



Trinidad and Tobago Electricity Commission

Vision: Powering the nation into the next generation

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PUBLIC LIGHTING DEPARTMENT

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EXPRESSION OF INTEREST

PROVISION OF LIGHTING DESIGN SOFTWARE FOR THE PUBLIC LIGHTING DEPARTMENT

TRINIDAD AND TOBAGO ELECTRICITY COMMISSION
INSTRUCTIONS TO RESPONDENTS
FOR
‘EXPRESSIONS OF INTEREST’ (EOI)

Please carefully read and follow these instructions in the submission of your (EOI). Failure to comply with the terms and conditions herein SHALL affect the consideration of your Submission.

1.0 EOI DOCUMENTS

- EOI documents and all other related correspondence must be in **ENGLISH**.
- Respondent must submit **ONLY** by Soft Copy using preferably CDR/DVDR, or Flash Drive in a PDF Format.
- The Submission must be signed and stamped by the respondent or his duly authorized agent.
- The EOI submission shall be placed in a properly, sealed envelope and shall be labeled:

TITLE:

REFERENCE NUMBER:

- EOI from locally registered companies should be accompanied by:

Certificates from the Board of Inland Revenue, the VAT Administration and the National Insurance Board to the effect that your firm has fulfilled the obligations under the Income Tax Act, Value Added Tax Act, and the National Insurance Act to the satisfaction of the Board of Inland Revenue, the VAT Administration and the National Insurance Board respectively.

LOCALLY REGISTERED RESPONDENTS WHOSE SUBMISSIONS DO NOT INCLUDE ALL OF THESE CERTIFICATES MAY NOT BE CONSIDERED.

2.0 DELIVERY OF EOI SUBMISSION

- EOI submissions **MUST** be placed in the Tender Box located at:

L.P. #846 Southern Main Road
King Village
CALIFORNIA
TRINIDAD AND TOBAGO

- The tender box can be accessed between the hours of 8.30 a.m. to 11.45 a.m. and 1.00 p.m. to 3.00 p.m. Mondays to Fridays except Public Holidays.
- Documents must be submitted **NO LATER THAN THE CLOSING DATE AND TIME ADVERTISED.**
- **NO SUBMISSION WILL BE ACCEPTED AFTER THE CLOSING DATE AND TIME DEADLINE.**

3.0 E-MAILS

EOIs submitted through this channel will not be accepted.

4.0 QUERIES

All queries concerning this EOI are to be emailed to Tender Queries Desk at TQueriesDesk@ttec.co.tt or tenderqueries@ttec.co.tt and shall be submitted at least fourteen (14) calendar days prior to the closing date of the EOI. The Commission will respond to such requests at least seven (7) calendar days prior to the closing of the EOI.

5.0 DELIVERABLES

All requests as per the “Details of Submission” in the EOI, must be responded to as precisely as possible as this may have a material bearing on evaluation process and the shortlisting of the supplier.

6.0 UNSOLICITED INFLUENCE

Any attempt by a respondent to influence T&TEC in the process of evaluation will result in disqualification.

7.0 PRICE

NO INFORMATION ON PRICE SHALL BE PROVIDED IN RESPONSE TO THIS EOI.

8.0 DISCLAIMER

The EOI does not constitute a Request for Tender (RFT) or a Request for Quotation (RFQ). The information is being requested as part of the Commission’s market research and may be utilized to shortlist the respondents to the procurement.


Curvis Francois
Apr 8 2022 11:58 AM


Curvis Francois
General Manager (Ag.)

2022 04 22

SCOPE OF WORKS

1.0 Introduction

The Public Lighting Department (PLD) of the Trinidad and Tobago Electricity Commission (T&TEC) is desirous of acquiring Lighting Design Software specifically for streetlighting (Minor and Major Roadways and Highways), recreation sport floodlighting (cricket and football), outdoor carparking areas, amateur basketball courts, recreation parks and other outdoor open spaces including Substations.

This document highlights the requirements for the Lighting Design Software, and as such, requests that invitees provide the necessary information on whether they can meet the objectives, attaching additional documents if required.

Where the word “shall” or “must” is used, it means that failure to comply with the respective requirements will lead to disqualification.

2.0 Software Requirements

The Lighting Design Software shall be able to simulate the spaces to be illuminated with the selected luminaire and generate the uniformity and illuminance/luminance levels achieved in such space. The lighting design software shall allow the designer to prepare the following:

2.1 A streetlighting design in accordance to ANSI/IES RP-8 standards with various streetlighting profiles including the following but not limited to:

- Major/minor roadways, highways, interchanges, roundabouts, underpass
- Simple construction of a roadway (with multi-lanes, pavements and medians) as well as import images and CAD files
- Manipulation of pole height (10m, 12m)
- Single or double gooseneck arrangements
- Median or road edge lighting or combination

2.2 A floodlighting design on a recreation ground (cricket, football, multi-purpose) with various configurations including the following but not limited to:

- Simple construction of a 2D area (polygonal, rectangular or circular spaces) or import of image and CAD files
- Multiple floodlights on crossarm arrangement (For e.g. crossarm arrangement with three rows of four floodlights) utilizing various beam types such as NEMA 3 and NEMA 5
- Manipulation of pole height (17m, 21m etc) and manipulation of floodlights at different heights on the same pole

3.0 IT Requirements

To ensure compatibility, security, and efficient use of the Lighting Design Software within the existing T&TEC IT environment, the Respondent shall address the following requirements:

3.1 System Compatibility

- The software shall be compatible with Microsoft 11 (64-bit) operating systems.
- Respondent must state system installation options, i.e. on premise and/or web-based/cloud version
- If a cloud/web-based solution is proposed, it must be compatible with commonly used web browsers (Chrome, Edge, Firefox) and details must be provided in the submission.

3.2 Minimum Hardware Requirements

The Respondent shall clearly state the minimum and recommended hardware specifications for both clients and servers, including:

- CPU type and speed (e.g. Intel i7 or AMD Ryzen equivalent and higher)
- RAM (minimum 16 GB recommended)
- GPU (if software uses GPU acceleration – e.g. NVIDIA GeForce or Quadro, list required specs)
- Storage (HDD/SSD requirements)
- Display resolution (especially for 3D rendering)

3.3 Software Interoperability

- The software shall support import/export of CAD files (e.g., .DWG, .DXF formats).
- The software should be able to integrate or import IES photometric data files (.IES format).
- The software should support standard export formats (e.g., PDF, PNG, Excel) for reports and design outputs.
- Plugin support or API access for custom extensions or integration with other systems is desired.

3.4 Licensing and Access Control

- The licensing model shall be specified (e.g., per-user, concurrent user, subscription, perpetual).
- The software should support license management (e.g., online activation, license transfer, floating licenses).
- For cloud-based systems, support for secure user authentication (e.g., username/password, MFA if available) must be included.

3.5 Data Security and Privacy

- All data stored locally or in the cloud must be protected using industry-standard encryption.

- If cloud-based, the hosting location of servers and compliance with data protection laws shall be indicated.
- The software must not transmit sensitive data without explicit user permission.
- The security methodology shall be defined
- Integration with active directory will be an asset

3.6 Maintenance and Support

The Respondent shall provide information, via the submission, on:

- Support methodology, Service Level Agreements and maintenance and support coverage
- Availability of technical support (hours, timezone, methods: email, chat, phone)
- Frequency of software updates
- Compatibility assurance with future Operating Systems or CAD versions
- Bug tracking and resolution process

3.7 Backup and Recovery

- The backup schedules and disaster recovery plans shall be described in the submission.
- Users shall be able to export their project files locally for independent storage.

3.8 Network and Internet Requirements

- For cloud-based systems: the minimum bandwidth requirements shall be stated in the submission.
- Offline functionality: the modules that can be used without an internet connection shall be indicated in the submission.

3.9 General System Customizations and Configurations

- Clear details of the extent of in-house configurations and customisations available and the tools for same shall be provided in the submission.

3.10 Reports

- Details of any out-of-the-box reports, data analytics and dashboards shall be provided in the submission and shall specify which are real-time.
- Clear details of the extent of additional report development, configurations and customisations (related to reports) available and the tools for same shall be provided in the submission.
- All reports shall be exportable to pdf, excel, csv etc.

3.11 Project Management

- A project plan for the implementation shall be included inclusive of project timelines. The details must be provided in the submission.

The Technical Summary Scoresheet shall be completed and submitted. Failure to provide the required information and supporting documentation listed below as part of the EOI submission may result in disqualification.

| Technical Summary Scoresheet | | | |
|-------------------------------------|--|-----------------|--|
| T&TEC Requirement | Description | Required | Respondent's Data (Information to be inserted by Respondents or additional supporting information included) |
| Software Requirements | Lighting Design Software able to simulate the spaces to be illuminated with the selected luminaire and generate the uniformity and illuminance/luminance levels achieved in such space | Yes/No | |
| Streetlighting Design | i. Streetlighting design in accordance to ANSI/IES RP-8 standards with various streetlighting profiles | Yes/No | |
| | ii. Streetlighting profile includes: Major/minor roadways, highways, interchanges, roundabouts, underpass | Yes/No | |
| | iii. Streetlighting profile includes: Simple construction of a roadway (with multi-lanes, pavements and medians) as well as import images and CAD files | Yes/No | |
| | iv. Streetlighting profile includes: Manipulation of pole height (10m, 12m) | Yes/No | |
| | v. Streetlighting profile includes: Streetlighting Single or double gooseneck arrangements | Yes/No | |
| | vi. Streetlighting profile includes: Median or road edge lighting or combination | Yes/No | |

| Technical Summary Scoresheet | | | |
|---|--|-----------------|--|
| T&TEC Requirement | Description | Required | Respondent's Data (Information to be inserted by Respondents or additional supporting information included) |
| Floodlighting Design | i. Floodlighting design configuration includes: Simple construction of a 2D area (polygonal, rectangular or circular spaces) or import of image and CAD files | To State | |
| | ii. Floodlighting design configuration includes: Multiple floodlights on crossarm arrangement (For e.g. crossarm arrangement with three rows of four floodlights) utilizing various beam types such as NEMA 3 and NEMA 5 | To State | |
| | iii. Floodlighting design configuration includes: Manipulation of pole height (17m, 21m etc) and manipulation of floodlights at different heights on the same pole | To State | |
| System Compatibility | i. Software compatible with Microsoft 11 (64-bit) operating systems. | Yes/No | |
| | ii. System availability options, i.e. on premise and/or web-based/cloud version | To State | |
| | iii. If a cloud/web-based solution is proposed, it must be compatible with commonly used web browsers (Chrome, Edge, Firefox) | To State | |
| Minimum Hardware Requirements (Client Systems) | i. CPU type and speed (e.g. Intel i7 or AMD Ryzen equivalent and higher) | To State | |
| | ii. RAM (minimum 16 GB recommended) | To State | |
| | iii. GPU (if software uses GPU acceleration – e.g. NVIDIA) | To State | |

| Technical Summary Scoresheet | | | |
|--|--|-----------------|--|
| T&TEC Requirement | Description | Required | Respondent's Data (Information to be inserted by Respondents or additional supporting information included) |
| | GeForce or Quadro, list required specs) | | |
| | iv. Storage (HDD/SSD requirements) | To State | |
| | v. Display resolution (especially for 3D rendering) | To State | |
| Minimum Hardware Requirements (Servers) | vi. CPU type and speed (e.g. Intel i7 or AMD Ryzen equivalent and higher) | To State | |
| | vii. RAM (minimum 16 GB recommended) | To State | |
| | iii. GPU (if software uses GPU acceleration – e.g. NVIDIA GeForce or Quadro, list required specs) | To State | |
| | ix. Storage (HDD/SSD requirements) | To State | |
| | x. Display resolution (especially for 3D rendering) | To State | |
| Software Interoperability | i. Software supports import/export of CAD files (e.g., .DWG, .DXF formats). | Yes/No | |
| | ii. Software able to integrate or import IES photometric data files (.IES format). | Yes/No | |
| | iii. Software supports standard export formats (e.g., PDF, PNG, Excel) for reports and design outputs. | Yes/No | |
| | iv. Plugin support or API access for custom extensions or integration with other systems is desired. | Yes/No | |
| Licensing and Access Control | i. Licensing model (e.g., per-user, concurrent user, subscription, perpetual). | To State | |
| | ii. Software license management (e.g., online activation, license transfer, floating licenses). | To State | |
| | iii. Support for secure user authentication options (e.g., username/password, MFA if | To State | |

| Technical Summary Scoresheet | | | |
|--|--|-----------------|--|
| T&TEC Requirement | Description | Required | Respondent's Data (Information to be inserted by Respondents or additional supporting information included) |
| | available) (for cloud-based systems). | | |
| Data Security and Privacy | i. All data stored locally or in the cloud protected using industry-standard encryption. | Yes/No | |
| | ii. Hosting location of servers and compliance with data protection laws (if cloud based). | To State | |
| | iii. Transmission of sensitive data without explicit user permission. | Yes/No | |
| | iv. Security methodology | To State | |
| | v. Integration with active directory | Yes/No | |
| Maintenance and Support | i. Support methodology, Service Level Agreements and maintenance and support coverage | To State | |
| | ii. Availability of technical support (hours, timezone, methods: email, chat, phone) | To State | |
| | iii. Frequency of software updates | To State | |
| | iv. Compatibility assurance with future Operating Systems or CAD versions | Yes/No | |
| | v. Bug tracking and resolution process | Yes/No | |
| Backup and Recovery | i. Backup schedules and disaster recovery plans. | To State | |
| | ii. Users can export their project files locally for independent storage. | Yes/No | |
| Network and Internet Requirements | i. Minimum bandwidth requirements for cloud-based systems | To State | |
| | ii. The modules that can be used without an internet connection (offline functionality) | To State | |

| Technical Summary Scoresheet | | | |
|---|--|-----------------|--|
| T&TEC Requirement | Description | Required | Respondent's Data (Information to be inserted by Respondents or additional supporting information included) |
| General System Customisations and Configurations | Extent of in-house configurations and customisations available and the tools for same | To State | |
| Reports | i. Out-of-the-box reports, data analytics and dashboards which are real-time | To State | |
| | ii. Extent of additional report development, configurations and customisations (related to reports) available and the tools for same | To State | |
| | iii. All reports exportable to pdf, excel, csv, etc | To State | |
| Project Management | Project plan for the implementation included inclusive of project timelines | Yes/No | |

4.0 Implementation and Training

4.1 Respondent shall provide training for the various units and modules required to be completed to meet the requirements. The Table below must be completed and submitted. Failure to provide the required information and supporting documentation listed below as part of the EOI submission may result in disqualification.

| T&TEC Description | Yes/No |
|--|---------------|
| The knowledge transfer and training methodology shall be included for initial implementation and future system updates | |
| Training implementation to include in-person classroom type training | |
| Training implementation to include virtual training | |
| Online User Manuals shall be provided | |
| Submission of video training tutorials | |

4.2 Respondent shall indicate the associated duration times, how the training can be facilitated (online group session on MS Teams or Zoom via live trainer, online (individual time management) and in person (to state address)). Companies are recommended to provide all various options available.

Note: Respondent to provide further information for any additional features which can be provided that may be applicable to the listed Software Requirements and impact on an improved design.

5.0 Details of Submission

5.1 EOI Information:

| <u>EOI REFERENCE NO.</u> | <u>CLOSING DATE</u> |
|---------------------------------|----------------------------|
| EOI-490-01-26 | Same as Advertised |

5.2 Item of interest:

| <u>ITEM DESCRIPTION</u> |
|---|
| Lighting Design Software for the Public Lighting Department |

5.3 PRICE – NO information on price should be provided

5.4 ALL submissions MUST be in ENGLISH

5.5 The Respondent may include any other information in their Submission that may be necessary to illustrate fully the details of the product

5.6 Please note that participants moving to the next phase of the EOI must become prequalified on the Office of Procurement Regulation's (OPR) Procurement Depository for the *Line of Business 81101518 – Lighting Engineering Service*.