inspection team constituted by the
 MCGM at its discretion may delegate the factory/warehouse inspection to the
 purchaser. Expenditure related to inspection shall be borne by the bidder/vendor.
 - The minimum lot size for testing shall be 300 numbers of Active and Passive Networking Components (any combination). The OEM shall provide the list comprises of make, model, part number and serial numbers of the equipment to the MCGM.
 - The bidder/supplier shall make the equipment ready for inspection within a week from the date of placing the order by the MCGM.
 - For every such batch, the supplier shall communicate in writing to the MCGM about the readiness of equipment for inspection.
 - Normally, the inspection shall be conducted within a week after the receipt of communication to the MCGM.
 - On the satisfaction after tests, the batch shall be cleared for dispatch. On getting any of the defects in any of the sample, whole lot will be rejected.
 - A tamper-proof inspection seal shall be affixed on the packed boxes of each batch so inspected and cleared. Inspection team leader will sign on the inspected boxes.
- 11) Surprise Inspection by MCGM In addition to the above inspection, the officer or the representative of the MCGM may do the surprise inspection of any destination of supply to check genuineness of the client side IT Infrastructure and peripherals supplied. Executive Engineer or his representative can choose any unit of any product from any of the Indenter for lab testing. The Testing lab (or a organization designated as Testing lab) where testing is to be carried out shall be decided by the MCGM. If the quality of the product is found contrary to the specification given in the RC, the RC shall be suspended. However, the final decision will be taken as per existing law.

12) Any interference by the vendor during the process of lab testing will be considered as violation of terms and conditions and vendor will be liable for the punishment. After supply, vendor shall not be authorized to take any supplied unit for testing. Besides, interfering directly or indirectly in laboratory testing by the vendor/OEM to influence to the laboratory authority shall be taken a fraudulent act on the part of the vendor/OEM and severe act as per law will taken. It will be the duty of the head of the office concerned to carry out laboratory testing as per direction of the Executive Engineer

13) RACI Matrix - The RACI matrix for various activities in the project is as given below.

Sr No	Activity	Selected Vendor	MCGM	FMS Vendor
1	Requirement Gathering and Project Management Plan	R/A	С	I
2	Supply of Active and Passive Components	R/A	С	I
3	Configuration, Customisation, Development, Installation, Configuration, Testing, Integration with existing MCGM network etc. (as per complete scope of work defined in this RFP)	R/A	С	С
4	Provisioning of Power, Cooling and Rack Space in MCGM offices	С	R/A	С
5	Provisioning of LAN connectivity	R/A	С	С
6	Onsite Maintenance and Support	R/A	I	I

For the above table, R= Responsible, A= Accountable, C= Consulted and I= Informed.

14) Method of Technical and Financial Evaluation and Award of Marks and Selection of Bidder

	Technical Evaluation and Score	
Sr.No.	Technical evaluation Parameter	Max.
		Score
1	The bidder should have proven experience in IT Infrastructure / Networking domain of having successfully completed similar contracts in Govt. / Semi Govt. / PSU or Local bodies totalling in last 5 years	
	1 project of 20 crores – 10 marks	Maximum
	2 projects of 20 crores – 25 marks	25

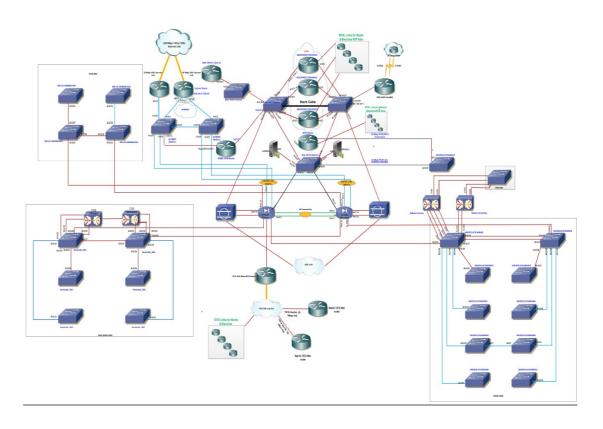
2	Approach and Methodology of implementation (Project	
_	Management) and Presentation.	
	 Presentation on understanding of Scope of Work and 	
	Requirements. Level of details captured in Solution design. 10	
	Marks	35
	 Design robustness including scalability, redundancy, SDN 	
	functionality, NMS & IPV6 readiness 10 Marks	
	 Project implementation Methodology, Project Management 	
	and manpower deployment methodology. 15 Marks	
	1. Quality monitoring assessment methods and safety standards	
	2. Testing and site acceptance methodology	
	3. List of key proposed persons to be associated with project	
	with their CV including qualification and experience.	
	4. Cabling detailing & level designing.	
3.	Compliance to Passive Solution	
	1. Technical Specification Compliance 5 Marks.	_
	⟨ Non compliance will lead to rejection of bid.⟩	10
	2. Passive OEM Eligibility Criteria Certifications 5 Marks	
4	OEM Qualification as per Gartner Magic Quadrant Marks, latest	
	report of 2016 would be awarded as per following Criteria:	
	Leaders (30 marks), Challengers (15 marks), Visionaries (5 marks),	30
	Niche Players (3 marks)	
	Magic Quadrant for the wired and wireless LAN Access	
	Infrastructure: 30 Marks	

Minimum score for qualifying :- 70 marks

Annexure-I

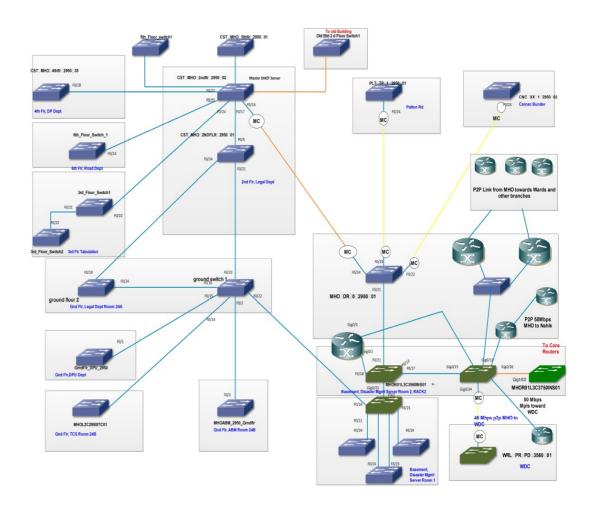
WDC and MHO Network Diagrams

(A) Existing Setup at WDC



Annexure-II

(B)Existing setup at MHO



CONTAINTS

VARIOUS SCHEDULES

SCHEDULE – I	Technical Specifications Compliance statement
SCHEDULE – II	Deviation

SCHEDULE – I

Technical Specifications Compliance statement

Active and Passive Components

A) Specifications for L2 Switch - 24 GE Copper Ports

N.T.	Minimum Specification	Complies(Y/N)
No	Make :-	
	Model:-	
	General Features	
1	1 RU, L2 switch	
1	Minimum of 24 Gigabit Ethernet (TX) ports with 10/100/1000	
2	Mbps auto-negotiation support with minimum 56 Gbps of	
2	switching band width	
3	Additional 4x1G SFP uplink ports for 24 port switch	
3	Switch should support stacking with dedicated stacking	
4	module/stacking ports apart from the uplink ports with 56 Gbps of	
7	stack throughput	
5	Full-Duplex Operation on Fast Ethernet	
6	Multiple Load Sharing Trunks	
7	128 MB DRAM and 16 MB Flash memory	
8	Configurable up to 8000 MAC addresses	
9	Configurable up to 255 IGMP groups	
	Configurable maximum transmission unit (MTU) of up to 9000	
10	bytes and jumbo frames	
	High Mean Time Between Failure (Life Expectancy) values should	
11	be available to ensure long life of Switch hardware	
	The Switches must be able to generate Syslog Messages with	
12	timestamp and Severity codes, which can be exported to a Syslog	
12	Server.	
	The Switches must be able to build up inventory (like Device Name,	
13	Chassis, Type, Memory, Flash, Software ver. Etc) on its own or	
13	through management software	
	Support for Local Proxy Address Resolution Protocol (ARP) to	
14	minimize broadcasts and maximize available bandwidth	
	IEEE Standard Compliance	
	Support for IEEE 802.1d Spanning Tree Protocol for redundant	
1	backbone connections and loop-free networks	
2	Support for IEEE 802.1s Multiple Spanning Tree Protocol	
3	802.1Q VLAN tagging	
	802.1p Priority	
	002.10 110110	
4		
	802.3u Fast Ethernet	
4 5	802.3u Fast Ethernet 802.3x Flow Control	
4 5 6	802.3u Fast Ethernet 802.3x Flow Control 802.1x Authentication	
4 5 6 7	802.3u Fast Ethernet 802.3x Flow Control 802.1x Authentication 802.3ab Gigabit Interface	
4 5 6 7	802.3u Fast Ethernet 802.3x Flow Control 802.1x Authentication 802.3ab Gigabit Interface Layer 1 Features: -	
4 5 6 7 8	802.3u Fast Ethernet 802.3x Flow Control 802.1x Authentication 802.3ab Gigabit Interface Layer 1 Features: - Support for 100 BASE-TX	
4 5 6 7 8	802.3u Fast Ethernet 802.3x Flow Control 802.1x Authentication 802.3ab Gigabit Interface Layer 1 Features: - Support for 100 BASE-TX Layer 2 Features: -	
4 5 6 7 8	802.3u Fast Ethernet 802.3x Flow Control 802.1x Authentication 802.3ab Gigabit Interface Layer 1 Features: - Support for 100 BASE-TX Layer 2 Features: - L2 Switching Support	
4 5 6 7 8 1 1 2	802.3u Fast Ethernet 802.3x Flow Control 802.1x Authentication 802.3ab Gigabit Interface Layer 1 Features: - Support for 100 BASE-TX Layer 2 Features: - L2 Switching Support Multi-Link Trunking	
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	Dor northwoodoost multipost and storm control to provent faulty	
5	Per-port broadcast, multicast, and storm control to prevent faulty end stations from degrading overall systems performance	
	QoS Features:-	
1	Support for Classification and scheduling based on 802.1p/Q	
	Support for 802.1p class-of-service (CoS). Ability to Mark/override	
2	802.1P CoS per port	
3	Eight queues per egress port and up-to 500 access control entries	
	Weighted Tail Drop (WTD) Or Strict Priority (SP) queuing,	
4	weighted round robin (WRR) or Shaped Round Robin (SRR) for	
	congestion avoidance	
5	The switch should support auto QoS/equivalent for certain device	
	types and egress queue configurations	
	Multicast Support:-	
1	Multicast must be supported in hardware so that performance is not	
1	affected by multiple multicast instances	
2	L2 Multicast Support – IGMP Snooping	
3	Should support minimum of 512 Ipv4 and Ipv6 multicast groups	
	Redundancy Control (Control (C	
1	Support for Link Aggregation Control Protocol (LACP)	
2	Quick Failover over redundant links for improved network stability	
	and reliability	
	Security Features	
1	Support for IEEE 802.1x for dynamic, port-based security and	
	providing user authentication	
2	Support for IEEE 802.1x with VLAN assignment	
3	Support for IEEE 802.1x with voice VLAN	
4	Support for IEEE 802.1x and port security	
5	Support for IEEE 802.1x with an ACL assignment	
6	Support for IEEE 802.1x with Guest VLAN allows guests without 802.1x clients to have limited network access on the guest VLAN	
	Support for SSH Protocol, Kerberos/SSHv2, and SNMPv3 to	
7	provide network security by encrypting administrator traffic during	
,	Telnet and SNMP sessions	
	Support for Dynamic ARP Inspection to ensure user integrity by	
8	preventing malicious users from exploiting the insecure nature of	
	the ARP protocol.	
9	Support for DHCP Snooping to prevents malicious users from	
J	spoofing a DHCP server and sending out bogus addresses	
	Support for IP source guard to prevents a malicious user from	
10	spoofing or taking over another user's IP address by creating a	
	binding table between client's IP and MAC address, port, and VLAN.	
	Bidirectional data support on the Switched Port Analyzer (SPAN)	
11	port (or Port mirroring/RMON) to take action when an intruder is	
11	detected.	
12	Support for RADIUS authentication	
	Switch should Support Ipv6 First hop Security with the following	
	functions: IPv6 snooping, IPv6 dynamic host configuration protocol	
13	(DHCP) address gleaning, IPv6 device tracking, neighbour	
	discovery (ND) Inspection, IPv6 DHCP guard, IPv6 router	
	advertisement (RA) guard	
	Other Features	
	The switch should have its own management software, which can be	
1	used remotely (through secured Web interface) to monitor,	
	troubleshoot & manage the switch	

2	The management software should integrate with any EMS product suite	
3	The Switch should seamlessly integrate with existing network infrastructure.	
4	Should support Link layer Discovery Protocol	
5	Should Support DNS	
6	Secure access to switch management, limiting management applications from specific hosts only	
7	Unicast MAC filtering, unknown Unicast and multicast Port blocking	
8	The switch should support Unidirectional link detection protocol or equivalent	
	Network Management (Management Feature)	
1	Embedded support for Web based management using standard secured web browser	
2	Support for SNMP v1, v2c and v3, Telnet interface and a CLI-based management console	
3	Support for TFTP based software download	
4	Support for port mirroring measurement using a network analyzer or RMON probe	
5	RMON: 4 Group (Statistics, Alarm, Events, History), on every port, no impact to performance	
6	Switch must be remotely managed via one telnet session for all module configuration	
7	Should have functionality to add new features like IOS/Firmware upgrades from central location, etc.	
8	Provisioned and Dynamic Policies/Advanced classifier-based QoS	
9	Support for Dynamic VLAN assignment	
10	Real Time Multi-Port Statistics	
11	Device and Port Groupings for Navigation and Policy Management	
12	Support for MIBs	
13	Administrative Access Right	
14	Traffic Volume/Error/Congestion Monitoring	
15	TFTP Download/Upload Software	
16	The Switch should be able to discover the neighbouring device of the same vendor giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems	
17	Switch should be supplied with NMS tool of the same OEM.	
	Switch should be EAL3 or NDPP & IPv6 ready logo certified from	
18	day one	

B) Specifications for Transceivers (SFP):

Sr. No	Minimum Specification	Complies(Y/N)
	Make:-	
	Model:-	
	Transreceiver for Multimode fibre	
1	1 GE SFP, LC connector SX transceiver (with license and	
	activation)	
Sr. No	Minimum Specification	
	Make:-	
	Model:-	
	Transreceiver for Single Mode fibre	
2	1 GE SFP, LC connector LX/LH transceiver (with license and	
	activation)	

Sr. No	Minimum Specification	
	Make:-	
	Model:-	
3	Transreceiver for RJ 45 1000 BASE-T SFP (with license and activation)	

C) Specifications for 9U Network Size Wall Mount Rack

Sr. No	Minimum Specification	Complies(Y/N)
	Make :-	
	Model:-	
1	Wall mount unit	
2	9 U size to accommodate networking equipment at site	
3	 Rack Features Quick release, lockable front and back glazed door Ventilated top and bottom panels Adjustable 19" mounting angles In-built AC Power Strip with 5A/15A 230VAC plug points Top mounted fan for forced ventilation Cable Manager 	

D) Specifications for 18U Network Size Wall Mount Rack

Sr. No	Minimum Specification	Complies(Y/N)
	Make :-	
	Model:-	
1	Wall mount unit	
2	18 U size to accommodate networking equipment at site	
3	Rack Features Ouick release, lockable front glazed door Ventilated top and bottom panels Adjustable 19" mounting angles In-built AC Power Strip with 5A/15A 230VAC plug points Top mounted fan for forced ventilation Cable Manager	

E) Specifications for 24 Ports Patch Panel

Sr. No	Minimum Specification	Complies(Y/N)
	Make :-	
	Model:-	
1	24 ports Patch Panel - 110 IDC type at rear end & RJ 45 jack on front panel, 19" rack mountable, Wire Manager, should confirm or exceed the EIA/TIA 568 C standards for CAT 6, Metallic high strength & IU height, confirm EIA/TIA 568 C wiring pattern, should have routing rings & ties and labeling strips for identification, UL listed & Verified. Ports should be individually replaceable.	

F) Specifications for Fiber Optics Media Convertor

Sr. No	Minimum Specification	Complies(Y/N)
	Make :-	
	Model:-	
1	Compliant with IEEE 802.3 10BaseT, IEEE802.3u 100BaseTX, IEEE 802.3ab 1000BaseT and IEEE 802.3z 1000BaseSX/LX Standards	
2	One 10/100/1000BaseT Gigabit Ethernet TP Port and One 1000BaseSX/LX Gigabit Ethernet Fiber Port	
3	One 1000BaseSX/LX Fiber Port can support either Multi or Single Mode	
4	TP Port can support Half/Full-Duplex, Auto-MDI/MDI-X and Auto-Negotiation	
5	Multiple Fiber Connectors	

G) Specifications for 24 Ports Wall Mount LIU (Light Interface Unit)

Sr. No	Minimum Specification	Complies(Y/N)
	Make :-	
	Model:-	
1	Suitable for interconnect in cables distribution or between cables and optical equipment	
2	Space saving with its compact & small design of enclosure	
3	Front door design is easy for operation & fibers expansion	
4	Can manage both splices and terminations	
5	Can include adapter panels for maximum 24 ports LC/SC and 12 ports ST/FC terminations	
6	Rubber fiber slotted bracket built-in, metal splice shelf to protect the fibers	
7	Snap-in locker design, easy to change adapter panels for flexible configuration & easy installation	
8	Top & bottom cable entry is easy with rubber plug	

H) Specifications for Information Outlet (I/O) Point

Sr.	Minimum Specification	Complies(Y/N)
No		
	Make :-	
	Model:-	
1	Category 6 Shielded Information Outlets with robust, cable-ready and installer-friendly design and should complied with ANSI/TIA/EIA 568 C standard.	

I) Specifications for Structured Cabling Components

ANSI - TIA 568 C Commercial Buildings for all kind of cables and connectors including Cat 6 and Fibre Optics with 15 - 20 yrs warranty (actual warranty duration as per OEM).

J) Remaining all items are as per S.O.R.

Seal & Signature of Tenderer with Date

SCHEDULE - II

DEVIATION FROM SPECIFICATIONS

The Tenderer shall state briefly any deviation contained in his main offer from the specification. If the deviations are listed in a covering letter then reference of the letter shall be made below.

Item or Clause	Deviation	Covering letter page

Seal & Signature of Tenderer with Date

FRAUD AND CORRUPT PRACTICES

FRAUD AND CORRUPT PRACTICES

- The Applicants and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained herein, the Authority may reject an Application without being liable in any manner whatsoever to the Applicant if it determines that the Applicant has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process.
- Without prejudice to the rights of the Authority under relevant Clause hereinabove, if an Applicant is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, such Applicant shall not be eligible to participate in any tender or RFQ issued by the Authority during a period of 2 (two) years from the date such Applicant is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.
- For the purposes of this Clause, the following terms shall have the meaning hereinafter respectively assigned to them:

A. "corrupt practice" means

the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to, or employing, or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly, with the Bidding Process or the LOA or has dealt with matters concerning the Concession Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or save and except as permitted under the relavant sub clause, engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOA or after the execution of the Concession Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Concession Agreement, who at any time has been or is a legal, financial or technical adviser of the Authority in relation to any matter concerning the Project;

- B. **"fraudulent practice"** means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;
- C. "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any persons participation or action in the Bidding Process;

- D. "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- E. "Restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Bidding Process.
- F. If the Employer/Financier determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days' notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of relevant Clause shall apply as if such expulsion had been made.
- G. Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with relevant Clause.

For the purposes of this Sub-Clause:

- i. "corrupt practice" is the offering, giving, receiving to soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. "another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes Financer staff and employees of other organizations taking or reviewing procurement decisions.
- iii. "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- iv. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- v. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- vi. "obstructive practice" is deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede the Financier investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

- vii. acts intended to materially impede the exercise of the Financer's inspection and audit rights provided .
- viii. "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.
 - ix. "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, noncompetitive levels.
 - x. A "party" refers to a participant in the procurement process or contract execution.

SECTION 12 PRE BID MEETING

PREBID MEETING

Pre-bid meeting of the interested parties shall be convened at the designated date, time and place. A maximum of three representatives of each Applicant shall be allowed to participate on production of authority letter from the Applicant.

During the course of Pre-bid meeting, the Applicants will be free to seek clarifications and make suggestions for consideration of the Authority. The Authority shall Endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.

SECTION –13 LIST OF APPROVED BANKS

LIST OF APPROVED BANKS

- 1. The following Banks with their branches in Greater Mumbai and in suburbs and extended suburbs up to Virar and Kalyan have been approved only for the purpose of accepting Banker's guarantee from 1997-98 onwards until further instructions.
- 2. The Bankers Guarantee issued by branches of approved Banks beyond Kalyan and Virar can be accepted only if the said Banker's Guarantee is countersigned by the Manager of a branch of the same Bank, within the Mumbai Limit categorically endorsing thereon that said bankers Guarantee is binding on the endorsing Branch of the bank within Mumbai limits and is liable to be on forced against the said branch of the Bank in case of default by the contractor/supplier furnishing the bankers Guarantee.

List of approved Banks:-

A	S.B.I and its subsidiary Banks
1	State Bank Of India.
2-	State Bank Of Bikaner & Jaipur.
3	State Bank Of Hyderabad.
4	State Bank Of Mysore.
5	State Bank Of Patiyala.
6	State Bank Of Saurashtra.
7	State Bank Of Travankore.
В	Nationalized Banks
8	Allahabad Bank.
9	Andhra Bank.
10	Bank Of Baroda.
11	Bank Of India.
12	Bank Of Maharashtra.
13	Central Bank Of India.
14	Dena Bank.
15	Indian Bank.
16	Indian Overseas Bank.
17	Oriental Bank Of Commerce.
18	Punjab National Bank.
19	Punjab & Sindh Bank.
20	Syndicate Bank.
21	Union Bank Of India.
22	United Bank Of India.
23	UCO Bank.
24	Vijaya Bank.
24A	Corporation Bank.
C	Scheduled Commercial Banks
25	Bank Of Madura Ltd.
26	Bank Of Rajasthan Ltd.
27	Banaras State Bank Ltd.
28	Bharat Overseas Bank Ltd
29	Catholic Syrian Bank Ltd.
30	City Union Bank Ltd.
31	Development Credit Bank.
32	Dhanalakshmi Bank Ltd.
33	Federal Bank Ltd.
34	Indsind Bank Ltd.
35	I.C.I.C.I Banking Corporation Ltd.
36	Global Trust Bank Ltd.

37	Jammu & Kashmir Bank Ltd.
38	Karnataka Bank Ltd.
39	
40	KarurVysya Bank Ltd. Laxmi Vilas Bank Ltd.
41	Nedugundi Bank Ltd.
42	Ratnakar Bank Ltd.
43	Sangli Bank Ltd.
44	South Indian Bank Ltd.
45	S.B.I Corporation ∬ Bank Ltd.
46	Tamilnadu Mercantile Bank Ltd.
47	United Western Bank Ltd.
48	Vysya Bank Ltd.
D	Schedule Urban Co-op Banks
49	Abhyudaya Co-op Bank Ltd.
50	Bassein Catholic Co-op Bank Ltd.
51	Bharat Co-op Bank Ltd.
52	Bombay Mercantile Co-op Bank Ltd.
53	Cosmos Co-op Bank Ltd.
54	Greater Mumbai Co-op Bank Ltd.
55	JanataSahakari Bank Ltd.
56	Mumbai District Central Co-op Bank Ltd.
57	Maharashtra State Co-op Bank Ltd.
58	New India Co-op Bank Ltd.
59	North Canara G.S.B. Co-op Bank Ltd.
60	Rupee Co-op Bank Ltd.
61	Sangli Urban Co-op Bank Ltd.
62	Saraswat Co-op Bank Ltd.
63	ShamraoVithal Co-op Bank Ltd.
64	Mahanagar Co-op Bank Ltd.
65	Citizen Bank Ltd.
66	Yes Bank Ltd.
E	Foreign Banks
67	ABM AMRO (N.Y.) Bank.
68	American Express Bank Ltd.
69	ANZ Grindlays Bank Ltd.
70	Bank Of America N.T. & S.A.
71	Bank Of Tokyo Ltd.
72	Bankindosuez.
73	BanqueNationale de Paris.
74	Barclays bank.
75	City Bank N.A.
76	Hongkong & Shanghai banking Corporation.
77	Mitsui Taiyokbe Bank Ltd.
78	Standard Chartered Bank.
79	Cho Hung Bank.
17	Cho Hung Dunk.

SECTION –14 APPENDIX

	FORM OF TENDER
To,	
	Iunicipal Commissioner for Greater Mumbai
Sir,	have read and examined the following documents relating to the construction of
1/ *** C	have read and examined the following documents relating to the construction of
i.	Notice inviting tender.
ii.	Directions to tenderers (General and special)
iii.	General condition of contract for Civil Works of the Municipal Corporation of Greater Mumbai as amended up to date.
iv.	Relevant drawings
V.	Specifications.
vi.	Special directions
vii.	Annexure A and B.
viii.	Bill of Quantities and Rates.
1A.	I/We(full name in capital letters, starting with surname), the Proprietor/ Managing Partner/ Managing Director/ Holder of the Business, for the establishment / firm / registered company, named herein below, do hereby offer to
	Referred to in the specifications and schedule to the accompanying form of con-tract of the rates entered in the schedule of rates sent herewith and signed by me/ us" (strike out the portions which are not applicable).
1B.	I/We do here by state and declare that I/We, whose names are given herein below in details with the addresses, have not filled in this tender under any other name or under the name of any other establishment /firm or otherwise, nor are we in any way related or concerned with the establishment /firm or any other person, who have filled in the tender for the aforesaid work."
2.	I/We hereby tender for the execution of the works referred to in the aforesaid documents, upon the terms and conditions, contained or referred to therein and in accordance with the specifications designs, drawings and other relevant details in all respects.
	ne rates entered in the aforesaid Bill of Quantities and Rates.
3.	According to your requirements for payment of Earnest Money amounting to

(Rs.)

I/We have deposited the amount through online payment gateways with the C.E. of the Corporation not to bear interest

- 4. I/We hereby request you not to enter into a contract with any other person/s for the execution of the works until notice of non/acceptance of this tender has first been communicated to me/us, and in consideration of yours agreeing to refrain from so doing I/we agree not to withdraw the offer constituted by this tender before the date of communication to me/us of such notice of on / acceptance, which date shall be not later than ten days from the date of the decision of the Standing Committee or Education Committee of the Corporation, as maybe required under the Mumbai Municipal Corporation Act, not to accept this tender.(Subject to condition 5 below).
- 5. I/We also agree to keep this tender open for acceptance for a period of 180 days from the date fixed for opening the same and not to make any modifications in its terms and conditions which are not acceptable to the Corporation.
- 6. I/We agree that the Corporation shall, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely, if.

- a. I/We fail to keep the tender open as aforesaid.
- b. I/We fail to execute the formal contract or make the contract deposit when called upon to do so.

A/c No.

- c. I/we do not commence the work on or before the date specified by the Engineer in his work order.
- 7. I/We hereby further agree to pay all the charges of whatsoever nature in connection with the preparation, stamping and execution of the said contract.
- 8. I/We further agree that, I/we shall register ourselves as 'Employer' with the Bombay Iron and Steel Labour Board' and fulfill all the obligatory provisions of Maharashtra Mathadi, Hamal and other Manual workers (Regulation of Employment and Welfare) Act 1969 and the Bom-

Full Name and private residential address of all the partners constituting the Firm

1.		
_		Name of Bank
2.		
3.		
		Name of Branch
4.		
5.		Vender No.
9.	with full knowledge of liabilities and any manner relating to any action, in any information, which is found to be	ers Scheme 1970
10.	ment of work/contract to me/us, that incorrect, I/We shall compensate the losses or inconvenience caused to the for such compensation on any ground not claim in such case any amount by	at in the event it is revealed subsequently after the allot- any information given by me/us in this tender is false or Municipal Corporation of Greater Mumbai for any such e Corporation in any manner and will not resist any claim d whatsoever. I/we agree and undertake that I/we shall y way of damages or compensation for cancellation of the assigned to me/us or is with-drawn by the Corporation,"
	Address	Yours faithfully,
••••		Digital Signature of the Tenderer or the Firm
		1
		2
		3
		4
		5

AGREEMENT FORM

Standin	ıg Com	mittee/Education Committee Resolution No.
		FOR THE WORKS
		at made this day of
inhabita	ants of	Mumbai, carrying on business at
in Bom	bay un	der the style and name of Messrs
(Herein	nafter ca	alled "the contractor of the one part and Shri
the incl time be of Grea has tender ten-der tion Co	usion is sing hole ter Mu dered for has been mmittee GREE In this signed	S.&P.) (hereinafter called "the commissioner" in which expression are included unless inconsistent with the context, or meaning thereof, his successor or successors for the ding the office of Director (E,S.& P)of the second part and the Municipal Corporation mbai (hereinafter called "the Corporation") of the third part, WHEREAS the contractor or the construction, completion and maintenance of the works described above and his en accepted by the Commissioner (with the approval of the Standing Committee/Educate of the Corporation NOW THIS MENT WITNESSETH as follows: agreement words and expressions shall have the same meanings as are respectively aslate them in the General Conditions of Contract for works hereinafter referred to: ollowing documents shall be deemed to form and be read and constructed as a part of greement viz. The letter of Acceptance
	b)	The Bid:
	c)	Addendum to Bid; if any
	d)	Tender Document
	e)	The Bill of Quantities:
	f)	The Specification:
	g)	Detailed Engineering Drawings
	h)	Standard General Conditions of Contracts (GCC)
	i)	All correspondence documents between bidder and MCGM
3)4)	In con inafter plete a The C	sideration of the payments to be made by the Commissioner to the contractor as herementioned the contractor hereby covenants with the Commissioner to construct, commind maintain the works in conformity in all respects with the provision of the contract. ommissioner hereby covenants to pay to the Contractor in consideration of the con-
		on, completion and maintenance of the works the contract sum, at times and in the man- escribed by the contract.
fixed (c	or have	WHERE OF the parties hereto have caused their respective common seals to be herein to afhereunto set their respective hands and seals) the day and year above written. I and delivered by the contractors

In the presence of	1 rading under the name and style of	
Full Name Address	Contractors	
Signed by the Director (ES&P) in the presence of	Ex City/ WS/ ES	
Director (ES&	&P)	
The Common seal of the Municipal Corporation of C 20 in the presence of two members of		
1. 2.	1. 2.	
And in the presence of the Municipal Secretary	Municipal Secretary	

ANNEXURE "A"

1.	Nan	ne of work :	Work of Selection of System Integrator for Network Revamp at Various MCGM Offices.
	The	Engineer for this work:	Chief Engineer (M & E)
			Dy. Ch. Eng.(M & E) P&C
			Exe. Eng. Mech. (E.I.) P&D
2.	Esti	mated cost of Tender:	
	Sr. No	Description of work	Total Amount Rs.
	1	Civil Work	NIL
	2	LAN Work	
	3	Total Amount	

3.	Earnest Money	1967000.00

4 Time Period

1.	Contract as a whole Period completion	12 Weeks + Five years comprehensive on site warranty & supports
2.	Part or Groups of items	
i)		i)
ii)		ii)
iii		iii

5. Percentage to be charged as supervision charges for the work got executed through other meanspercent.

The "Actual cost of the work" shall mean in the case of percentage rate contracts the actual cost of the work executed at the rates as mentioned in the Contract Schedule adjusted by the Contractor's percentage rate and cost of extra and excess, but excluding the cost on account of Water Charges and Sewerage Charges if any, payable by the contractor and also excluding cost on account of price variation claims as provided in price variation clause as amended up to date.

- 1. In case of item rate contracts the actual cost calculated for the work executed at the rates mentioned in the contract schedule for different items including cost of excess and extra items of the work excluding the cost of water charges and sewerage charges if any, payable by the contractor and excluding cost on account of price variation claims as provided in extra excess conditions as amended up to date.
- 1. In case of lump sum contract the cost of the work actually carried out as per break up and programme of the work and the schedule of payment included in the contract including cost of any excess and/or extra items, of the work, excluding the cost on account of water charges and sewerage charges and also excluding cost on account of price variation claims as provided in extra excess conditions as amended up to date.

Annexure-B

PRE-CONTRACT INTEGRITY PACT

The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following:-

- 1. The Bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MCGM, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
- 2. The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MCGM or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.
- 3. The Bidder will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 4. The Bidder will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 5. The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the MCGM or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 6. The Bidder shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the MCGM as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder also undertakes to exercise due and adequate care lest any such information is divulged.
- 7. The Bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

- 8. The Bidder shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 9. The Bidder and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained herein, the Authority may reject an Application without being liable in any manner whatsoever to the Applicant if it determines that the Applicant has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process

For the purposes of this Clause 9, the following terms shall have the meaning herein after respectively assigned to them:

- 1. "fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;
- 2. "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any persons participation or action in the Bidding Process;
- 3. "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- 4. "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

Signature of Tenderer/Bidder

Annexure- C

(On Rs. 500/- Stamp Paper)

DECLARATION CUM INDEMNITY BOND

	I, of, do hereby declared and undertake as under.
1.	I declare that I have submitted certificates as required to Executive engineer
	(Monitoring) at the time of registration of my firm/company and there is no change in the contents of the certificates that are submitted at the time of registration.
2.	I declare that I in capacity as Manager/Director/Partners/Proprietors of has not been charged with any prohibitory and /or penal action such as banning(for specific time or permanent)/de-registration or any other action under the law by any Government and/or Semi Government and/or Government undertaking.
3.	I declare that I have perused and examined the tender document including addendum, condition of contract, specifications, drawings, bill of quantity etc. forming part of tender and accordingly, I submit my offer to execute the work as per tender documents at the rates quoted by me in capacity as of
4.	I further declare that if I am allotted the work and I failed to carry out the allotted work in accordance with the terms and conditions and within the time prescribed and specified, MCGM is entitled to carry out the work allotted to me by any other means at my risk and cost, at any stage of the con-tract.
5.	I also declare that I will not claim any charge/damages/compensation for non availability of site for the contract work at any time.
6.	I declare that I will positively make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge
	Signature of Tenderer/Bidder

BANKERS GURANTEE IN LIEU OF CONTRACT DEPOSIT

THIS INDI	ENTURE m	ade this		day of		BETWEE	N	
THE		В	ANK incorp	porated unde	r the Englis	h/Indian C	ompanies	Acts
and carrying on bu								
deemed to	include	its	successors	and	assigns)of	the	first	part
inhabitants carrying	g on busines	ss at			i	n Mumbai	under the	e style
and name of Messe								
part Shri.								
THE MUN	ICIPAL CC	MMISS	SIONER FO	R GREATEI	R MUMBAI	(hereinafte	er referred	l to as
'the commissioner'	which expre	ession sh	nall be deem	ned, also to in	nclude his su	accessor or	successo	rs for
the time being in th	e said office	of Mun	icipal Comr	nissioner) o	f the third pa	rt and THE	E MUNIC	IPAL
CORPORATION (OF GREATI	ER MUN	MBAI (herei	nafter referre	ed to as 'the (Corporation	n') of the	fourth
part WHEREAS th	e consultant	ts have s	submitted to	the Commis	sioner tende	er for the e	xecution	of the
work of "						and the	e terms of	f such
tender /contract rec	quire that the	e consult	tants shall d	eposit with t	the Commiss	sioner as/co	ontract de	posit/
earnest money and	or the secui	rity a sur	n of Rs		_(Rupees)AND
WHEREAS if and	when any su	uch tend	er is accepte	ed by the Co	mmissioner,	the contrac	et to be er	ntered
into in furtherance	thereof by t	he consu	ultants will 1	provide that	such deposit	shall rema	in with a	nd be
appropriated by the	Commissio	ner towa	ards the Sec	urity -deposi	t to be taken	under the	contract a	ınd be
redeemable by the	consultants,	if they	shall duly a	nd faithfully	carry out th	e terms an	d provisio	ons of
such contract and	shall duly s	atisfy al	l claims pro	operly charge	eable agains	t them the	re under	AND
WHEREAS the co	nsultants are	e constit	uents of the	Bank and ir	order to fa	cilitate the	keeping	of the
accounts of the co	onsultants, t	the Bank	k with the	consent and	concurrenc	e of the c	onsultant	s has
requested the Com	missioner to	accept	the undertal	king of the B	ank hereina	fter contair	ned, in pla	ace of
the contractors dep	ositing with	the Cor	mmissioner	the said sum	as earnest i	money and	/or secur	ity as
aforesaid AND W	HEREAS a	ccording	ly the Com	missioner ha	as agreed to	accept su	ch undert	taking
NOW THIS AGRI	REMENT V	VITHNE	SSES that	in considerat	tion of the p	oremises, tl	ne Bank	at the
request of the cons	ultants (her	eby testi	ified) UND	ERTAKES '	WITH the co	ommissione	er to pay	to the
commissioner upor	n demand in	writing	, whenever	required by	him , from	time to tin	ne, so to	do ,a
sum not exceeding	in the who	le Rs		(Rupees)u	nder the	terms
of the said tender a	and /or the c	ontract .	The B.G. Is	valid up to	"	Notwithsta	nding any	thing/
what has been	stated abo	ve, our	liability	under the	above gua	rantee is	restricte	d to
Rson	ly and guar	antee sha	all remain ii	n force up to		unless	the dema	ınd or
claim under this gu	arantee is n	nade on	us in writing	g on or befor	re	all your	right und	er the
above guarantee sh	nall be forfe	ited and	we shall b	e released fr	om all liabi	lities under	the guar	rantee
thereafter"								

IN WITNESS WHEREOF

WITNESS(1)	<u> </u>
Name and	
address	
WITNESS(2)	<u> </u>
Name and	the duly constituted Attorney Manager
address	_
the Bank and the said Messer's _	
	(Name of the Bank)
WITNESS(1)	_
Name and	
address	
WITNESS(2)	_
Name and	_
For Messer's	
address	

have here into set their respective hands the day and year first above written.

The amount shall be inserted by the Guarantor, representing the Contract Deposit in Indian Rupees.

Annexure- D

Rate Analysis

Item Description

Sr. No.	Description of rate analysis parameters	Unit	Quantity	Rate	Amount
1	Basic Material (Rate should be inclusive of all taxes)				
2	Machinery Hire Charges				
3	Labour Type		(labour components)		
4	Total of all components				
5	Overhead & Profit 15% on 4				
6	Total Rate (4+5)				
7	Per unit rate				

Sign & Seal of the Tenderer

PROFORMAS:

PROFORMA-I

The list of similar works as stated in para 'A' of Post qualification during last five years-

	PROFORMA- I					
Sr. No. Name of the Project		Name of the employer of completion		Actual date of completion	Actual Cost of work done	
1	2	3	4	5	6	

NOTE:

- j. Seanned Attested copies of completion/performance certificates from the Engineer-in-Charge for each work should be annexed in the support of information furnished in the above proforma.
- k. Works shall be grouped financial year-wise.

PROFORMA-II

Yearly turnover of Civil Engineering Construction Works during the last five years.

PROFORMA- III

At least similar work, as stated in para 'A' of Post qualification,.

	PROFORMA- III						
Name of the Project	Name of the Employer	Cost of the Project	Date of is-sue of work Order	Stipulated Date of Completion	Actual Date of Completion	Actual cost of work done	Remarks explaining reasons for delay, if any
1	2	3	4	5	6	7	8

Note: Scanned Attested copies of completion/performance certificates from the Engineer-in-charge for each work should be annexed in support of information furnished in the above proforma.

PERSONNEL:

PROFORMA- IV					
Sr. No.	Post	Name	Qualification	Work Experience	
		(Prime Candidate/ Alternate)		No. of Years	Name of Projects
1					
2					
3					
4					

NOTE: Scanned Attested copies of qualification certificates and details of work experience shall be submitted /uploaded.

MACHINERY: (for special work only)

PROFORMA- V/A				
Sr. No.	Equipment-	Number-	Owned/Leased/Assured	
			access-	
1	2	3	4	

PROFORMA- V/B				
	Sr. No.	Equipment-	Number-	Owned
1		2	3	4

Note: The tenderer(s) shall furnish/upload the requisite Seanned Attested documents of ownership/leased of machineries. The undertaking from the suppliers will not be accepted.

PROFORMA - VI / A

Details of Existing Commitments and ongoing works -

PROFORMA - VI / A											
Description	Place	Contract	Name &	Value of	Scheduled-	Value of	Anticipated				
of work		No. &	Addresses	Contract	date of	work	Date of				
		Date-	of	in Rs.	eompletion	remaining	eompletion-				
			employer			to be	_				
						completed					
1	2	3	4	5	6	7	8				

Note: Scanned Attested copies of completion/performance certificates from the Engineer-in-Charge for each work should be annexed in the support of information furnished in the above proforma.

PROFORMA - VI / B

Details of works for which bids are already uploaded -

<u>PROFORMA - VI / B</u>										
Description of work	Place	Name & Ad-dresses of employee	Value of Contract in Rs.	Time Period	Date on- which- decision is- expected	Remarks				
1	2	3	4	5	6	7				

Note: Scanned Attested copies of certificates from the Engineer-in-charge for each work shall be annexed.