Cofinanciación fondos comunitarios

"Una manera de hacer Europa"

INFORMATIVE

TECHNICAL SPECIFICATION

REF: EQ AIMEN 3/ 6-2015

The proposals can be submitted until next july 20,2015 at 13:30 hours

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Background

I.- The *Asociación de Investigación Metalúrgica del Noroeste* (AIMEN) [Metallurgical Research Association of the North West] is a private non-profit entity incorporated in Vigo in 1967 and promoted by a group of Galician businessmen with the aim of boosting Research, Technological Development and Innovation in the Industry.

AIMEN is the Center of reference in the field of materials in the Autonomous Community of Galicia and it is recognized and registered as Center of Innovation and Technology under number 38 in the Registry of the Science and Technology Inter-Ministerial Commission (CICYT), dated on 21 May 1998. Currently, the body has more than one hundred companies associated and it serves more than seven hundred organizations devoted to industrial and commercial activities.

Given the transversal nature of the technologies and services developed by the Center, AIMEN renders its services to a wide range of sectors: motor, naval, aeronautic, mechanical metal, building, energy, among others. In addition, AIMEN plans to cover other sectors, like the textile and biotechnical industries, thus broadening its frame of action.

For more than forty years of activity, AIMEN's main objective has been contributing to the development and strengthening of the competitive capacity of companies in the fields of technology and innovation, providing companies with technological services, scientific-technical support and R&D activities in the following areas: metallurgy, forming processes, welding, laser technologies, industrial design and engineering, the environment, characterization of materials and failure analysis, non-destructive tests, calibration, industrial organization, quality management, environmental management, hazard prevention at work and technological training.

II.- AIMEN has built the new building for the Laser Processing Center on a plot covering 11,000 m^2, located in the future Business Park of Cataboy-Porriño SURPPI 2 (Sector 2) lot 3; all of this according to the Execution and Basic Projects of the Architect Mr. Santiago Ulloa Ayora in May 2010. For this purpose, a tender was called in the modality of open procedure.

III.- This document aims to establish the administrative basis of the tender which, under the modality of open procedure, will be carried out in order to choose the Awardee of the Supply Agreement of the goods described in the Schedule of Technical Specifications.

IV.- Calling Entity

The Asociación de Investigación Metalúrgica del Noroeste (AIMEN), which calls the tender, is located at:
Relva, 27A – Torneiros
36410 PORRIÑO (Pontevedra)
CIF (Tax Identification Code): G36606291
Phone: 00.34.986.344.000
www.aimen.es
E-mail (for issues related to the tender) : licitaciones@aimen.es
PROFILE OF THE CONTRACTING PARTY: It can be checked at: HYPERLINK "http://www.aimen.es/"www.aimen.es, where the general instructions for contracting approved within the Association can also be found.

V.- Financing:

A collaboration agreement has been signed between the Ministry of Economy and Competitiveness of the Government of Spain, the Regional Department of Economy and Industry of the Xunta de Galicia (Galician Regional Government) and AIMEN, so the **project is co-financed by the aforementioned Ministry, charged to the European Regional Development Fund (ERDF) 2007-2013 "A way of making Europe" and the Xunta de Galicia.**

VI.- Regulation:

Taking into account the origin of the funds, and in spite of the provisions of sections 9, 17, 190, 191 and 192, regarding 3.3 of TRLCSP (Leg. R. D. 3/2011) the contract would not be subject to the harmonized regulation of the TRLCSP. According to the provisions of Council Regulation (EC) 1083/2006, laying down general provisions on the European Regional Development Fund and the Cohesion Fund (which abolishes Regulation CE 1260/1999), and the Community regulations on contracting, this tender is inspired by and is adapted to the provisions of the revised text of the Law on Public Sector Contracts (TRLCSP) on anything related to the preparation process, publicity, tender stage, election, awarding and execution of the contract (and thus respecting the principles of publicity, concurrence, transparency, confidentiality, equality and non-discrimination included in the abovementioned TRLCSP and Community regulations).

To be more specific, and taking into account that the contract is not under the suppositions of art. 17 of the TRLCSP as harmonized regulations, the procedure is subject to the information principles and provisions included in arts. 157 and following and 191 and 192 of the TRLCSP.

Therefore, and according to the aforementioned terms, Leg. R.D. 3/2011, of 14 November, on Contracts of the Public Sector has been basically considered when writing this Schedule; as well as the General Law on Subsidies, the General Regulation on Contracts of Public Administrations and other applicable private Law regulations, when applicable.

In addition, the Contracting Internal Instructions approved by the Association will be applicable. They can be checked at the Association's website.

Definitions of the terms that will appear in the text of the administrative basis or technical specifications:

A. Contracting Body: AIMEN
B. Contracting Committee: The offers will be assessed by the Contracting Committee, which will be made up by the following members:

CHAIRMAN: Chairman of AIMEN, who will be in charge of leading the meetings and responsible for the functions of the maximum representative of the Committee.

MEMBER: Adviser and Deputy Chairman of AIMEN. In case of absence of the Chairman, he/she shall take on his/her functions, standing in for him/her as established in the General Instructions for Contracting of the Association.
MEMBER: Managing Director of AIMEN.
MEMBER: Adviser of the Board of Directors of AIMEN.
MEMBER: Member specially invited according to the provisions of the General Instructions for Contracting, head of the Directorate for Technology of AIMEN, whose participation is appropriate as a result of his/her profile and proven professional experience.

SECRETARY: Secretary of the Board of Directors and General Assembly of AIMEN, who shall not have the right to vote, limiting his/her action, when applicable, to the provision of advice to the Commission. He/she shall be in charge of writing the minutes of the meetings, recording as faithfully as possible the relevant agreements concerning the tender. The minutes will be written at the same act or, with authorization of the members meeting in the Contracting Committee, just the main and essential points of the meeting will be recorded, writing the definitive minutes as soon as possible and within the five working days following the meeting. The minutes shall be signed by the Secretary and the Chairman and then they will be transferred to the members of the Committee.

C. Minimum Quorum for the valid constitution of the Contracting Committee: The Contracting Committee shall be considered as validly constituted if at least 3/5 of its members are present.

D. Votes of the Contracting Committee: Agreements shall be taken by simple majority of the members who are present.

E. Committee of Experts: Made up by the people listed below, who are in charge of the execution of the tasks indicated in the administrative basis: 3 engineers (at least one of them must be a Superior Engineer) or, failing that, university graduates of other fields, appointed by AIMEN.

F. Contract Responsible: Legal Representative of AIMEN appointed in the contract to be signed with the awardee. Should there not be an expressed appointment, the Managing Director of

AIMEN would be.

G. Delegate of the Awardee: Representative appointed by the tenderer for the purposes of this schedule and the contract to be signed with the awardee.

H. Notifications: all and any notification made by AIMEN at the addresses or e-mail addresses provided by the tenderers will be valid.

I. Calendar days: every day of the year. **Working days:** every day but Sundays and public holidays (local holidays in Porriño and provincial, autonomic or state holidays). Unless otherwise stated, the reference to days in this schedule shall refer to calendar days.

J. Working hours: AIMEN's working hours for the receipt of documentation are from 9.00 to 13.30 from Monday to Friday. The Contracting Committee can authorize another timetable and days for the submission of the documentation, in case of need, for rectifications or similar cases. Should the documentation receipt service be authorized in the afternoon, documents can be submitted out of the abovementioned working hours (after confirming this possibility with the Calling Entity).

The times indicated refer to the local time in Porriño (province of Pontevedra, Spain).

K. Language: all and every communication made by the interested parties shall be in Spanish or Galician. The documents to be submitted in the tender offers can be in Spanish, Galician or English (if they are submitted in another language, a translation to any of those three languages shall be attached). The submission in another language shall not be a reason for exclusion, unless AIMEN does not have qualified personnel for the translation among its staff.

It has been included an English translation of these Specifications Sheets for information purposes only

BASIS

1. Object of the contract.

The object of the contract is the supply and installation of the goods indicated and detailed in the Schedule of Technical Specifications; including the delivery of the documentation required in the abovementioned schedules, the execution of the training actions and tasks and all the obligations for the awardee deriving from this document, the schedule of technical specifications and the contract undersigned (the awarding of which is object to this tender process).

Any additional improvement offered by the tenderer is included, unless AIMEN expressly rejects their addition or execution.

Therefore, the obligations of the awardee for the observance of the object of the contract concerning the supply and installation of the goods acquired include any packaging tasks or needs, transportation, storage at AIMEN's premises —including the necessary means, such as machinery, means of transport, elevators, etc.— until the definite and complete installation of the good for its operation with all the technical requirements demanded by this document and by the Schedule of Technical Basis of this procedure (including those necessary tests for this purpose, even rectifications or repairs that could be made within the guarantee period). The good object to this tender shall only be considered as duly delivered once these requirements and obligations have been met (especially concerning the maximum deadline period for each lot).

Por la individualidad de los bienes objeto de adquisición y sus sustantividad propia aun cuando para la incorporación a un solo Centro, es por lo que se ha decidido -a modo similar lo propuesto en el art. 86 de la LCSP- la confección de lotes en los términos que más adelante se señalaran aun cuando se admite la posibilidad de optar a varios lotes por los mismos licitadores si bien, insistiendo en la individualidad de los mismos y a fin de alcanzar la mayor eficacia y obtención de la propuesta económicamente más ventajosa, procediéndose a la admisión de ofertas individualizadas por cada uno de los referidos lotes.

2. Needs to be met through the contract.

The object of the execution of the contract and the supply and installation of the goods acquired is to provide the new building of AIMEN's Laser Processing Center with the goods needed for the development of its activity, as well as the optimization of the investment made. The goods object to this procedure, and according to their description in the Schedule of Technical Specifications, as a result of their characteristics, are essential for this purpose.

3. Object of this Specifications Sheet.

The purpose of this Technical Specifications Sheet is to define and clarify the minimum characteristics for the elements subject to acquisition which in turn constitute the object of the contracts to be awarded in the present proceeding.
In any case they are considered as essential minimum requirements to be met in order to consider the bid submitted as valid.
This Specifications Sheet is drafted without prejudice to the drafting of the Schedule of Administrative Clauses to be complied with by those interested in submitting their bids to this tender.

4. EXPRESS ACCEPTANCE OF THE OBSERVANCE OF ALL AND ANY REQUIREMENT AND TECHNICAL SPECIFICATION OF THE EQUIPMENT TO BE SUPPLIED, according to the Schedule of Technical Specifications of this procedure.

THE SUBMISSION OF A TENDER OFFER in this procedure ENTAILS THE EXPRESS AND COMPREHENSIVE ACCEPTANCE by the tenderer, WHO AGREES TO OBSERVE THE TECHNICAL SPECIFICATIONS INCLUDED IN THE SCHEDULE OF TECHNICAL SPECIFICATIONS of this procedure. IT ALSO ENTAILS THE EXPRESS KNOWLEDGE OF AL THE TENDER SCHEDULES OF CONDITIONS (both administrative and technical specifications).

It is expressly indicated that, in case the tender offer includes improvements with respect to the technical specifications included in the Schedules, the tenderer undertakes to meet them if he/she is the awardee —unless AIMEN expressly rejects their inclusion or execution— but the offer of these improvements will not be considered when giving the points that decide the awarding of the contract, except for the ones expressly established in these schedules or technical specifications.

Likewise, if the Committee of Experts, to be herein referred to later on, considers that the improvements or variations offered by the tenderer involve the inobservance of any of the inexcusable requirements demanded in the Schedules of Technical Specifications —because they improve any feature of the good, but they do not meet other requirements demanded— it will inform about the situation and will propose the exclusion of the tender offer.

Porriño, on 29 june 2015

TECHNICAL SPECIFICATION
LOT 1º
LASER-TIG MULTI-WELDING CELL FOR INSIDES REBUILDING.

Hybrid Laser-Tig cell is a compact cell with a large number of freedom degrees which facilitates accessibility to complex pieces of variable sizes. It allows rotation of the workpiece holding the welding head in a static mode, simplifying the system and avoiding the use of ultra flexible cables for several degrees of rotation which those usually increase the price of this type of equipment.
The control system shall allow to rule both the laser source and the TIG source, the rotation of the workpiece on the positioner, and the movement of the linear axes X and Z. It also will allow the adjustement of the theoretical parameters used to make buttering, and in operation it will measure the actual parameters to be stored and in this way, they will constitute the traceability system with respect to the buttering made.

TECHNICAL SPECIFICATIONS.

The rebuilding hybrid system must be endowed with the following main elements:
- Column and boom 2000x1500mm movement length respectively.
- 4m linear servo track on rack and linear guides for displacement of the column and boom and the mounted console for the welding machines. Interior wiring in energy chains and limit switches in both directions. Leveling system by adjustable screw feet.
- Console for mounting the welding machines.
- External linear guides on calibrated bars of the same length as the linear track, for coupling positioning systems and support parts.
- Rotary table at least 1000kg of pay load. Adjustable tilt and system for connecting preheating devices. It will include central clamping plate.
- Servo-controlled guides for X, Y, Z axes and 90º rotation capability for coupling welding heads.
- Pre-assembly of cables and tubes (10 m length) prepared to coupling TIG / PLASMA system.
- HMI hardware and software system for the global control of the system both in positioning and welding parameters. It will include graphical environment for easy handling by the operator, in Spanish, and traceability of rebuilding parameters.
- Software for monitoring and adjustment the inside rebuilding of valves with crossed holes located at 90 °
- DC TIG welding power source 500A output, cooled by closed loop circuit and gas flow control system. Ground connection and power cables 10 m length must be included.
- Digital wire feeder with rollers for wire 1 and 1.2 mm diameter.
- Water-Cooled TIG torch for quick change and wire feed system for wire 1 and 1.2 mm diameter.

OTHER TECHNICAL AND OPERATIONAL REQUIREMENTS TO CONSIDER IN THE OFFER:

- Packaging for equipment transport.
- Transportation to AIMEN facilities.
- Installation and commissioning on-site AIMEN.
- Delivery time limit: November 2015.
- Handbooks for installation, operation and maintenance in Spanish and / or English languages.
- Basic Operation Manual in Spanish.
- 24 months warranty

OTHER ITEMS FOR IMPROVEMENT.

- TIG power source for wire heating based on CC / CV features, with software and interface control for hot wire. It includes power and ground cables 10m length. **ONE POINT**
- Plasma Module with possibility of connection to previous described power source and gas flow regulator. **TWO POINTS**
- Water-Cooled Plasma torch for quick change and wire feed system for wire 1 and 1.2 mm diameter. **ONE POINT**
- TIG Torch with adjustable head angle and 1m cane for inside rebuilding, from 45 mm in inside diameters. **ONE POINT**
- Regulation system for the gas valve. **ONE POINT**
- Hardware and software elements needed to adapt the supply system to double wire feeding. **ONE POINT**
- Extended Warranty for 24 months, of the systems involved. **ONE POINT for each 12-month extension**
- Training about the operation with the different components of the system. 1 week lasting in AIMEN facilities. **ONE POINT**

TECHNICAL SPECIFICATION
LOT 2º
CMT ADVANCED WELDING EQUIPMENT.
(Equipo CMT Advanced de Fronius + antorchas de recargue TIG.)

The hybrid laser arc-welding is a process that combines the advantages of laser welding and those from the arc welding. This result in deep penetration welds and good positioning tolerances between parts. The laser source can be CO2 or solid state and can be combined with MIG / MAG, TIG or Plasma arc.
The equipment CMT Advanced is a variant of the MIG / MAG welding process. It is possible to have full control over the heat input supplied to the base material. This is achieved thanks to the technical advances in power electronics and in an electromechanical system that allows total control on the wire feeding process. Thus, the possibility of changing the polarity of the current (through the use of alternating current) during the short circuit welding, provides excellent control of the deposition of the filler wire which results in excellent control of heat input and a lower end distortion component, while reducing welding fumes derivatives, which significantly improves the working environment.
Unlike the MIG / MAG process, CMT advanced technology allows precisely by using AC power and an excellent control of times and intensities in the positive and negative cycles increase the deposition rate, while controlling the heat input contribution. This means the capability to absorb very low thickness joints, with important gaps or separations between the plates and an overlap joint design, typically of the automotive industry. In combination with the laser, an hybrid process is obtained in which the conventional MIG is replaced by the CMT, justifying its use by the greater control of heat input.

TECHNICAL SPECIFICATIONS.

The CMT Advanced welding equipment must be endowed with the following main elements:

- Power Source for cold transfer combining AC and DC current, 400 A output, inverter technology and fully digital controlled by microprocessor.
- Remote Control, allowing welding data monitoring and parameterization and regulation thereof.
- Refrigeration unit in a closed loop circuit for the power source and the welding torch. It must be calculated to maintain maximum power of the machine at 100% duty cycle.
- Digital wire feeder with four rollers and specifically designed to this process.
- Digital gas sensor
- Supports for the above elements.
- Accumulation buffer welding wire .
- Specific welding torch to this process and provided with engine for wire retraction after short-circuit detection. Quick change neck 22°.
- Integration in Laser- TIG multiwelding cell.

OTHER TECHNICAL AND OPERATIONAL REQUIREMENTS TO CONSIDER IN THE OFFER:

- Packaging for equipment transport.
- Transportation to AIMEN facilities.
- Installation and commissioning on-site AIMEN.
- Delivery time limit, November 2015.
- Handbooks for installation, operation and maintenance in Spanish and / or English languages.
- Basic Operation Manual in Spanish.
- 24 months warranty

OTHER ITEMS FOR IMPROVEMENT.

- Robot interface for bidirectional communication between the welding power source and the electronics of the robot, through a fieldbus. **ONE POINT**
- Welding torch neck for quick change, and 45 ° angle. **ONE POINT**
- Spare consumables of the torch and of the wire feed path. **ONE POINT**
- Regulation system for the gas valve. **ONE POINT**
- Extended Warranty for 24 months, of the systems involved. **ONE POINT for each 12-month extension**
- Training about the operation with the different components of the system. 1 week lasting in AIMEN facilities. **ONE POINT**