DKZ/96/2011 **Date: Warsaw, 26.08.2011**

Legal Grounds
This public tender is conducted according to Public Procurement Law of January 29, 2004 (position 759 in Polish Journal of Acts No 113 of 2010 with later changes).

INSTYTUT TECHNOLOGII ELEKTRONOWEJ
Al. Lotników 32/46, 02-668 Warsaw, Poland

TERMS OF REFERENCE
for:

DELIVERY OF THE TOOL FOR OPTICAL ANALYSYS OF MICROSYSYTEMS - OPTICAL PROFILOMETER INCLUDING MODULE

CPV 38500000-0

Proceedings are conducted according to open procedure for assessed value below

EUR 193 000,00

1. Name (company name) and address of the Awarding Entity.

This proceedings are conducted by Tender Committee of Instytut Technologii Elektronowej,
Al. Lotników 32/46, 02-668 Warsaw, Poland.
Web page: http://www.ite.waw.pl

2. Procedure for awarding the Contract.

These proceedings are conducted in mode of open procedure according to Article 39 of Public Procurement Law of January 29, 2004.

The tenders submitted will be opened and evaluated by the Tender Committee according to the evaluation criteria.
From all tenders which have not been rejected, the one will be selected which receives the highest number of points calculated according to the evaluation criteria.

3. Description of the object of the Contract.

The object of the order is a delivery, installation, start up and testing of the brand new **optical profilometer including module**, hereinafter called **"device".**

Requirements and technical parameters of the object of the order are indicated in Appendix No. 1 of this Terms of Reference.

4. Partial and variant tenders are not allowed.

5. Time limit for the Contract performance.

Deadline for completion of the tender – maximally to 15 weeks after signing the Contract.

6. Conditions for participation in the procedure and description of the method used for the evaluation of the fulfilment of those conditions:

Eligible to compete for the Contract shall be economic operators who fulfil conditions defined in Article 22 paragraph 1 of Public Procurement Law of January 29, 2004 (with later changes):

1) authorizations to perform specific activities or actions, if such authorizations are required by the law;
2) knowledge and experience;
3) appropriate technical potential and personnel capable of performing a contract;
4) economic and financial standing.

The Contractor may rely on knowledge and experience, technical potential, personnel capable of performing the Contract or financial abilities of other entities, regardless of the legal nature of its relations with such entities. In such case, the Contractor is required to prove to the Awarding Entity that it will have at its disposal the resources necessary to performing the Contract, in particular by presenting to this end a written commitment of those entities whereby they undertake to put the necessary resources at the Contractor's disposal for the time of their use in performance of the Contract.

Evaluation of the above requirements will be performed according to the rule: "fulfil - not fulfil", on the basis of documents mentioned in point 7 of this Terms of Reference.

7. Information concerning declarations and documents to be provided by the Contractor to confirm the fulfilment of the conditions for participation in the procedure:

7.1. Signed statement confirming fulfilment of the conditions defined in Article 22 paragraph 1 "Public Procurement Law" – in form of "STATEMENT" [Appendix No. 2].

7.2. The list of the completed deliveries – prove, that within the period of the last three years before deadline of tender submission or if being active in the business for shorter period – in this period, have completed at least 2 deliveries of the optical profilometers, with the indication of their prices, objects of deliveries, dates of performing, buyers and with enclosed documents confirming that these deliveries were performed by the Contractor with due diligence.

The Awarding Entity recommends to fill in Appendix No. 3 to this Terms of Reference.

The lack of any of the above documents will cause the tender being rejected from further proceedings.

8. Other documents required from the Economic operators:

In case of subcontracting, the Awarding Entity requests the Contractor to indicate in its tender the parts of the Contract which the Contractor intends to subcontract.

9. Information on the manner of communication between the Awarding Entity and the Contractor as well as of delivery of declarations and documents, indication of persons authorised to communicate with the Contractor.

All the statements and applications are provided only in writing form, but notifications and information the Awarding Entity and the Contractor can provide in writing form or by fax or by e-mail.

The contact person in matters concerning the tender is:
Michał Urbański, e-mail: urbanski@ite.waw.pl

Please address all written correspondence, related to this tended proceedings, to:
Instytut Technologii Elektronowej
Al. Lotników 32/46
02-668 Warsaw, Poland.
building No VI, room 216

Fax: + 48 22 548 78 46.

10.<u>Deposit requirements</u>: we do not require.

11. <u>Tender validation time</u> – 30 days from the date of submission of the tenders.

12. <u>Description of the manner of the tender preparation.</u>

The tender schould be presented in writing form.

The tender must include:

a) Name and address of the Contractor,
b) Date of preparation of the tender,
c) Filled in Appendix No. 1 to this Terms of Reference,
d) Net price in PLN (The price presented in EUR, GBP or USD is allowed. In the case of submission of the tenders in EUR, GBP or USD, the price will be exchanged to Polish zlotys PLN according to selling exchange rate of the National Bank of Poland dated on the day before of opening of the tenders).

The tender has to be signed by the Contractor or his Authorised Representative.

Together with the offer the Contractor is allowed to submit required documents defined at point 7 of this Terms of Reference, to confirm the fulfilment of the conditions for participation in the procedure.

The Awarding Entity recommends to fill in the tender form – Appendix No. 4 to this Terms of Reference.

In the case the Contractor company is located outside Poland, it is approved to submit the tender as well as the documents required from the Contractor as specified under point 7 of this Terms of Reference either in Polish or in English language.

The Contractor is allowed to submit only one offer.

All costs of preparation of the tender, regardless of the results of the tender, shall be covered by the Contractor.

13. <u>Date and place of submission and opening of tenders.</u>

The tenders should be submitted at the site of the Awarding Entity in Warsaw at Al. Lotników 32/46, building No. VI, room 216, by 10^{00} am, on **6th of September 2011** (in working days from 9 am till 2 pm). The tenders submitted after this deadline will not be considered.

Opening of the tenders will take place on 6th of September 2011 at 10^{15} am. at the site of the Awarding Entity: Warsaw, Al. Lotników 32/46 in the building No. VI, room 216.

The Awarding Entity will open the tenders in accordance with its internal procedures but on occasion may hold a public opening which your representatives may attend.

The offers must be submitted in non-transparent and closed envelopes or packages. The envelope or package must be addressed as follows:

Instytut Technologii Elektronowej
Al. Lotników 32/46
02-668 Warsaw
Building No VI, room 216
Do not open before 10^{15} am, on 6th of September 2011.
OFFER FOR:
DELIVERY OF THE OPTICAL PROFILOMETER INCLUDING MODULE

The envelope or package must include full name and address of the Contractor.

The Awarding Entity does not accept responsibility for consequence of contractors failure to keep the above requirements.

14. <u>Description of the method of the price calculation.</u>

The net price in PLN (EUR, GBP or USD) must include:

a) the device according to the requirements indicated in Appendix No. 1 of this Terms of Reference,
b) installation,
c) start up,
d) testing of the device,
e) transport,
f) delivery conditions: DDP Piaseczno,
g) insurance,
h) training of persons according to Appendix No. 1 point 27 of this Terms of Reference.

15. <u>Description of the criteria which the Awarding Entity will apply in selecting a tender, specifying also the importance of particular criteria and method of evaluation of tenders.</u>

The Awarding Entity will evaluate whether the tender meets requirements introduced in this Terms of Reference. If the tender is valid (meets requirements introduced in this Terms of Reference), it will be taken into consideration in choice of the best one.

Offer evaluation criteria:

- Price - 60%
- Quality of the device - 30%
- Warranty period - 10%

Within each of the criteria, the evaluation will take place according to the following rules:

15.1. **For the price:** number of points in the price criteria will be calculated according to the following formula:

$$P_n = C_{min} / C_n * W$$

where: P_n – points in price criteria
C_{min} – the lowest price from all the offers
C_n – the price from the offer of n-th bidder
W – weight of the "Price" criteria.

Maximum number of points to be gained within the price criteria is 60.

15.2. **For the quality of the device:** number of points in the quality criteria will be calculated according to filled table (Appendix No 1 to the Terms of Reference) and the following formula:

$$Q_n = \left(\sum_p (0,3)_p\right)_n / \max\left(\sum_p (0,3)_p\right)_n * W$$

where: Q_n - points in quality criteria
$(0,3)_p$ - values of points for the evaluation of the p-th parameter
p - number of evaluated parameters
n - number of the offer
W - weight of the "Quality" criteria.

Maximum number of points to be gained within the quality criteria is 30.

15.3. **For the warranty period:** number of points in the price criteria will be calculated according to the following formula:

$$G=\begin{cases} \dfrac{G_n - 12}{G_{\max} - 12} * W & \text{for} \quad G_{\max} > 12 \\ 0 & \text{for} \quad G_{\max} = 12 \end{cases}$$

where: G – points in warranty criteria
C_n – the warranty period from the offer of n-th bidder (in months)
G_{max} – the maximum warranty period (in months) from all the offers
W – weight of the "Warranty period" criteria.

Maximum number of points to be gained within the price criteria is 10.

The sum of points received in all criteria makes aggregate evaluation of the tender.

16. <u>Information concerning formalities which should be met following the selection of a tender in order to conclude a public procurement contract.</u>

The Contract with the winning Contractor will be signed pursuant to Article 94 "Public Prbocurement Law".
The Contract is concluded under procedure according to Title IV of Public Procurement Law of January 29, 2004.

NOTICE! Before concluding the Contract the winning Contractor shall submit to the Awarding Entity current document confirming that the person signing the Contract is authorised representative of the Contractor.
This document schould be presented in the form of original or authorised photocopie.

17. <u>Other important statements which will be included in the Contract</u>.

The following statements will be included in the Contract:

17.1. Indemnity

1) In case of delay, caused by negligence, or poor performance of the Seller, the Seller will pay to the Buyer an indemnity of 0,1% of the value of the equipment delayed for each working day of delay up to 10% of it's value.

2) In case of delay in payment, the Buyer will pay to the Seller indemnity of 0,1% of the value of delayed payment for each day of delay up to 10% of it's value.

3) In case the Seller will cancel the Contract without reason caused by the Buyer, the Seller will pay to the Buyer penalty of the 10% of the total Contract value and the Seller will transfer back all the received payments for the subject of this contract to the Buyer account.

4) In case the Buyer will cancel the Contract without reason caused by the Seller, the Buyer will pay to the Seller penalty of the 10% of the total Contract value plus documentary evidence costs of materials and labour based on the following schedule:
   a) in period shorter than 30 days from order placement - 20% of the Contract value
   b) in period shorter than 30 days before delivery and acceptance – 100% of the Contract value
   c) in period between mentioned in points a and b – percentage approximated by linear function.

5) In case of delay, caused by the Seller, in delivery longer than 3 months, the Buyer can cancel the Contract and the Seller will pay to the Buyer penalty of the 10% of the total Contract value and the Seller will transfer back all the received payments for the subject of this contract to the Buyer account.

17.2. Warranty

1) The Seller undertakes a warranty of correct operation and technical quality of the delivered equipment for "warranty period included in the offer" months, calculated from the date of the final acceptance protocol, but no longer than "warranty period included in the offer + 3 months from the date of delivery".
2) The Seller within warranty period covers costs of the repair or replacement of the defective goods and costs of their transport to the Buyer site after repair.
3) During the warranty period, in case of the necessity of the repair outside the Buyer site, the Seller has the obligation to make the repair or replacement within not longer than 7 weeks after the date of the written claim.
4) The warranty period will be increased by the time needed for the repair.
5) The replaced or repaired parts of equipment will be included a warranty of the Seller or the Producer.
6) During the warranty period, the Seller undertakes a maximal service response time within 3 working days after the date of the written claim.

17.3. Delivery instruction

1) Subject of the Contract is to be shipped to the address below and placed at the disposal of the Buyer.
   Shipping address: Instytut Technologii Elektronowej
   ul. Puławska 34
   05-500 Piaseczno, Poland
2) The Seller advises to the Buyer about the dispatch by fax (No.+48 22 54-87-803).
3) The Seller will deliver CE certificate together with subject of the Contract.

17.4. Terms of payments

Payment will be effected in the following way:

1. 60% of the contract value – (the value from the offer) – payable at delivery by the bank transfer to the Seller's account on the basis of an original invoice and shipment documents within 7 days after shipment of the subject of the Contract to the Buyer's site.
2. 40% of the contract value – (the value from the offer) – payable by the bank transfer to the Seller's account on the basis of an original invoice within 14 days after performing the acceptance test at Buyer's site and signing the acceptance test protocol by both parties of the Contract.

The Buyer shall pay to the Seller due amount for the subject of this contract by transfer to the Seller's account in:
……
……

All bank charges in Poland are at the Buyer's account and bank charges outside Poland are at the Seller's account.

The Contractor is liable to make invoices separately:

- **for optical profilometer,**
- **for module.**

17.5. Acceptance of the subject of the Contract

The acceptance test will be performed after installation and start up of the subject of the Contract at the Buyer's site. Start-up of the device includes technical lunch and performing of the functional tests

confirming technical parameters of the device according to technical specification and requirements indicated in this Terms of Reference.
The results of the acceptance test must be accepted by signing by the Seller and the Buyer the acceptance test protocol.

17.6. Force Majeure

1. The parties shall be free of responsibilities for non-fulfilment of their obligations due to Force Majeure or these obligations will be change according to the point 4. Force Majeure shall be considered as an event, unforeseeable by either of the parties at the date of signature of this Contract, arisen after such date and being unavoidable and beyond the control of both parties.
2. Cases of Force Majeure are e.g. accidents, flood, earthquake, fire, explosion, war, mobilisation, strikes, blockades, general shortage of transport, materials or labour.
3. The party wishing to claim Force Majeure shall notify the other party in writing without delay on the intervention and on the cessation therefore.
4. Such party must certify the case of Force Majeure to the other party by documentation issued by the competent official authority of this country. The dates and periods for fulfilment of these obligations will be postponed or extended by the period of existence of the state of Force Majeure.

17.7. Setting of disputes

All disputes arising from the present Contract, failing amicable settlement shall be resolved by the Arbitration Court of the Polish Chamber of Commerce in Warsaw in accordance with the rules of this Court.

18. Requirements concerning the security on due performance of the Contract:
we do not require.

19. Procedure for additional explanations.

Contractor is authorized to address the Awarding Entity only in written form, fax or e-mail is also allowed with request for additional information regarding the content of Terms of Reference - in this proceeding till 31st of August 2011. The Awarding Entity will respond all the inquiries according to the article 38 of the Act – "Public Procurement Law".
The questions and the answers will be published on web site of the Awarding Entity.

20. Information on legal protection measures available to an the Contractor during the contract award procedure.

Contractor's legal protection laws are included in Chapter VI of the Public Procurement Law of January 29, 2004 which is available on the Public Procurement Office (PPO) web site: www.uzp.gov.pl

21. Other matters.

For all matters not regulated in this Terms of Reference, the provisions of Public Procurement Law of January 29, 2004 will apply.

Michał Urbański

Vice-Director for Administrative and Technical Affairs

This order has been co-founded by the EU: Project No. POIG.02.01.00-14-081/09-00 Mikrosystemy i NanoTechnologie Elektroniczne dla Innowacyjnej Gospodarki „MINTE" (MEMS and Electronic NanoTechnologies for Innovative Economy).

Appendix No. 1

Requirements and technical parameters of the optical profilometer including module.

Lp.	Parametr name	Requirement	Column to be completed by Tenderer *	Scoring
1	2	3	4	5
1.	Type of device		specify	
2.	Year of manufacturing	2011	confirm	
3.	Country of origin		specify	
4.	Manufacturer's name		specify	
5.	Device	brand new	confirm	
6.	Sample stage	minimum movement in the XY >= 100 mm x 100 mm	confirm and specify	
		movement in the XY: a) manual b) automatically from software level	specify	0 3
		optical resolution in X and Y axis for a 2.5x magnification >= 4.90 um	confirm and specify	
		movement range in Z axis >= 100mm	confirm and specify	
		mechanical tip tilt of the table	confirm	
		maximum tilt angle of the table for manual handling not less than 6 º	confirm and specify	
7.	Scan range in Z axis	a) =10 mm b) >10 mm	specify	0 3
8.	Scanning resolution in Z-axis (vertical) or optical path scaning step of the reference beam	scanning resolution in Z-axis <0.1 nm or optical path scaning step of the reference beam = 0.2 µm	confirm and specify	
9.	Scan speed in the Z axis	>= 20 µm/sec	confirm and specify	
10.	Measurement resolution	in plane and for objective 2.5x a) >0.6 µm b) <= 0.6 µm	specify	0 3
		out of plane and for objective 2.5x a) >0.1 nm b) <=0.1 nm	specify	0 3
11.	Field of view of single measurement	for objective 2.5x, not less than 2.5 mm x 2.5 mm	confirm and specify	
12.	Closed feedback loop	not less than in one axis	confirm and specify	
13.	Mode	device should have mode that combines vertical and phase shift interferometry technique	confirm	
14.	Additional modes	a) no modes b) verical interferometry mode c) phase shift interferometry mode	specify	0 3 3

15.	Turrent for interferometric lens	a) minimum 4 lens b) > 4 lens	specify	0 3
16.	Objective	2.5x Michelson type (standard), minimum working distance: 3.5 mm, lens is going to be mounted in handle	confirm and specify	
17.	Additional equipment of the objective	a) set of optical zoom lens that change field of observation b) no lens	specify	3 0
18.	Module for testing thin films	optical thickness of transparent film >=70 µm	confirm and specify	
		measurement resolution in Z axis for scanning 150 um a) >=1nm b) <1nm	specify	0 3
19.	Sample preview	camera, the matrix not less than 640 x 480 pixels	confirm and specify	
		number of frames per second a) <= 60 fps b) > 60 fps	specify	0 3
20.	Module for optical analysis of microsystems	system that ensures dynamic testing of MEMS structures in the range a) < 2MHz b) >= 2 MHz	specify	0 3
21.	Anti-vibration system	assured	confirm	
22.	Additional requirements	a) high – voltage amplifiles and waveform generator b) no option	specify	3 0
		a) software control of camera, of the illumination as well as other systems that enables analysis of height or deformation or resonant frequency of a single structure b) no option	specify	3 0
		a) possibility of application own procedures b) no option	specify	3 0
		a) in plane measurements of MEMS structures b) no option	specify	3 0
		a) out of plane measurements of MEMS structures with resolution <1nm b) no option	specify	3 0
23.	Software must assure	a) possibility of profilometer control b) possibility of images observation, analysis including use of conventional filters (Gauss, Fourier, numerical) c) possibility of source data acquisition from the measurement including ASCII format d) common parameters of 2D and 3D surface topography analysis, including roughness parameters e) stitching option f) possibility of work in Windows operational system, software must be compatible with standard	confirm	

		Windows applications		
24.	PC with LCD monitor for controlling the profilometer	processor: Intel min. 2,4 GHz memory RAM: min 4GB graphics card: min 500 GB hard disc: min. 320 GB (SATA) burner: DVD ± RW (SATA) operationing system: Windows monitor LCD min. 19", keyboard, mouse, network card	specify	
25.	Acceptance test after installation and start-up of the equipment at the premises of the Purchaser	assured Test samples / wafers delivered to the test by the Tenderer to verify the parameters of the points 6, 7, 8, 11	confirm	
26.	The deadline for completion of the contract	max. 15 weeks	specify	
27.	Two-step training for a minimum of 3 persons, on-site	first after the installation (2 days training) second in about 3 months after receiving the device (2 days training)	confirm	
28.	Operating manual and technical documentation in English or Polish	assured	confirm	
29.	Software update free of charge within the minimum 1 year from the date of signing the acceptance protocol	assured	confirm	
30.	Post -warranty service within 10 years from the date of signing the acceptance protocol	assured	confirm	
31.	Additional requirements for service	Start-up service within 72 hours (weekdays) from the moment a fault of failure notification	confirm	
32.	All spare parts accessible from the date of signing the acceptance protocol through	10 years	confirm	
33.	Technical support provided from the date of signing the acceptance protocol through	10 years	confirm	
34.	The warranty period from the date of signing the acceptance protocol	min. 12 months max. 24 months	specify in number of months	

*** Imprecise or inaccurate fulfilment of the table in the column 4 will result in rejection of the offer**

Appendix No. 2

…….... .....
/address stamp of the Contractor/ /date/

S T A T E M E N T

Acting in accordance with the contract award procedure, we certify that we fulfil all the requirements.

.....
/signature of the Contractor or his Authorised Representative/

Appendix No.3

…… ……
/address stamp of the Contractor/ /date/

THE LIST OF THE COMPLETED DELIVERIES

Submitting the tender in the proceeding conducted in the open procedure for delivery of the optical profilometer including module we certify that within the period of the last three years before deadline of tender submission or if being active in the business for shorter period – in this period, we have completed following deliveries:

No.	Object of the delivery	Price	Date of performing	Buyer
1	**2**	**3**	**4**	**5**
1.				
2.				

Notice! To each delivery presented in this list schould be enclosed documents confirming that this delivery was performed by the Contractor with due diligence .

……
/signature of the Contractor or his Authorised Representative/

Appendix No.4

.....
/address stamp of the Contractor/

TENDER FORM

for Institute of Electron Technology

The object of the order		**Delivery of the optical profilometer including module.**
1.	Name and address of the Contractor	
2.	VAT identification number	
3.	Phone number: Fax: e-mail:	
4.	Net price of the optical profilometer Net price of the module Net price of the tender	..... PLN (EUR/ USD/ GBP/) ..... PLN (EUR/ USD/ GBP/) ..... PLN (EUR/ USD/ GBP/) (say: ....)
5.	Time limit for the Contract performance: Maximally to 15 weeks after signing the Contract	**specify in number of weeks:** .....
6.	The persons authorised to represent the Contractor	……..
7.	The list of documents enclosed to the tender:	1. . .
8.	Place: Date of preparation of the tender:	…… ……

.....
/signature of the Contractor or his Authorised Representative