**Appendix No. 1 to the Terms of Reference**

**Requirements and technical parameters for the delivery of the in-situ monitoring system to control epitaxial growth**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Paramter** | **Requirements** | **Column to be filled in by contractor** |
| **1.** | Type |  | Specify |
| **2.** | Manufacturer |  | Specify |
| **3.** | Country of origin |  | Specify |
| **4.** | Year of production | 2022 | Confirm |
| **5.** | Device | Factory new, unused | Confirm |
| **6.** | Main application | The device is used for real-time (in-situ) monitoring of epitaxial processes in a MOCVD/MOVPE reactor for: reflectance, film thickness, film growth rate, wafer (wafer) curvature, film stress. | Confirm |
| **7.** | General requirements | The need for real-time (in-situ) monitoring of epitaxial growth of the following parameters:   * Reflectance, * Film thickness, * Growth rate, * Wafer curvature, * Stress. | Confirm |
| **8.** | Basic and specialized functions | 8.1. The system must be able to measure reflectance with ~600 nm and ~400 nm light. | Confirm |
| 8.2. The system must be able to measure wafer growth rate, film thickness and optical constants (n, k) in real time. | Confirm |
| 8.3. The system must measure in real time the curvature/radius of curvature of the substrate, layer tension at a curvature resolution of 0.001 m-1. | Confirm |
| 8.4. The system must provide an accuracy of ± 1% for measuring layer thickness and growth rate. | Confirm |
| 8.5. Laser with ≤0.2% stability with pattern recognition function. | Confirm |
| 8.6. The system must allow measurement at ≤ 1500 rpm. | Confirm |
| 8.7. The system must be equipped with the latest integrated control and analysis software with appropriate hardware - minimum 19'' monitor and all drivers. The system must be able to synchronize the results with the successive stages of the epitaxial process performed in the Epiluvac ER3-N Epitaxial Reactor. | Confirm |
| **9.** | Acceptance Tests | Execution of the processes described in the table entitled: "Acceptance Tests" at the Employer's premises in the presence of the Contractor's representative. | Confirm |
| **10.** | Training | Training in the operation and maintenance of the device conducted in the CTME laboratory or possibly online training. The supplier will provide training in the operation of the device including: construction (basic components), and use and operation of the device. | Confirm |
| **11.** | Technical documentation and user manual | Installation and operating instructions (user manual) provided with the device, in paper and/or electronic format. | Confirm |

**Table: Acceptance tests**

**Samples for testing are provided by the Purchaser**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Test description** | **Sample** | **Test result** |
| 1. | Verification of layer thickness by characterization techniques, e.g., SEM, TEM, ellipsometry,  Stress checking by Raman spectroscopy and XRD.  Measurement by X-ray reflectometry (XRR). | GaN/AlN/Al203  1x1 cm | comparison with the indications of characterization devices - a difference of up to 20%. |

**Appendix No. 2 to the Terms of Reference**

**Contractor: Date:** ………………………………………

…………………………………………….

*……………………………………………*

**Statement of the Contractor**

**submitted pursuant to Art. 125, item 1 of the Act of September 11 2019**

**Public Procurement Law (hereinafter: the PPL Act),**

**ON THE CONDITIONS FOR EXCLUSION FROM THE PROCEDURE**

For the purposes of the procedure for award of a public contract, entitled …………………………………………………… *(name of the procedure)*, conducted by Sieć Badawcza Łukasiewicz − Instytut Mikroelektroniki i Fotoniki *(name of the Contracting Authority),* I hereby represent as follows:

**STATEMENTS ON THE CONTRACTOR:**

* I represent that I am not subject to exclusion from the procedure under Art. 108 item 1 and 109 item 1 (4) of the PPL Act and Art. 7 para. 1 (1-3) of the Act of April 13, 2022 on special solutions in the scope of counteracting the support of aggression against Ukraine and serving the protection of national security

or

* that grounds for exclusion from the procedure exist pursuant to Art. …………… of the PPL Act

*At the same time, I represent that, in connection with these circumstances, I have taken the following corrective actions pursuant to Art. 110 item 2 of the PPL Act: ………………………………………………………………………………….*

**STATEMENT CONCERNING THE ENTITY WHOSE RESOURCES WILL BE REFERRED BY THE CONTRACTOR**

* I certify that the following entity/s, whose resources I am referring to in these proceedings, i.e. …………………………………………………………………….……………………… *(full name of the entity, address, and also depending on the entity: Tax ID/Personal ID, National Court Register/Register of Business Activity Number),* is/are not subject of exclusion from the public Contract awarding procedure.

**STATEMENT CONCERNING A SUBCONTRACTOR WHICH IS NOT AN ENTITY WHOSE RESOURCES WILL BE REFERRED TO BY THE CONTRACTOR**

* I certify that the following entity/s, being the Subcontractor/s: ……………………………………………… *(full name of the entity, address, and also depending on the entity: Tax ID/Personal ID, National Court Register/Register of Business Activity Number)*, is/are not subject of exclusion from the public Contract awarding procedure.

**DECLARATION CONCERNING THE INFORMATION PROVIDED:**

* I declare that all the information provided in the above statements is up-to-date and truthful and has been presented with full awareness of the consequences of misleading the Contracting Authority when providing the information.

I indicate that the documents confirming these facts, referred to in Chapter VII of the ToR, are available in electronic form at the following internet addresses of public and free *(please select):*

* <https://prod.ceidg.gov.pl>
* <https://ems.ms.gov.pl>
* Other register (please provide internet address):[………………………………..](https://ems.ms.gov.pl)

…………….……. *(place),* date: ………….……. . …………………………………………

*(Signature)*

**Appendix No. 3 to the Terms of Reference**

**Contractors who jointly apply for a contract:**

………………………………………

………………………………………

(Full name/Company name, address)

**STATEMENT OF THE CONTRACTOR ABOUT THE SCOPE OF PERFORMANCE OF THE CONTRACT BY THE CONTRACTORS WHO JOINTLY APPLY FOR A CONTRACT**

submitted on the basis of art. 117 item 4 of the Act of September 11, 2019 - Public Procurement Law (Official Journal of 2019, item 2019 with later changes)

in the procedure for awarding a public Contract for

**………………………………………………………………………………………..**

we declare that:

1. Contractor …………………………………………………………………………………………………….…………….…..

*(name and address name and address of one of the Contractors who jointly apply for a contract, e.g. a consortium member or partner in a civil partnership)*

will perform the following supplies, services or construction works \*:…………………………………………

1. Contractor ……………………………………………………………………………………………….……………..……..

*(name and address name and address of one of the Contractors who jointly apply for a contract, e.g. a consortium member or partner in a civil partnership)*

will perform the following supplies, services or construction works \*:…………………………………………

NOTE!

It should be indicated which supplies/services/construction works \* included in scope of the subject of the contract are performed by individual contractors (consortium members or partners of a civil partnership)

**STATEMENT REGARDING THE INFORMATION PROVIDED**

I/We\* hereby represent that any and all information provided in this Statement are up-to-date and accurate and that they I/we are fully aware of the consequences of providing the Contracting Authority with misleading information.

*\* Delete as appropriate*

**………………………………….. ………………………………….**

*place, date signature of the Contractor*

**Appendix No. 4 to the Terms of Reference**

**Contractor: Date:** ………………………………………

…………………………………………….

*…………………………………………….*

**BID FORM**

for: Łukasiewicz Research Network – Institute of Microelectronics and Photonics

|  |  |  |
| --- | --- | --- |
| Subject of the Order | | **Delivery of the in-situ monitoring system to control epitaxial growth** |
| 1. | Name and address of the Contractor | ……………………………………………………………………………….  ………………………………………………………………………………. |
| 2. | Taxpayer’s Identification Number NIP  REGON number:  or the relevant foreign identification numbers | ………………………………………………………………………………  ……………………………………………………………………………..  ……………………………………………………………………………. |
| 3. | Telephone:  E-mail: | ...............................................................................  .............................................................................. |
| 4. | Total net price of the bid  VAT rate  VAT amount  Total gross price of the bid | **enter:** ......... PLN/EUR/USD/GBP\*  say:..................................................................................  **enter:** .....................%  **enter:** ......... PLN/EUR/USD/GBP\*  **enter:** ......... PLN/EUR/USD/GBP\*  Say: ...................................................... |
| 5. | Time of performing the Contract:  Maximum time: up to **12 weeks** from the date of signing the agreement | **enter:** ........................................ *(weeks)* |
| 6. | Warranty period: **at leat 12 months** | **enter:……………………..** *(months)* |
| 7. | Statement | I hereby represent that the selection of our bid **will/will not**\* result in imposing taxation obligation on the Contracting Authority.  The following (name or type of the goods or services) will lead to the emergence of a tax obligation **Value without tax:…………………………………………….. Name of goods:…………………………………………………..** |
| 8. | Type of Contractor | I declare that I am:   Microentrepreneur   Small enterprise   Medium enterprise   A sole proprietorship   A natural person who does not conduct business activity   Other types: specify ……………………….  within the meaning of the Act of March 6, 2018 Entrepreneurs Law.  (Note! Mark the "X" in the appropriate box)) |
| 9. | Statement | I hereby represent that I have read the Terms of Reference (together with the Appendices constituting an integral part thereof) and that I accept its content without reservations. |
| 10. | I hereby represent that I have fulfilled the information obligations foreseen in Art. 13 or Art. 14 of the GDPR towards natural persons whose personal data I obtained directly or indirectly in order to apply for awarding a public contract in the present procedure. | **confirm:……………………………………..**  *In the event if the Contractor does not transfer the personal data other than their own or if the information obligation is excluded pursuant to Art. 13, item 4 or Art. 14, item 5 of the GDPR, the Contractor shall not submit this statement (delete the content of the statement e.g. by crossing out).* |
| 11. | Persons authorised to represent the Contractor | **enter:** ........................................... |
| 12. | Parts of the Contract that will be entrusted to subcontractors | **Specify the parts of the Contract:** .......................  **Enter names of companies:** ………………………….. |
| 13. | Documents attached to the bid | 1.  2.  3. |

*\* Delete as appropriate*

.............................................................

Signature of persons authorised

to represent the Contractor

**Appendix No. 6 to the Terms of Reference**

**STATEMENT**

STATEMENT OF THE CONTRACTOR CONFIRMING THE VALID OF INFORMATION PROVIDED IN THE STATMENT SPECIFIED IN ART. 125 OF THE PPL ACT, ON THE GROUNDS FOR EXCLUSION

Contractor :……………………………………………………………………………………………

…………………………………………………………………………………………………….……

For the purposes of procurement procedure, the subject of which is   
……………………………………………………………………………………………………………………………………………………………..,

We declar that the information provided in the statement placed pursuant to Art. 125, item 1 of the PPL Act, with respect to the ground for exclusion from procedinds, stipalated in:

1. **art. 108 ust. 1** of the PPL Act
2. **art. 7 para. 1 (1-3)**  of the Act of April 13, 2022 on special solutions in the scope of counteracting the support of aggression against Ukraine and serving the protection of national security

**are up-tp-date / are out-of-date\***

NOTE: In the previously provided information is not up-to-date, please submit additional information in this regard, in particular specify which data the change relatesto and indicate its scope

*\*delete as appropriate*

**Appendix No. 7 to the Terms of Reference**

**Contractor Date:……………….**

………………………………………

………………………………………

*(Full name/Company name, address)*

**LIST OF DELIVERIES PERFORMED**

By placing a bid in the procedure conducted as an open tender procedure, for the **Delivery of of the in-situ monitoring system to control epitaxial growth** we hereby represent that during the period of three years preceding the date of placing bids (for a shorter period of business activity – during this period) we performed the following deliveries:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Subject of delivery | Value of delivery | Date of delivery | Entity for whom the delivery was made  *(name and address)* |
| ***1*** | ***2*** | ***3*** | ***4*** | ***5*** |
| 1. |  |  |  |  |

*Note! Please attach the relevant proof confirming that the item was duly delivered for each delivery listed in the table.*

..............................................................

Signature of persons authorised

to represent the Contractor

**Appendix No. 8 to the Terms of Reference**

**Contractor: Date:** ………………………………………

…………………………………………….

*……………………………………………*

**Statement of the Contractor**

**submitted pursuant to Art. 125, item 1 of the Act of September 11 2019**

**Public Procurement Law (hereinafter: the PPL Act),**

**ON THE FULFILMENT OF THE CONDITIONS FOR PARTICIPATING IN THE PROCEDURE**

For the purposes of the procedure for award of a public contract, entitled …………………………………………………… *(name of the procedure)*, conducted by Sieć Badawcza Łukasiewicz − Instytut Mikroelektroniki i Fotoniki *(name of the Contracting Authority),* I hereby represent as follows:

**STATEMENTS ON THE CONTRACTOR:**

* I declare that I meet the conditions for participation in the procedure set out by the Contracting Authority in **Chapter VI of the Terms of Reference (ToR**)

**INFORMATION RELATING TO RELYING ON RESOURCES OF OTHER ENTITIES:**

* I declare that in order to fulfill the conditions for participation in the procedure, specified by the Contracting Authority in the Terms of Reference (ToR), I rely on the resources of the following entity / s:………………………………………………….………………………., to the following extent: …………………………………………………………………………………………..………

*(please indicate the entity and define the appropriate scope for the indicated entity).*

**DECLARATION CONCERNING THE INFORMATION PROVIDED:**

* I declare that all the information provided in the above statements is up-to-date and truthful and has been presented with full awareness of the consequences of misleading the Contracting Authority when providing the information.

…………….……. *(place),* date: ………….……. . …………………………………………

*(Signature)*