# Section 6: Returnable Bidding Forms / Checklist

This form serves as a checklist for preparation of your Proposal. Please complete the Returnable Bidding Forms in accordance with the instructions in the forms and return them as part of your Proposal submission. No alteration to format of forms shall be permitted and no substitution shall be accepted.

Before submitting your Proposal, please ensure compliance with the Proposal Submission instructions of the BDS 22.

**Technical Proposal Envelope:**

|  |  |
| --- | --- |
| **Have you duly completed all the Returnable Bidding Forms?** |  |
| * Form A: Technical Proposal Submission Form |  |
| * Form B: Bidder Information Form |  |
| * Form C: Joint Venture/Consortium/ Association Information Form |  |
| * Form D: Qualification Form |  |
| * Form E: Format of Technical Proposal |  |
| **Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?** |  |

**Financial Proposal Envelope**

**(Must be submitted in a separate sealed envelope/password protected email)**

|  |  |
| --- | --- |
| * Form F: Financial Proposal Submission Form |  |
| * Form G: Financial Proposal Form |  |

## **Form A:** Technical Proposal Submission Form

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | RFP/BLR/Green Cities/384/2018 | | |

We, the undersigned, offer to provide the services for the street lighting modernization in Novogrudok in accordance with your Request for Proposal No. RFP/BLR/Green Cities/384/2018 and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and our Financial Proposal sealed under a separate envelope.

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium /Association members or subcontractors or suppliers for any part of the contract:

1. is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists;
2. have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization;
3. have no conflict of interest in accordance with Instruction to Bidders Clause 4;
4. do not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with our firm in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN post-employment restrictions published in ST/SGB/2006/15);
5. have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future;
6. undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we embrace the principles of the United Nations Supplier Code of Conduct and adhere to the principles of the United Nations Global Compact.

We declare that all the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification and/or sanctioning by the UNDP.

We offer to provide services in conformity with the Bidding documents, including the UNDP General Conditions of Contract and in accordance with the Terms of Reference

Our Proposal shall be valid and remain binding upon us for the period of time specified in the Bid Data Sheet.

We understand and recognize that you are not bound to accept any Proposal you receive.

I, the undersigned, certify that I am duly authorized by [Insert Name of Bidder] to sign this Proposal and bind it should UNDP accept this Proposal.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[*Stamp with official stamp of the Bidder*]

## **Form B:** BidderInformation Form

|  |  |
| --- | --- |
| **Legal name of Bidder** | [Complete] |
| **Legal address** | [Complete] |
| **Year of registration** | [Complete] |
| **Bidder’s Authorized Representative Information** | Name and Title: [Complete]  Telephone numbers: [Complete]  Email: [Complete] |
| **Are you a UNGM registered vendor?** | Yes  No If yes, [insert UGNM vendor number] |
| **Are you a UNDP vendor?** | Yes  No If yes, [insert UNDP vendor number] |
| **Countries of operation** | [Complete] |
| **No. of full-time employees** | [Complete] |
| **Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (***If yes, provide a Copy of the valid Certificate):* | [Complete] |
| **Does your Company hold any accreditation such as ISO 14001 related to the environment?** *(If yes, provide a Copy of the valid Certificate):* | [Complete] |
| **Does your Company have a written Statement of its Environmental Policy?** *(If yes, provide a Copy)* | [Complete] |
| **Contact person UNDP may contact for requests for clarification during Proposal evaluation** | Name and Title: [Complete]  Telephone numbers: [Complete]  Email: [Complete] |
| **Please attach the following documents:** | 1. Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured 2. Certificate of Incorporation/ Business Registration 3. Tax Registration/Payment Certificate issued by the Internal Revenue Authority evidencing that the Bidder is updated with its tax payment obligations, or Certificate of Tax exemption, if any such privilege is enjoyed by the Bidder 4. Сopies of the luminaires and controllers manufacturer’s certificates for compliance with ISO 9001 standards for quality management systems 5. Copies of the luminaires and controllers manufacturer’s certificates for compliance with ISO 14001 standards for environmental management systems, if any 6. Patent Registration Certificates, if any of technologies submitted in the Bid is patented by the Bidder 7. Official appointment to act as Agent or a dealer on behalf of the Manufacturer, or Power of Attorney, if bidder is not a manufacturer 8. Power of Attorney to represent interests of the Bidder as regards any matters related to the RFP, incl. signing the Proposal 9. Certificate of compliance to perform the functions of a prime contractor, Category 3 or higher 10. Certificate of compliance to perform the functions of a prime designer/ Certificate of compliance for design and survey works, Category 3 or higher (issued to the Bidder or its Subcontractor) 11. Other Certificates confirming, which may beas required according to the legislation of the Republic of Belarus to confirm the right of the Bidder or its Subcontructors’ to carry out works offered in the technical proposal of the Bidder in response to the Terms of Reference of this RFP 12. Technical documentation for equipment as per Clause 15, Section 5a:   12.1 Technical specification of each proposed model of equipment, confirming all the parameters and data specified in this Terms of Reference, certified by the signature of the Contractor;  12.2 Photometric files of each proposed luminaire model in formats \*.ldt or \*.ies;  12.3. Copy of the certificate (declaration) of conformity of the Customs Union (attaching copies of the test record sheets);  12.4. Copies of the following documents (for bidders offering products from EU countries or non-Customs Union states):  - ENEC certificate for the luminaire (ENEC certificate according to standards: EN 62031, EN 62471, EN 60598-1, EN 60598-2-3);  - EC Declaration of Conformity (EC Declaration of Conformity in accordance with the requirements of the EU Directive 2004/108/EC, EU Directive 2006/95/EK, EN 60598-2-3, EN60598-1, EN 61547, EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61347-2-13);  - Test report on compliance of the proposed product with the electromagnetic compatibility standards (EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3) issued by an independent laboratory accredited according to ISO 17025;  - Test report on the dust and moisture protection rating (IP) of the enclosure of the proposed product (EN 60598-1), confirming the declared rating, issued by an independent laboratory accredited according to ISO 17025;  - Test report on the impact protection rating (IK) of the enclosure of the proposed product confirming the declared rating (EN 50102), issued by an independent laboratory accredited according to ISO 17025;  - A test report on photobiological safety for each proposed model of the product, issued by an independent laboratory accredited according to ISO 17025. The risk group shall not be higher than Risk Group 1;  - A test report on the measured permissible operating temperatures of the luminaire components (EN 60598-1 and declared permissible operating temperatures);  12.5. In case of the absence of the certificate (declaration) of conformity of the Customs Union at the time of submission of the Proposal, the Bidder shall submit an obligation to provide a certificate (declaration) of conformity of the Customs Union with the attached copies of test record sheets before the developed DSE is submitted to the Gosstroyekspertiza as well as the following documentation:  12.5.1 Copies of the documents specified in Clause 4 above (for bidders offering products from EU countries or non-Customs Union states):  12.5.2 Copies of the following documents (for bidders offering products from the Customs Union countries):  - Technical conditions (if any);  - Operational documents;  - Test report(s) of the independent test center;  12.6. An obligation to provide the permits issued by RUE “BelGIE” for the used data communications equipment before the DSE development is completed (in case the bidder proposes solutions that envisage data communication via GSM channels) |

## 

## **Form C:** Joint Venture/Consortium/Association Information Form

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | RFP/BLR/Green Cities/384/2018 | | |

To be completed and returned with your Proposal if the Proposal is submitted as a Joint Venture/Consortium/Association and in case of prvision of services through subcontractors

|  |  |  |
| --- | --- | --- |
| **No** | **Name of Partner and contact information** *(address, telephone numbers, fax numbers, e-mail address)* | **Proposed proportion of responsibilities (in %) and type of services to be performed** |
| 1 | [Complete] | [Complete] |
| 2 | [Complete] | [Complete] |
| 3 | [Complete] | [Complete] |

|  |  |
| --- | --- |
| **Name of leading partner**  (with authority to bind the JV, Consortium, Association during the RFP process and, in the event a Contract is awarded, during contract execution) | [Complete] |

We have attached a copy of the below document signed by every partner, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture:

Letter of intent to form a joint venture ***OR***  JV/Consortium/Association agreement

We have attached a copy (copies) of the below document (s):

Copies of the agremements with Subcontractor (s)

Copies of special permits (certificates) and clearances issued to the Subcontractor (s) required to perform certain types of works

We hereby confirm that if the contract is awarded, all parties of the Joint Venture/Consortium/Association or Subcontractors’ shall be jointly and severally liable to UNDP for the fulfillment of the provisions of the Contract.

|  |  |
| --- | --- |
| Name of partner: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name of partner: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |
| Name of partner: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name of partner: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

## **Form D:** QualificationForm

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | [Insert RFP Reference Number] | | |

If JV/Consortium/Association, to be completed by each partner.

**Historical Contract Non-Performance**

|  |  |  |  |
| --- | --- | --- | --- |
| Contract non-performance did not occur for the last 3 years | | | |
| Contract(s) not performed for the last 3 years | | | |
| **Year** | **Non- performed portion of contract** | **Contract Identification** | **Total Contract Amount** (current value in US$) |
|  |  | Name of Client:  Address of Client:  Reason(s) for non-performance: |  |

**Litigation History** (including pending litigation)

|  |  |  |  |
| --- | --- | --- | --- |
| No litigation history for the last 3 years | | | |
| Litigation History as indicated below | | | |
| **Year of dispute** | **Amount in dispute** (in US$) | **Contract Identification** | **Total Contract Amount** (current value in US$) |
|  |  | Name of Client:  Address of Client:  Matter in dispute:  Party who initiated the dispute:  Status of dispute:  Party awarded if resolved: |  |

**Previous Relevant Experience**

List the assignments for the performance of electrical installation works, development of design specifications and estimates and the supply of outdoor lighting fixtures (incl. LED lighting fixtures) and/or street lighting control systems confirmed by a reference list including pre-commissioning and training an end user.

Please list only previous similar assignments successfully completed at least during the last 3 years.

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder’s individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder’s partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by UNDP.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project name & Country of Assignment** | **Client & Reference Contact Details** | **Contract Value** | **Period of activity and status** | **Types of activities undertaken** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

*Bidders may also attach their own Project Bid Data Sheets with more details for assignments above.*

  Attached are the Statements of Satisfactory Performance from the Top 3 (three) Clients or more.

**Financial Standing**

|  |  |
| --- | --- |
| **Annual Turnover for the last 3 years** | Year 2015 USD  Year 2016 USD  Year 2017 USD |
| **Latest Credit Rating (if any), indicate the source** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Financial information**  (in US$ equivalent) | **Historic information for the last 3 years** | | |
|  | Year 1 | Year 2 | Year 3 |
|  | *Information from Balance Sheet* | | |
| Total Assets (TA) |  |  |  |
| Total Liabilities (TL) |  |  |  |
| Current Assets (CA) |  |  |  |
| Current Liabilities (CL) |  |  |  |
|  | *Information from Income Statement* | | |
| Total / Gross Revenue (TR) |  |  |  |
| Profits Before Taxes (PBT) |  |  |  |
| Net Profit |  |  |  |
| Current Ratio |  |  |  |

 Attached are copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:

* 1. Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
  2. Historic financial statements must be audited by a certified public accountant;
  3. Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.

**Technical Specification for the Equipment**

**Part 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Works to be Executed** | **Description of Works (required)** | | **Description of Works (offered)**  *Please confirm provision of the required works* |
| **1. Development of design specifications and estimates (DSE), DSE clearance and approval by relevant authorities.**  **Obtaining a positive opinion of the Gosstroyexpertiza on the DSE.**  **Design supervision.** | General requirements: | In accordance with Terms of Reference Section. | *Please confirm* |
| Endorsement of DSE: | The developed DSE shall be duly endorsed by all interested organizations, including UNDP, Novogrudok RUE “Housing & Utilities”, the State Motor Vehicle Inspectorate, the power supplier, rayon power networks operator, etc., as necessary. | *Please confirm* |
| **2. Supply of equipment, materials and software for street lighting control** | General requirements: | In accordance with Terms of Reference Section. | *Please confirm* |
| **3. Performance of construction and installation works** | General requirements: | In accordance with Terms of Reference Section. | *Please confirm* |
| **4. Pre-commissioning of equipment** | General requirements: | In accordance with Terms of Reference Section. | *Please confirm* |
| **5. End-user training** | General requirements: | In accordance with Terms of Reference Section. | *Please confirm* |
| **6. Commissioning of the facility and its transfer to UNDP** | General requirements: | In accordance with Terms of Reference Section. | *Please confirm* |
| **7. Transfer of the facility in cooperation with UNDP to the Novogrudok RUE “Housing & Utilities”** | General requirements: | In accordance with Terms of Reference Section. | *Please confirm* |
| **8. Warranty service and planned servicing** | General requirements: | In accordance with Terms of Reference Section. | *Please confirm* |
| Time limits | 1. Warranty for construction works – at least 5 years from the commissioning date.  2. Warranty for equipment – at least 5 years from the commissioning date.  3. Timeframe for the elimination of defects during the warranty period shall be no more than 30 calendar days from the date of receipt of a defect/malfunction notification.  4. Duration of technical support for equipment and software – at least 5 years from the commissioning date.  5. Equipment planned servicing - at least 5 years from the commissioning date in accordance with the declared warranty term. | *Please confirm* |
| Assignment of rights | 1. After signing the Certificate of Final Completion, the right to use the Contractor's warranty obligations, technical support obligations and right to use the Contractor's servicing according to the declared maintenace programme is transferred from UNDP to the Novogrudok RUE “Housing & Utilities” with signing a separate agreement between the Contractor and the Novogrudok RUE “Housing & Utilities”. | *Please confirm* |
| Planned servicing | 1. The Contractor shall provide the equipment servicing in accordance with the maintenance program (the relevant costs for the equipment planned servicing should be included into the Financial proposal) – at least 5 years according to the declared warranty term. | *Please confirm* |
| After Warranty Support | The Contractor shall provide warranty services and technical support for equipment and software, including remote support, for at least 5 years from the date of completion of above-mentioned warranty and technical support obligations under a separate agreement to be concluded between the Contractor and the Novogrudok RUE “Housing & Utilities” (if needed by the Novogrudok RUE “Housing & Utilities”). | *Please confirm* |
| **9. Overall work implementation period** |  | Start date: October 2018  End date: March 2019 | *Please confirm* |

**Part 2**

| **Item to be Supplied** | **Q-ty** | **Description/ Specification of Goods (required)** | | | **Description/Specification of Goods (offered)**  *Please confirm provision/ indicate parameters of the offered goods* |
| --- | --- | --- | --- | --- | --- |
| **1. Outdoor LED luminaire (max. power 50 W)** | **147 sets** | **MODEL, MANUFACTURER, COUNTRY OF ORIGIN** | | | *Please indicate model, manufacturer, country of origin of the offered goods:*  *Model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Manufacturer:\_\_\_\_\_\_\_\_\_\_\_\_*  *Country of origin:\_\_\_\_\_\_\_\_\_* |
| **Year of manufacture:** not earlier than 2018 (not being used or repaired) | | | *Please indicate the year of manufacture, that the goods are new, not being used or repaired* |
| Light source type | | LED (Light Emitting Diode) | *Please indicate parameters* |
| Material of the protective glass of the luminaire | | Tempered glass | *Please indicate parameters* |
| Material of the housing of the luminaire | | Die-cast aluminium | *Please indicate parameters* |
| Ingress Protection rating of the luminaire (IP), not less than | | IP66 | *Please indicate parameters* |
| Impact Protection rating of the luminaire (IK), not less than | | IK09 | *Please indicate parameters* |
| Weight of luminaire (kg),  not more than | | 10 kg | *Please indicate parameters* |
| Compatibility of the luminaire with the support or console diameter | | ∅ (diameter) 40÷60 mm, possibility of installation on a standard console | *Please indicate parameters* |
| Ability to adjust the tilt angle of the luminaire relative to the horizontal illuminated plane | | +/-15o | *Please indicate parameters* |
| Operating temperatures range | | -40°C - +45°C | *Please indicate parameters* |
| Colour temperature, K | | 4000 +/-250K (neutral white) | *Please indicate parameters* |
| Type of luminaire mounting kit | | With stainless steel screws | *Please indicate parameters* |
| Efficacy of the luminaire, not less than | | 120 lm/W | *Please indicate parameters* |
| Total luminous flux, including losses in the optics, not less than | | 6000 lm | *Please indicate parameters* |
| Colour Rendering Index (CRI) | | >70 | *Please indicate availability* |
| Electrical safety class according to EN 60598 | | I (first) | *Please indicate parameters* |
| Overvoltage protection, not less than | | 6 kV | *Please indicate parameters* |
| The luminaire is equipped with a lightning protection device built into the luminaire housing, with the following parameters: | | * rated discharge current, not less than 5 kA; * maximum discharge current, not less than 10 kA | *Please indicate parameters* |
| Total power consumption, no more than | | 50 W | *Please indicate parameters* |
| Protection from light pollution, not worse than | | Luminous flux 0 candelas above 90° plane of the light emitting surface of the luminaire | *Please indicate parameters* |
| Useful lifetime of the luminaire - the operating time, during which the luminous flux is 80% of the initial value (L80), not less than | | 50 000 hours | *Please indicate parameters* |
| **2. Outdoor LED luminaire (max. power 120 W)** | **253 sets** | **MODEL, MANUFACTURER, COUNTRY OF ORIGIN** | | | *Please indicate model, manufacturer, country of origin of the offered goods:*  *Model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Manufacturer:\_\_\_\_\_\_\_\_\_\_\_\_*  *Country of origin:\_\_\_\_\_\_\_\_\_\_* |
| **Year of manufacture:** not earlier than 2018 (not being used or repaired) | | | *Please indicate the year of manufacture, that the goods are new, not being used or repaired* |
| Light source type | LED (Light Emitting Diode) | | *Please indicate parameters* |
| Material of the protective glass of the luminaire | Tempered glass | | *Please indicate parameters* |
| Material of the housing of the luminaire | Die-cast aluminium | | *Please indicate parameters* |
| Ingress Protection rating of the luminaire (IP), not less than | IP66 | | *Please indicate parameters* |
| Impact Protection rating of the luminaire (IK), not less than | IK09 | | *Please indicate parameters* |
| Weight of luminaire (kg), not more than | 10 kg | | *Please indicate parameters* |
| Compatibility of the luminaire with the support or console diameter | ∅ (diameter) 40÷60 mm, possibility of installation on a standard console | | *Please indicate parameters* |
| Ability to adjust the tilt angle of the luminaire relative to the horizontal illuminated plane | +/-15o | | *Please indicate parameters* |
| Operating temperatures range | -40°C - +45°C | | *Please indicate parameters* |
| Colour temperature, К | 4000 +/-250K (neutral white) | | *Please indicate parameters* |
| Type of luminaire mounting kit | With stainless steel screws | | *Please indicate parameters* |
| Efficacy of the luminaire, not less than | 120 lm/W | | *Please indicate parameters* |
| Total luminous flux, including losses in the optics, not less than | 14400 lm | | *Please indicate parameters* |
| Colour Rendering Index (CRI) | >70 | | *Please indicate availability* |
| Electrical safety class according to EN 60598 | I (first) | | *Please indicate parameters* |
| Overvoltage protection, not less than | 6 kV | | *Please indicate parameters* |
| The luminaire is equipped with a lightning protection device built into the luminaire housing, with the following parameters: | * rated discharge current, not less than 5 kA; * maximum discharge current, not less than 10 kA | | *Please indicate parameters* |
| Total power consumption, no more than | 120 W | | *Please indicate parameters* |
| Protection from light pollution, not worse than | Luminous flux 0 candelas above 90° plane of the light emitting surface of the luminaire | | *Please indicate parameters* |
| Useful lifetime of the luminaire - the operating time, during which the luminous flux is 80% of the initial value (L80), not less than | 50 000 hours | | *Please indicate parameters* |
| **Additional requirements for luminaires (max power 50 W and 120 W):** | | Availability of the “safe maintenance” function – when the luminaire is opened, the power of luminaire automatically cuts; | | | *Please conform* |
| the luminaire should be designed to include a built-in dustproof and waterproof filter for smoothing the pressure in the luminaire housing | | | *Please conform* |
| the luminaire should be designed to envisage separate compartments, divided by a partition, which is a structurally inseparable part of the luminaire housing and intended for separate installation of the LED module and the power supply unit in the luminaire housing | | | *Please conform* |
| the luminaire should be designed to provide function of tool less opening of the luminaire compartment where the power supply unit and other electrical devices are placed, to provide for on-the-spot repairs (replacement of the luminaire power supply unit without its dismantling) and maintenance of the luminaire | | | *Please conform* |
| the luminaire should be designed to allow a replacement of the LED module, secondary optics of the luminaire, and other functional components without full or partial dismantling of the luminaire housing | | | *Please conform* |
| all components of the luminaire housing, including the mounting bracket, must have a powder coated finish | | | *Please conform* |
| **Technical requirements for the power supply unit of the luminaire** | | A programmable power supply unit with the output power and feed current setting function | | | *Please conform* |
| data reading from the luminaire driver using DALI/DALI 2 protocols | | | *Please conform* |
| the power supply unit shall have a built-in function of automatic regulation of illumination levels depending on the time of day and power-on modes with the possibility of pre-setting 5 illumination levels. For each of the illumination stages, it shall be possible to select the level and duration of operation | | | *Please conform* |
| **3. Street lighting control system** | | *Performance requirements for the street lighting control system:*  The street lighting control system is designed to control the 400 luminaires to be purchased, as well as for the currently used stock of luminaires specified in Annex 3 | | | *Please conform* |
| Street lighting control system shall include the following basic equipment:  1. Controller integrated into the luminaire housing for remote control using PLC technology  2. Segment controller installed in the street lighting control cabinet  3. Centralized control software for the street lighting system  4. Street lighting control cabinets | | | *Please conform* |
| *The street lighting control equipment, as well as the incorporated software, should provide for*  • The possibility of real-time monitoring of the main parameters of input and output electric power lines (voltage, frequency, current load monitoring);  • The possibility of real-time monitoring of the status of individual functional units in the control cabinet, storing information about the monitored parameters for a certain period of time, regardless of the presence of external supply voltages, and transferring this information to the main PC-based dispatcher workstation via communication channels;  • The possibility of operating in an automatic mode according to a pre-set street lighting system operating schedule;  • The possibility of local (manual) and remote (using the main PC-based dispatcher workstation) control;  • Switching on, switching off operating modes, monitoring of the technical condition of street lighting control cabinet units;  • Switching on/off and/or adjusting the power consumption of each phase separately according to a pre-set schedule;  • Timely signalling of technical malfunctions and emergency situations arising during the operation of the street lighting control system. | | | *Please conform* |
| **3.1.** **Controller integrated into the luminaire housing for remote control using PLC technology** | **400 pcs.** | **MODEL, MANUFACTURER, COUNTRY OF ORIGIN** | | | *Please indicate model, manufacturer, country of origin of the offered goods:*  *Model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Manufacturer:\_\_\_\_\_\_\_\_\_\_\_\_*  *Country of origin:\_\_\_\_\_\_\_\_\_\_* |
| **Year of manufacture:** not earlier than 2018 (not being used or repaired) | | | **Year of manufacture:** not earlier than 2018 (not being used or repaired) |
| *Technical requirements for the controller:* | | |  |
| • Built-in automatic positioning (GPS) function to determine the position of the connected luminaire; | | | *Please conform* |
| • The luminaire controller shall provide for brightness adjustment from 10 to 100% with a brightness adjustment increment of 10%; | | | *Please conform* |
| • The luminaire controller shall support at least two interfaces for monitoring various types of power supply units of the connected luminaire: 1-10 V, DALI, PWM; | | | *Please conform* |
| • The luminaire controller shall support DALI or DALI 2 standard; | | | *Please conform* |
| • The luminaire controller shall have a built-in real-time clock with an astronomical calendar and memory for offline operation for at least 365 days; | | | *Please conform* |
| • The luminaire controller shall have a functional input for receiving data from an external motion sensor (PIR, Radar, etc.); | | | *Please conform* |
| • The luminaire controller shall ensure readout of the following data from the luminaire driver in accordance with DALI /DALI2 protocols: total operation hours of the driver; current supplied to the LED array of the luminaire, mA; voltage supplied to the LED array of the luminaire, V; operating temperature on the LED array of the luminaire, °C; operating temperature of the luminaire driver, °C; total power consumption of the luminaire (kWh); | | | *Please conform* |
| • The luminaire controller shall be able to transmit the data from the connected motion sensors to other luminaire controllers without using a central segment controller; | | | *Please conform* |
| • The luminaire controller shall use CENELEC B standard (95-125 kHz) for communication with the segment controller; | | | *Please conform* |
| • Maximum distance between the control network elements, luminaire controller/luminaire controller or luminaire controller/segment controller, shall be at least 200 m; | | | *Please indicate parameters* |
| • Rated voltage of the luminaire controller, 230 W -15%.. + 10%; | | | *Please indicate parameters* |
| • Current frequency 50 +/ - 1 Hz; | | | *Please indicate parameters* |
| • Operating temperature range of the luminaire controller, from -40°C to + 70°C; | | | *Please indicate parameters* |
| • Overvoltage protection, at least 3 kW; | | | *Please indicate parameters* |
| • Total consumption of the luminaire controller in the operating mode, no more than 2 W; | | | *Please indicate parameters* |
|  | • The proposed luminaire controller must meet the standards, at a minimum:  - EN 301 489-1 (1.9.2) & 7 (1.3.1) - Electromagnetic compatibility and radio spectrum matters;  - EN 55015: 2013 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment;  - EN 61547: 2009 - Equipment for general lighting purposes. EMC immunity requirements;  - EN 61347-2-11 and EN 61347-1 - Lamp Control gear. | | | *Please conform* |
| **3.2 Segment controller installed in the street lighting control cabinet** |  | **MODEL, MANUFACTURER, COUNTRY OF ORIGIN** | | | *Please indicate model, manufacturer, country of origin of the offered goods:*  *Model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Manufacturer:\_\_\_\_\_\_\_\_\_\_\_\_*  *Country of origin:\_\_\_\_\_\_\_\_\_\_* |
| **Year of manufacture:** not earlier than 2018 (not being used or repaired) | | | **Year of manufacture:** not earlier than 2018 (not being used or repaired) |
| The quantity is determined by the Contractor based on the number of control cabinets offered by the Contractor to ensure the operation:  1) 400 controllers of luminaires purchased under this Terms of Reference, and  2) existing luminaires specified in Appendix 3. | | | *Please indicate the quantity of equipment* |
| *Technical requirements for the segment controller:* | | |  |
| • Segment controller shall ensure the transfer of data and commands to at least 200 luminaire controllers centralized in a real-time mode with a time shift of less than 1 minute; | | | *Please conform* |
| • Segment controller shall provide for sending and receiving a minimum amount of data to/from the centralized control software:  - relay status in any phase (ON/OFF);  - voltage level in any phase (V);  - current level in any phase (A);  - power factor level in any phase (cos φ);  - data from the connected luminaire controller(s);  - relay operation schedule in case of communication failure;  - PIN-codes for access of technical personnel; | | | *Please conform* |
| • Segment controller shall be able to communicate with the central control software via a secure TCP/IP protocol; | | | *Please conform* |
| • Segment controller shall communicate with the central control software no more often than every 10 minutes; | | | *Please conform* |
| • Segment controller shall support at least two communication channels (automatic switching) for communication with the central control software: Ethernet (LAN), 3G, LTE, Wi-Fi, etc.; | | | *Please conform* |
| • Segment controller shall be able to communicate with the luminaires via a power line using secure encryption; | | | *Please conform* |
| • Segment controller shall have a built-in real-time clock with a backup battery and astronomical calendar support. The clock shall be synchronized from the central control software at least once a day; | | | *Please conform* |
| • Segment controller shall be able to send notifications to the centralized control software in the event of a complete loss of power; | | | *Please conform* |
| • Automatic updating of firmware and settings of remote equipment, programming by protocol (OTA); | | | *Please conform* |
| • Segment controller shall have a minimum of interfaces in the main unit:  - RS-485 interface for connecting additional equipment;  - two or more optically separated digital inputs;  - at least three voltage measurement inputs with the accuracy of +/- 1%;  - at least three current transformer inputs;  - at least three relay inputs;  - at least one antenna connector for PLC equipment;  - 12 VDC output for connecting an external siren | | | *Please conform* |
| • Segment controller should have built-in backup memory for operation without communication with the central control software for at least one month; | | | *Please conform* |
| • Rated voltage of segment controller, 230W -15 %.. + 10%; | | | *Please indicate parameters* |
| • Current frequency, 50 +/- 1 Hz; | | | *Please indicate parameters* |
| • Operating temperature range of segment controller, from -40°С to + 70°С; | | | *Please indicate parameters* |
| • Overvoltage protection, at least 6 kW; | | | *Please indicate parameters* |
| • Total power consumption of segment controller in the operating mode, no more than 10 W; | | | *Please indicate parameters* |
| • The proposed segment controller must meet the standards, at a minimum:  - EN 301 489-1 (1.9.2) & 7 (1.3.1) - Electromagnetic compatibility and Radio spectrum Matters;  - EN 55015: 2013 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment;  - EN 61547: 2009 - Equipment for general lighting purposes. EMC immunity requirements. | | | *Please conform* |
| **3.3. Centralized control software for the street lighting system** | **1 set** | **NAME, DEVELOPER, COUNTRY OF ORIGIN** | | | *Please indicate name, developer, country of origin of the offered software:*  *Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *DEveloper:\_\_\_\_\_\_\_\_\_\_\_\_*  *Country of origin:\_\_\_\_\_\_\_\_\_\_* |
|  | | | Year of development: |
| *Technical requirements of the incorporated software* | | |  |
| • The centralized control software for the street lighting system shall provide for at least two-level user access; | | | *Please conform* |
| • The centralized control software shall support determination of access rights and access restrictions; | | | *Please conform* |
| • The centralized control software shall visualize all segment controllers, luminaire controllers and the location of gauges and sensors on a map (GIS); | | | *Please conform* |
| • The maps visualization shall support interactive functions, such as scaling, selecting, adding, deleting and moving objects; | | | *Please conform* |
| • The maps visualization should provide status information about the luminaire and the cabinet: malfunctions, on/off, dimming level, type, group membership; | | | *Please conform* |
| • The centralized control software shall allow for configuring and changing the switching and dimming profiles depending on the time of day and outdoor lighting; | | | *Please conform* |
| • The centralized control software shall allow for configuring and setting the dimming and switching parameters on either a single controller or a group of objects; | | | *Please conform* |
| • The centralized control software shall support online data visualization and equipment operation; | | | *Please conform* |
| • The centralized control software shall allow for assigning sensors to luminaire controllers and the corresponding luminaires | | | *Please conform* |
| • The user reporting function of the centralized control software for the street lighting system shall envisage the following:  - user reports shall provide a possibility to select: period (year, month, day, week, day of the week, time), parameters, objects (segment controllers, luminaire controllers), groups;  - all reports shall be available in html, pdf, xls formats;  - the server management software shall provide notifications via SMS and e-mail based on user selection criteria;  - the server management software shall be based on web interfaces and support various browsers with an easy-to-read design;  - the server management software shall have an interface in the Russian or Belarusian languages with the ability to add new languages (English). | | | *Please conform* |
| **4. Street lighting control cabinets** |  | **MODEL, MANUFACTURER, COUNTRY OF ORIGIN** | | |  |
| **Year of manufacture:** not earlier than 2018 (not being used or repaired) | | | **Year of manufacture:** not earlier than 2018 (not being used or repaired) |
| The quantity is determined by the Contractor based on the number of control cabinets offered by the Contractor to ensure the operation:  1) 400 controllers of luminaires purchased under this Terms of Reference, and  2) existing luminaires specified in Appendix 3. | | | *Please indicate the quantity of equipment* |
| **Technical Documentation** | | All documentations, including catalogues, instructions and operating manuals shall be in Russian (supplied with the Goods) | | | *Please list documents to be supplied with equipment and indicate their language:* |

## **Form E:** Format ofTechnical Proposal

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | RFP/BLR/Green Cities/384/2018 | | |

The Bidder’s proposal should be organized to follow this format of Technical Proposal. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same will be viewed as non-responsive.

**SECTION 1: Bidder’s qualification, capacity and expertise – please use the Previous Relevant Experience table of the Form D: Qualification Form to provide the information required in the items 1.1.-1.2 below:**

* 1. Practical work experience in the development of design specifications and estimates, performance of electrical installation works and in the supply of outdoor lighting fixtures and/or street lighting control systems.
  2. Positive reviews from other customers on the results of work on similar projects (design specifications and estimates development, construction and installation works, for delivery, pre-commissioning a street LED equipment or street lighting control system, training of personnel and commissioning of equipment)

**SECTION 2: Proposed Approach and Implementation Plan**

This section should demonstrate the bidder’s responsiveness to the TOR by identifying the specific components proposed, addressing the requirements and demonstrating how the proposed approach meets or exceeds the TOR requirements. All important aspects should be addressed in sufficient detail and different components of the project should be adequately weighted relative to one another.

* 1. The contract weekly Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing as well as Scheme of the project implementation with indication of the functions of each party involved (Contractor, UNDP, Novogrudok RUE “Housing & Utilities”, Technical supervision company), outputs, deliverables and documentation, which should be provided by each party and to each party in the course of the project implementation. The contract implementation plan should also be supported by the equipment maintenance program for the period of at least 5 years from the commissioning date in accordance with the declared warranty term. Relevant servicing costs for according to the provided maintenance programme shall be included into the Financial Proposal.
  2. Additional years of warranty for construction works and equipment if any.
  3. Warranty maintenance of the equipment performed by the Contractor/Contractor’s authorized representative in the territory of the Republic of Belarus if available.
  4. Availability of the equipment manufacturer’s certificates for compliance with ISO 14001 standards for environmental management systems or analogue if any.
  5. Volume of electricity consumption during the period of 15,000 hours

The Bidders shall provide information on electricity consumption during the min. warranty period (5 years, 15,000 hours) in accordance with Table 1 below.

The volume of electricity consumption during the warranty period will be compared and taken into account in the technical evaluation of the proposals (Section 4 (Evaluation Criteria)).

The bidders shall have the right to submit a proposal, indicating lower-power luminaires than those specified in the Technical Specification (Annex 1) provided that their technical proposal meets the requirements stipulated in the Technical Specification and, primarily, the criteria “Total luminous flux, including losses in the optics, not less than 6000 lm” for luminaires of no more than 50 W, “Total luminous flux, including losses in the optics, not less than 14400 lm” for luminaires of no more than 120 W, and “Efficiency of the luminaire, not less than 120 lm/W”.

*Table 1.*

|  |  |  |  |
| --- | --- | --- | --- |
| Luminaire power according to the technical specification | Luminaire power, declared by the Contractor, W | Number of luminaires, set | Electricity consumption for 15000 hours, kW ∙ h |
| А | B | C | D=BxCx15000 |
| 1. Not more than 50W | ХХ | 147 | ХХХХ |
| 2. Not more than 120W | ХХХ | 253 | ХХХХХ |
| Total, line 1 + line 2: | | | ХХХХХ |

Total consumption of electricity for 15,000 hours during the warranty period of 5 years will be compared and taken into account in the technical evaluation of the proposals (Section 4 (Evaluation Criteria)).

**SECTION 3: Management Structure and Key Personnel**

* 1. Describe the overall management approach toward planning and implementing the project. Include an organization chart for the management of the project describing the relationship of key positions and designations. Provide a spreadsheet to show the activities of each personnel and the time allocated for his/her involvement.
  2. Provide CVs for key personnel (Chief engineer of the project, Chief Specialist for development of the design documentation, Work Manager (Foreman) ) that will be provided to support the implementation of this project using the format below. CVs should demonstrate qualifications in areas relevant to the Scope of Services.

**Format for CV of Proposed Key Personnel**

|  |  |
| --- | --- |
| Name of Personnel | [Insert] |
| Position for this assignment | [Insert] |
| Nationality | [Insert] |
| Language proficiency | [Insert] |
| Education/ Qualifications | *[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]* |
| [Insert] |
| Professional certifications | *[Provide details of professional certifications relevant to the scope of services]* |
| * Name of institution: [Insert] * Date of certification: [Insert] |
| Employment Record/ Experience | *[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]* |
| [Insert] |
| References | *[Provide names, addresses, phone and email contact information for two (2) references]* |
| Reference 1:  [Insert]  Reference 2:  [Insert] |

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe my qualifications, my experiences, and other relevant information about myself.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Personnel Date (Day/Month/Year)

## **Form F:** Financial Proposal Submission Form

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | RFP/BLR/Green Cities/384/2018 | | |

We, the undersigned, offer to provide the services for the street lighting modernization in Novogrudok in accordance with your Request for Proposal No. RFP/BLR/Green Cities/384/2018 and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and our Financial Proposal sealed under a separate envelope.

Our attached Financial Proposal is for the sum of [Insert amount in words and figures].

Our Proposal shall be valid and remain binding upon us for the period of time specified in the Bid Data Sheet.

We understand you are not bound to accept any Proposal you receive.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[*Stamp with official stamp of the Bidder*]

## **Form G:** Financial ProposalForm

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Bidder: | [Insert Name of Bidder] | Date: | Select date |
| RFP reference: | RFP/BLR/Green Cities/384/2018 | | |

The Bidder is required to prepare the Financial Proposal following the below format and submit it in an envelope separate from the Technical Proposal as indicated in the Instruction to Bidders. Any Financial information provided in the Technical Proposal shall lead to Bidder’s disqualification.

The Financial Proposal should align with the requirements in the Terms of Reference and the Bidder’s Technical Proposal.

**Part 1.** **Summary Bill of Quantities**

The Bidder is required to prepare the Summary Bill of Quantities (Summary BOQ)as indicated in the form provided below. Prices offered by Bidders in the Summary BOQ are fixed. Bidders should neither change the Summary BOQ text nor work quantity while submitting the offer. In the offer, Bidders should consider all the expenses for works, including transportation costs, materials storing, work insurance, testing and putting into operation, as well as temporary works or temporary constructions if they are required.

Delivery of all necessary materials shall be carried out by the Contractor. The price of one unit of work should include all the costs of its implementation, including, but not limited to, the following costs: profit, general economic and production costs, employee salaries, machine operation costs, social security contributions, material costs (excluding the cost of basic materials, the price of which is allocated to separate items) and other necessary costs.

The cost of works, services and materials provided for in the terms of reference, but not represented by separate items in the Summary BOQ of work and materials on the facility, is considered as taken into account in the calculation of the price proposal included in other items of work and materials indicated in the Summary BOQ. The cost of works, services and materials is not presented separately for payment and not paid.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Summary Bill of Quantities and materials for the construction works on the facility "Modernization of the street lighting system in the municipality of Novogrudok"**  **Currency of the proposal: [Insert Currency]** | | | | | | | | | | | | | |
|  | | | | | |  | | |  | | | |
| **#** | **Title of works** | **Unit of measure** | **Quantity** | | **Price per unit** | | | **Total** | | | |
|  | | | | | |  | | |  | | | |
| 1 | Development of design specifications and estimates (DSE), DSE clearance and approval by relevant authorities.  Obtaining a positive opinion of the “Gosstroyexpertiza” on the DSE | Project | 1 | |  | | |  | | | |
| 2 | Design supervision | Project | 1 | |  | | |  | | | |
| 3 | Outdoor LED luminaire (max power 50 W) | set | 147 | |  | | |  | | | |
| 4 | Installation of outdoor LED luminaires (max power 50 W) with the dismantling of existing ones | set | 147 | |  | | |  | | | |
| 5 | Outdoor LED luminaire (max power 120 W) | set | 253 | |  | | |  | | | |
| 6 | Installation of outdoor LED luminaires (max power 120 W) with the dismantling of existing ones | set | 253 | |  | | |  | | | |
| 7 | Equipment and materials for street lighting control system for 400 LED luminaires | set | 1 | |  | | |  | | | |
| 7.1 | Including control cabinets in the assembly | set | please specify quantity | |  | | |  | | | |
| 7.2 | Including other equipment (if applicable), please specify equipment | set | please specify quantity | |  | | |  | | | |
| 8 | Performance of construction and installation works of street lighting control system for 400 LED luminaires | system | 1 | |  | | |  | | | |
| 8.1 | Including installation of control cabinets in assembly | set | please specify quantity | |  | | |  | | | |
| 8.2 | Including installation of other equipment (if applicable), please specify equipment | set | please specify quantity | |  | | |  | | | |
| 9 | Equipment, materials for street lighting control system for existing street lighting inventory for Novogrudok | set | 1 | |  | | |  | | | |
| 9.1 | Including control cabinets in the assembly | set | please specify quantity | |  | | |  | | | |
| 9.2 | Including other equipment (if applicable), please specify equipment | set | please specify quantity | |  | | |  | | | |
| 10 | Performance of construction and installation works of street lighting control system for existing street lighting inventory for Novogrudok | system | 1 | |  | | |  | | | |
| 10.1 | Including installation of control cabinets in assembly | set | please specify quantity | |  | | |  | | | |
| 10.2 | Including installation of other equipment (if applicable), please specify equipment | set | please specify quantity | |  | | |  | | | |
| 11 | Software for street lighting control system (designed and existing) | set | 1 | |  | | |  | |
| 12 | Pre-commissioning of equipment | set | 1 | |  | | |  | | | |
| 12.1 | Including for the designed street lighting inventory | set | 1 | |  | | |  | | | |
| 12.2 | Including for the existing street lighting inventory | set | 1 | |  | | |  | | | |
| 13 | End-user training | man-day | ХХ | |  | | |  | | | |
| 14 | Servicing Costs (as per Part 2, Form G) | set | 1 | |  | | |  | | | |
| ***TOTAL cost without VAT*** | | |  |  | | |  | | | |
| ***VAT – \_\_\_\_%*** | | |  |  | | |  | | | |
| ***TOTAL cost with VAT*** | | |  |  | | |  | | | |
|  |  |  |  | |  | | |  | | | |
| Sincerely yours, | |  |  | |  | | |  | | | |
|  | | | | | |  | | |  | | | |
| *Signature of the authorized person* | | | | | |  | | |  | | | |
| Last name, first name and middle name, position of the person signing the document: | |  | | | |  | | |  | | | |
| Name of the company: | |  | | | |  | | |  | | | |
| Contact information: | |  | | | |  | | |  | | | |

**Part 2. Planned servicing**

Servicing costs during the declared warranty period should include planned maintenance according to the maintenance program submitted by the bidder as a part of the Tecnical Proposal. The costs should cover the servicing of the lighting system operating 3000 hours per year (servicing of the luminairies, control cabinets, software, datalink channels, consultations of the contractor’s authorized specialists during the planned business trips to Novogrudok). Planned servicing should be implemented by the contractor’s authorized specialists and include dedicated sepcialists remuneration, travel costs to Novogrudok and other overhead costs. In case the costs of the maintenance program differs for different years, they shall be given separately for each year (1, 2, 3, 4, 5, etc.) of the warranty period declared in the proposal. Please, complete the table below:

*Table 1. Equipment planned servicing (in currency of the Proposal:\_\_\_\_)*

|  |  |  |
| --- | --- | --- |
| **##** | **Name** | **Amount, w/o VAT** |
| 1 | Planned servicing costs during the warranty period of …. years from the commissioning date, including: | ----- |
| 1.1 | Cost of maintenance of 400 luminaires | |
| 1.1.1 | Year 1 |  |
| 1.1.2 | Year 2 |  |
| 1.1.3 | Year 3 |  |
| 1.1.4 | Year 4 |  |
| 1.1.5 | Year 5 |  |
| 1.1.6 | …. |  |
| 1.2 | Cost of maintenance of the street lighting control system (service support of control cabinets, software, datalink channel, on-site consultations, etc.) | |
| 1.2.1 | Year 1 |  |
| 1.2.2 | Year 2 |  |
| 1.2.3 | Year 3 |  |
| 1.2.4 | Year 4 |  |
| 1.2.5 | Year 5 |  |
| 1.1.7 | … |  |
|  | **Total w/o VAT:** |  |
|  | **Total with VAT (…%)** |  |

|  |
| --- |
| Sincerely yours, |
|  | |
| *Signature of the authorized person* | |
| Last name, first name and middle name, position of the person signing the document: |
| Name of the company: |
| Contact information: |