

TECHNICAL SPECIFICATION

REF. AIMEN/POCTEP 1/2019

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**THIS DOCUMENT IS ONLY INFORMATIVE in
order to facilitate translation**

The proposals can be submitted until next
20/05/2019 – 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 is a beneficiary of Proyecto 0411 MANUFACTUR4 (01E), funded under the "Programa COOPERACIÓN INTERREG V A ESPAÑA-PORTUGAL (POCTEP) 2014-2020."

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:

Agreement between the managing authority and the principal beneficiary has been formalized in operation 0411MANUFACTUR401E within the framework of "PROYECTOS DEL PROGRAMA DE COOPERACION INTERREG v A ESPAÑA-PORTUGAL (POCTEP) 2014-2020

VI.- Regulation:

Considering what would be the indicated origin of the funding, and even when in view of the indicated, among others, in arts. 16 and 22, in relation to the 3 of Law 9/2017, of November 8, of Public Sector Contracts, the contract would not be subject to harmonized regulation that provides for this body of law, also meeting the provisions of the Community Regulations of application and in particular Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions for the European Regional Development Fund, the European Social Fund, the Cohesion Fund , the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund, and laying down general provisions concerning the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime Fund and Fisheries, and repeal Council Regulation (EC) No 1083/2006, as well as Community rules on recruitment, this procedure is inspired by the content and forecasts of the Law 9/2017 in everything related to the preparation process, advertising, contest phase, election, award and formalization of the contract (and therefore respecting the principles of publicity, concurrency, transparency, confidentiality, equality and non-discrimination that inform the cited Law 9/2017 and community regulations).

For all these reasons, at the time of drafting this Bidding Document, it has been considered, basically, under the terms indicated, Law 9/2017, and the provisions of the General Law on Grants, the Grants Law of Galicia and other regulations of applicable private law. Likewise, the Internal Hiring Instructions approved within the Association, displayed on the Association's website, are applicable for interpretive purposes.

The adjudication will fall on the bidder justifiably chosen among the bids submitted that which is economically more advantageous, conditioned to the fulfillment by the candidate of the

unavoidable requirements that are detailed in the Bidding Documents that govern this procedure. The criterion of choice will therefore be the lowest price, with the criteria that will be indicated in the case of a tie.

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:

PRESIDENT: President of Aimen, who will be responsible for the direction of the meetings and functions corresponding to the maximum representative of the Board. In his absence replaced, successively, by the 1st Vocal, 2nd and subsequent Vocal

VOCAL 1º: Secretary General of Aimen, who in case of absence will replace the President of the Board

VOCAL 2º: Managing Director of Aimen

VOCAL 3º: Specially invited member as provided in the General Contracting Instructions, which may be any of the Directors of Aimen (Technological, Commercial or Operations).

VOCAL 4º: Personnel member of the Aimen Template with condition of Director, Manager or Coordinator

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.

Any of the above members may be replaced by another person who designates who must meet the condition of Director, Responsible or Coordinator of Aimen

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: Contracting Committee may determine the existence of a committee of experts, made up of at least three technicians, graduates or heads of the different departments of the Association with knowledge of the Interreg Program and Projects that bring about this procedure, so that , received offers if necessary, advise Contracting Committee

F. 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.

J. 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, Galician or English. 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.

BASIS

1. Object of the contract.

The contract will have as its object the supply and installation of the goods indicated and detailed in the Technical Specifications - including the delivery of the required documentation, the actions and training activities indicated and, ultimately, all the obligations that for the awardee are derived from this document, the technical specifications and the contract signed whose award is the subject of this tender procedure-.

The object encompasses those improvements offered by the bidder, except expressly rejected by AIMEN for its addition or execution.

Therefore, it is included in the obligations of the contractor for the fulfillment of the object of the contract in terms of supply and installation of the goods object of acquisition, all those tasks or needs of packaging, transport, unloading and deposit in Aimen's facilities -including those means of use necessary for such purposes as machinery, means of transport, elevators, etc. -until the definitive and complete installation of the good placed in complete conditions for its operation with all the technical requirements required for it in this document (including those tests that are relevant or necessary for this - even remedies or repairs that should be carried out within the warranty period offered Only the goods subject to bidding will be considered duly delivered once these requirements and obligations have been met.

For the individuality of the goods object of acquisition and their own substantivity even when for the incorporation to a single Center, it is for what has been decided - in a similar way art. 99 and ss of the LCSP- the preparation of lots in the terms that will be indicated later, even when admitting the possibility of choosing several lots for the same bidders, although insisting on the individuality of the same and in order to achieve the greatest effectiveness and obtaining the economically most advantageous proposal, proceeding to the admission of individualized offers for each of the aforementioned lots.

2. Needs to be met through the contract.

Through the execution of the contract, and therefore supply and installation of the goods object of acquisition, it is intended to cover the need derived from the participation of AIMEN in Project 0411 MANUFACTUR4 (01E),

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 ALL 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 25/04/2019

TECHNICAL SPECIFICATION LOTE 1

Mobile platform for position of manufacturing parts:

Mobile platform with medium payload for autonomous operation in shop floor and metal parts manufacturing operations. This would allow automating operations in multi-stage modular manufacturing lines with reduced transfer times between manufacturing stages and intralogistics, using the same platform for transport and part positioning. It is necessary to have a hardware solution that allows a simple integration with an open control architecture for autonomous mobile robots and with the necessary autonomy for at least half continuous operation shift.

For precise positioning in manufacturing areas, it is required a traction system that allows maneuvers in confined spaces.

Especificaciones técnicas:

- Mobile platform with a payload greater than or equal to 400kg.
- Payload fully supported by the mobile platform, without dragging.
- Speed greater than or equal to 0.8m/s.
- Omnidirectional movements.
- Communications with the platform opened or based on open software.
- Battery duration in normal operation greater than or equal to 4h
- Relation between charging time and operation time less than 1.0
- Safety guarding system without occlusions all around the robot.
- Robot arm base for a collaborative manipulator.
- Battery charger and corresponding connection wires.

Other technical warranty and training requirements that the offer must include:

- Warranty for at least 24 months.
- Required packaging for transport.
- Transportation to the AIMEN facilities.
- Download at AIMEN facilities after transportation.
- Installation, operation and maintenance manuals in Spanish and/or English.

PRICE MAX.: 60.000 EUR

DEADLINE: 30/08/2019

TECHNICAL SPECIFICATION LOTE 2

6 axes industrial robot system to machining and welding operations

Machining system consisting of a 6 axes industrial robot attached to the floor or a platform on the floor. Machining tools to work on mild steel will be attached to the robot, therefore the robot rigidity should be considered in order to absorb the usual process vibrations related to these kinds of works, remaining its accuracy and repetition specifications. Furthermore the machining operations, plasma cutting and arc welding operations will be done on metal parts attached to the 2 axes positioner.

Technical specifications:

- 6 axes industrial robot with a minimum payload of 180kg; 200kg or larger would be advisable to absorb machining vibrations and tool loads. Software specifications: multitasking, arc welding instructions set, ethernet communication with external devices throughout sockets or XML, absolute accuracy, field buses like DeviceNet, Profinet, Collision control, Robot moved by external devices (similar to ABB EGM option).
- Robot dress pack prepared to arc welding and handling operations
- 2 axes positioner with a payload of 500kg or larger, and arc welding prepared. Similar to ABB IRBP 500A positioner.
- Connection cables between robot and controller with a minimum length of 10m.

Additional requirements included in the bid, related to warranty and training course:

- 24 months minimum warranty.
- Shipment packing.
- Shipment to AIMEN facilities.
- Equipment download at AIMEN facilities.
- Delivery term of 16 weeks maximum.
- Installation, operation and maintenance manuals in Spanish and/or English language.
- Basic operation manual in Spanish language.

PRICE MAX.: 60.000 EUR

DEADLINE: 30/09/2019

TECHNICAL SPECIFICATION LOTE 3

Milling tool set to machining weld beads.

A complete milling tool set and accessories to dry machining (non-use of liquid coolants) of weld beads excess thickness, of mild steel or aluminium in square-butt or overlap joint arrangements. This tool set will be attached to an electro-spindle by mean of an automatic toolholder change.

It will be included an spread set of accessories and consumables to different materials (mild steel, stainless steel, or aluminium).

Technical specifications:

- Minimum 2 units toolholder ISO 30, DIN69871 + Pinza Sfere D5,556mm.
- Minimum 2 units collet without coolant channels, 10mm diameter.
- Minimum 2 units collet without coolant channels, 12mm diameter.
- Minimum 2 units collet without coolant channels, 16mm diameter.
- Minimum 12 units interchangeable 4 flute solid carbide toric nose endmill head, Ø12, Z4, R0,5 (like ISCAR MM EC120A09R0.5-4T08) used with shank.
- Minimum 12 units interchangeable solid carbide ball nose milling head, Ø12, Z4 (like ISCAR MM EB120A09-4T08) used with shank.
- Minimum 7 units interchangeable 6 flute solid carbide toric nose endmill head, Ø12 Z6 R1,5 (like ISCAR MM EC120B09R1.5-6T08) used with shank.
- Minimum 7 units interchangeable 4 flute solid carbide toric nose endmill head, Ø12 Z6 R1,0 (like ISCAR MM EC120B09R1.0-4T08) used with shank.
- Minimum 7 units interchangeable 4 flute solid carbide toric nose endmill head, Ø12 Z4 R1,5 (like ISCAR MM EC120E09R1.5CF-4T08) used with shank.
- Minimum 12 units interchangeable 4 flute solid carbide toric nose endmill head, Ø12 Z4 (like ISCAR MM EC120E09C5CF-4T08I) used with shank.
- Minimum 2 units tungsten straight shank, 2 coolant holes, for interchangeable milling heads (like ISCAR MM S-A-L130-C12-T08-W-H)
- Minimum 2 units tungsten conical shank, 2 coolant holes, for interchangeable milling heads (like ISCAR MM S-D-L130-C16-T08-W-H)

Additional requirements included in the bid, related to warranty and training course:

- Shipment to AIMEN facilities.
- Delivery term: 2-3 weeks maximum.

PRICE MAX.: 5.000 EUR

DEADLINE: 30/06/2019