

**I) Qualifying Requirement/ Eligibility criteria**

Utility may float tender individually or in any combination of towns A/B/C/U together depending upon the availability of resources such as control center infrastructure. In case tender floated in combined approach i.e. all towns A/U, B&C in same package, then QR of higher i.e. group A/U shall be followed or else QRs of respective groups to be followed

**Group-A /U towns**

Only those bidders which meets the below mentioned minimum Qualifying Requirements shall be considered for further evaluation of Proposal. The bidder or members of the consortium & their holding company shall not be based in prior referenced countries as notified by MHA, GoI at the time of bidding at the time of Bidding and award.

In case of consortium bid, name of lead bidder shall be mentioned in the bid. The Bidder can be a Sole Bidder or a Consortium (of not more than two members i.e. one lead and one consortium partner) who shall meet the following along with identification of lead bidder in the bid:

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| <p>I. Financial (I) Turnover criteria shall be met by the sole bidder. In case of consortium, both lead &amp; Consortium partner shall meet the criteria mentioned as given below:<br/>QF - QR - Financial</p> |
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***QF1 For lead or sole bidder***

Average Annual financial turnover of best 3 years in the last 5 FYs including last completed financial year , ending 31<sup>st</sup> March , should be at least 30% of the estimated cost **(to be specified by utility)**

***QF2 For consortium partner***

Average Annual financial turnover of best 3 years in the last 5 FYs including last completed financial year , ending 31<sup>st</sup> March , should be at least 15% of the estimated cost **(to be specified by utility).**

**(Proof:** Annual Audited Financial Statements for last 5 financial years or 3 best financial years considered for qualification shall be submitted. In case Audited Financial Statements for the previous year is not prepared then certificate from statutory auditor shall be submitted certifying the annual financial turnover.)

***QF3***

The bidder (Sole or lead and consortium both ) should have a net worth not less than paid-up equity, in each of the best 3 years in the last 5 FYs incl last completed financial year

**(Proof:** Annual Audited Financial Statements for last 5 financial years or 3 best financial years shall be submitted. In case Audited Financial Statements for the previous year is not prepared then certificate from statutory auditor shall be submitted certifying the net worth)

## II. Technical

**The following qualifying requirements QT1 shall be met by the sole bidder. In case of consortium bidding, QT1 to be met by one partner & QT2 to be met by another consortium partner (QR-Technical)**

**QT1)** - The bidder shall provide evidence of previous experience in the design, engineering, supply/integration, installation, testing and commissioning of at least one or cumulatively in multiple projects of SCADA & DMS/EMS (Supervisory Control and Data Acquisition System & Distribution Management System Projects for Power Distribution /Transmission/(11KV or above) meeting the following requirements or Power distribution Utility or its subsidiary & has successfully awarded, operationalized the solution in last **Fifteen (15) years** from the bid submission date. In case of power distribution utility or its subsidiary, the projects shall be awarded and successfully operationalized the solution for its own organization in **last Fifteen (15) years** from the bid submission date.

The above project(s) should consist of cumulative of all projects, at least 15 RTUs or Data Concentrator (DC or distributed RTUs) or Bay controller Unit (BCU or **RMUs** or in combination of these items and 20 FRTUs (**20 FRTUs applicable only in case of SCADA/DMS projects**). In case of multiple projects, each project shall have minimum 5 RTUs or Data Concentrator (DC) or Distributed RTU or Bay controller Unit (BCU or **RMUs** or in combination of these items and above projects should have been awarded in **last Fifteen (15) years** & have been in operation for at least one year after completion during **last Fifteen (15) years** from the bid submission date

**QT2 )-** For other consortium partner (QT2A or QT2B)

The bidder shall provide evidence of previous experience in the design, engineering, supply/integration, installation, testing and commissioning of at least one project or cumulatively in maximum 5 projects for Power Distribution /Transmission (11KV or above) Generation/ railways/ Oil /Gas/**water/Process control sector** in **last Fifteen (15) years**. The projects meeting the following, should have been awarded in **last Fifteen (15) years** & have been in operation for at least one year after completion during **last Fifteen (15) years** from the bid submission date

**QT2A)** - Electrical Infrastructure

- Minimum cumulatively 750 CKM of HT line(11KV or above), 5 nos of new 33/11 KV S/S & 50 nos remote controllable Sectionalizer/ RMUs/ /Communication gateways or DCUs

Or

**QT2B** SCADA or Substation Automation system Projects

- At least 15 RTUs or Data Concentrator (DC or distributed RTUs) or Bay controller Unit (BCU or IED (Intelligent Electronic device) or in combination of these items.

**(Proof:** i) LoA from the owners/client and ii)certificates of Acceptance/ successful completion for work done, in support of the qualifying requirements, clearly establishing – a) the start and end date, b) operation of at least 1 year of the project, c) brief scope of work and d) cost of project, on client letterhead. Power distribution Utility or its subsidiary which has successfully operationalized the solution for its own organization shall provide certificate /test report of acceptance of the system alongwith certification of successful running by company secretary.

The supporting proof document must be labeled as original/true copy/translation, as the case may be, and the same shall necessarily be signed and authenticated by the Authorized Signatory of bidder. The owner/client contact details shall be provided against each project experience proof being submitted.

The proof documents available in any language other than English shall be translated to English and authenticated by Authorized Signatory of bidder for submission. In such cases, the original language copies shall also be submitted along with the translated proofdocuments)

Further, multiple participation of any bidder as sole or part of consortium partner in the same bid is not allowed. Further, multiple participation of any bidder as sole or part of consortium partner in the same bid is not allowed. However, product /solution can be offered by multiple bidders.

**Group-B&C towns**

Only those bidders which meets the below mentioned minimum Qualifying Requirements shall be considered for further evaluation of Technical Proposal.

The bidder or members of the consortium & their holding company shall not be based in prior referenced countries as notified by MHA, Gol at the time of bidding.

In case of consortium bid, name of lead bidder shall be mentioned in the bid. The Bidder can be a Sole Bidder or a Consortium (of not more than two members) who shall meet the following:-

I) Financial (I) Turnover criteria shall be met by the sole bidder. In case of consortium, both lead & Consortium partner shall meet the criteria mentioned as given below  
QF - QR - Financial

***QF1 For lead or sole bidder***

Average Annual financial turnover of best 3 years in the last 5 FYs incl last completed financial year , ending 31<sup>st</sup> March , should be at least 30% of the estimated cost ***(to be specified by utility)***

***QF2 For consortium partner***

Average Annual financial turnover of best 3 years in the last 5 FYs incl last completed financial year, ending 31st March , should be at least 15% of the estimated cost

**(Proof:** Annual Audited Financial Statements for last 5 financial years or best 3 financial years considered for qualification shall be submitted. In case Audited Financial Statements for the previous year is not prepared then certificate from statutory auditor shall be submitted certifying the annual financial turnover.)

**QF3**

The bidder (Sole or lead and consortium both) should have a net worth not less than paid-up equity, in each of the best 3 years in the last 5 years incl last one financial year.

**(Proof:** Annual Audited Financial Statements for last 5 financial years or best 3 financial years considered for qualification shall be submitted. In case Audited Financial Statements for the previous year is not prepared then certificate from statutory auditor shall be submitted certifying the net worth.)

II) Technical

**The following qualifying requirements QT1 shall be met by the sole bidder. In case of consortium bidding QT1 shall be met by one partner & QT2 by another consortium partner (QR- Technical)**

The bidder shall provide evidence of previous experience in the design, engineering, supply/ integration, installation, testing and commissioning of at least one project or cumulatively in maximum 5 projects in Distribution/ Transmission/ Generation/ Railways/ Oil/ Gas sector/ water/ process control meeting the following requirements or by Power distribution Utility or its subsidiary meeting the following requirements & has successfully awarded, operationalized the solution in last **Fifteen (15) years** from the bid submission date. In case of power distribution utility or its subsidiary, the projects shall be awarded and successfully operationalized the solution for its own organization in **last Fifteen (15) years** from the bid submission date. The projects meeting the following requirement's should have been awarded and have been in operation for at least one year after completion during **last Fifteen (15) years** from the bid submission date.

**For one consortium partner**

**QT1**

SCADA (Supervisory Control and Data Acquisition Projects or RT-DAS for Power Distribution /Transmission/Generation/ railways/ Oil/Gas sector/water/process control should consist of at least one project or cumulatively in maximum 5 projects with at least 15 RTUs or/Data Concentrator (DC) or Bay controller Unit (BCU) or Distributed RTU or IED (Intelligent Electronic Devices) or in combination of these items with each project having minimum 5 quantities of such items. The SCADA project must be using IEC-870-5- 104/101/DNP3.0/MODBUS/IEC61850 protocol.

**For another consortium partner**

**QT2**

Minimum cumulatively 500 CKM of HT line(11KV or above ) & 5 nos of new 33/11 KV Sub-Station or above in the above project & should be in operation for at least one year after completion during **last 15 years** from the bid submission end date.

**Proof:** i) LoA from the owners/client and ii)certificates of Acceptance/ successful completion for work done, in support of the qualifying requirements, clearly establishing

– a) the start and end date, b) operation of at least 1 year of the project, c) brief scope of work and d) cost of project, on client letterhead. Power distribution Utility or its subsidiary which has successfully operationalized the solution for its own organization shall provide certificate /test report of acceptance of the system along with certification of successful running by company secretary.

The supporting proof document must be labeled as original/true copy/translation, as the case may be, and the same shall necessarily be signed and authenticated by the Authorized Signatory of bidder. The owner/client contact details shall be provided against each project experience proof being submitted.

The proof documents available in any language other than English shall be translated to English and authenticated by Authorized Signatory of bidder for submission. In such cases, the original language copies shall also be submitted along with the translated proof documents)

Further, multiple participation of any bidder as sole or part of consortium partner in the same bid is not allowed. However, product /solution can be offered by multiple bidders

## 9.1 Design Standards –RTU

The RTUs shall be designed in accordance with applicable International Electro- technical Commission (IEC), Institute of Electrical and Electronics Engineer (IEEE), American National Standards Institute (ANSI), and National Equipment Manufacturers association (NEMA) standards, unless otherwise specified in this Technical specification. In all cases the provisions of the latest edition or revision of the applicable standards in effect shall apply.

The RTU shall be designed around microprocessor technology. For easy maintenance the architecture shall support pluggable modules on backplane. The field wiring shall be terminated such that these are easily detachable from the I/O module. **The RTU shall comply to IEC62351-3 for cyber security in communication between RTU and master station and IEC62443-4-2 for cyber security for product** including testing requirement as per MoP order no. 12/34/2020-T&R dtd 08.06.21 & CEA /PLG/R&D/MII/2021 dtd 11.6.21 and any amendment from time to time.

## 10.1 Design Standards -FRTU

The FRTUs shall be designed in accordance with applicable International Electro- technical Commission (IEC), Institute of Electrical and Electronics Engineer (IEEE), American National Standards Institute (ANSI), and National Equipment Manufacturers association (NEMA) standards, unless otherwise specified in this Technical specification. In all cases the provisions of the latest edition or revision of the applicable standards in effect shall apply. **The FRTU shall comply to IEC62351-3 for cyber security in communication between FRTU and master station and IEC62443-4-2 for cyber security for product** including testing requirement as per MoP order no 12/34/2020-T&R dtd 08.06.21 & CEA /PLG/R&D/MII/2021 dtd 11.6.21 and any amendment from time to time.