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

**Technical requirements and parameters for the delivery of Semi-auto wire bonder**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Semi-auto wire bonder** | | | | |
| **No.** | **Parameter** | **Requirement** | **To be completed by Bidder\*** |  |
| 1. | Type |  | Specify |  |
| 2. | Manufacturer |  | Specify |  |
| 3. | Country of origin |  | Specify |  |
| 4. | Year of manufacturing | 2022 | Confirm |  |
| 5. | Main application | Wire bonder for fine wires, thermo and ultra-thermo compression technologies. | Confirm |  |
| 6. | Basic technical requirements | Automatic and manual working mode. | Confirm |  |
|  |  | 6.1 . Automated X, Y, Z travel and rotation (bond head/working table), controlled by PC. Rotation at least in the range of 360º. | Confirm |  |
| 6.2 **.** Pattern recognition system | Confirm |  |
| 6.3. Automatic system for components placement based on the data from the pattern recognition system. | Confirm |  |
| 6.4. Working table heated up to 200ºC or more | Confirm |  |
| 6.5. Bonding accuracy: ±5µm (3 sigma) or better (both in manual and automatic working mode, based on the data from the pattern recognition system) | Confirm |  |
| 6.6. Repatibility wire bonds pleacement ±3µm (3 sigma) or better. | Confirm |  |
| 6.7. Bonding pads dim**e**nsion **(**pad opening) ≤40 m | Confirm |  |
| 6.8. Bond pad pitch : ≤ 80 µm | Confirm |  |
| 6.9. Loop shape generator | Confirm |  |
| 6.10. Possibility of programming the device operation for individual chips and for matrices of elements | Confirm |  |
| 6.11. multi-level bonding in the range of the Z axis ≥ 30 mm. | Confirm |  |
| 6.12. Optical inspection during operation with an additional stereoscopic microscope | Confirm |  |
| 6.13. Speed: 1 wire /s or better | Confirm |  |
| 6.14. Dedicated laboratory table for a tabletop device or a "self-standing" device | Confirm |  |
| 7. | Working table | 7.1 working area a x b: 200 mm x 150 mm or bigger (both dimensions) | Confirm |  |
| 7.2 . Vacuum and mechanical substrates clamping | Confirm |  |
| 7.3. Possibility of stable mounting of own holders/trays to the table with screws (metric) | Confirm |  |
| 8. | Wedge-wedge Bond mode | 8.1. Fine wires wedge – wedge bondhead | Confirm |  |
| 8.2. bondhead suitable for wires:  Al: 17,5µm – 75µm,  Au: 17,5µm – 50µm, | Confirm |  |
| 8.3. bonding process controlled by : time, ultrasonic power, force | Confirm |  |
| 9 | Ball-wedge bond mode | 9.1 Fine wires ball-wedge bondhead | Confirm |  |
| 9.2 Bondhead suitable for wires:  Au: 17,5µm – 50µm, | Confirm |  |
| 9.3. Bonding process controlled by: time, ultrasonic power, force. | Confirm |  |
| 10. | Bonding heads replacement | Replacement of the wedge-wedge / ball wedge heads in <10 minutes with the use of one standard tool (screwdriver, Allen key etc.) or without the use of tools; calibration not required | Confirm |  |
| 11. | Acceptance test two stages - in factory and on site after the tool installation | The Bidder must provide the tools and materials (sonotrodes, capillaries and wires) for the tests described in point 11.1 ÷ 11.4.  11.1. Ball- wedge bonds on the substrate provided by Contracting Entity. Bonding pads: Al, dimension: 40 x 40 m, bond pad pitch = 80 m. In automated mode, based on pattern recognition system. At least 50 bonds on 10 independently placed substrates.  11.2. Wedge- wedge bonds on the substrate provided by Contracting Entity. Bonding pads: Al, dimension: 40 x 40 m, bond pad pitch = 80 m. In automated mode, based on pattern recognition system. At least 50 bonds on 10 independently placed substrates.  11.3. Matrix of bumps (10x20) on the substrate provided by Contracting Entity. Bonding pads: Al, dimension: 90 x 90 m, bond pad pitch = 70 m. In automate mode, based on pattern recognition system. At least 10 matrix on 10 independently placed substrates.  11.4. Test of accuracy and repability carried out using components provided the Bidder. (In factory and on site after the tool installation) | Confirm |  |
| 12. | Installation and training | 12.1 Delivery to the Ł -IMiF laboratory in Piaseczno | Confirm |  |
| 12.2. Training: two stage - first during the pre-acceptance test, second after installation during acceptance test on-site (for 2 participants) | Confirm |  |
| 13. | Documentation and software | In Polish or English | Confirm |  |
| 14. | Spare parts availability | Ensured within 7 years from the date of signing the acceptance protocol | Confirm |  |
| 15. | Service requirements | Service response ensured within a maximum of 5 days from reporting the failure of the tool  Remote maintenance and application support capability (via Internet). | Confirm |  |
| 16. | Technical support | Ensured within 7 years from the date of signing the acceptance protocol | Confirm |  |
| 17. | Post-warranty service | Ensured within 7 years from the date of signing the acceptance protocol | Confirm |  |

**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.

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**

**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)*

**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 Semi-auto wire bonder** |
| 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 **25 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. 5 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 Semi-auto wire bonder**  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. 6 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. 8 to the Terms of Reference**

**OBLIGATION OF AN ENTITY TO PROVIDE THE CONTRACTOR WITH THE RESOURCES NECESSARY FOR PERFORMING THE CONTRACT**

Having read the content of the announcement of the Contract and the Terms of Reference for the procedure for awarding a public Contract conducted in form of an open tender by ……………………………………………………….. for: **………………………….**, we:……………… (*first name and surname of the person signing the statement)* hereby represent that we are duly authorised to perform this action, acting on behalf of:…………………………………………………………. (*enter the name of the entity providing resources)* with its seat in: ………………………. ……………………. *(enter the address of the entity providing resources)* we hereby commit ourselves to provide access to the resources in our possession necessary to realise the Contract, to: ………………. *(enter the name)* with its seat in: ……………, hereinafter referred to as the Contractor.

1. The scope of the resources available to the Contractor:
   1. ………………………………………………………………………………………………

*(please specify the provided resources)*

* 1. ………………………………………………………………………………………………

*(please specify the provided resources)*

1. Manner of using the resources in the realisation of the Contract: …………………………………………………………………………………………………................................................
2. Scope and duration of our participation in performing the Contract: ………………………………………………………………………………………………….................................................
3. We will provide the following services being parts of the subject of the Contract:

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

Due to the above, we hereby provide these resources to the disposal of the Contractor who may use them in the realisation of the subject of the Contract (if its bid is selected and the Contract granted in the said procedure).

**………………………………….. ………………………………….**

*place, date*

*Signature of persons authorised*

*to represent the Contractor*