



TENDER POLICY DOCUMENT

OPEN PROCEDURE ART. 60 LEG. DECREE 50/2016 AND SUBSEQUENT ADDITIONS AND AMENDMENTS

In application of Sole Administrator Resolution no. 84 of 26/09/2017

SUPPLY OF EQUIPMENT FOR THE RESEARCH AND DEVELOPMENT OF COMBUSTORS AT THE SESTA LAB

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TENDER ID CODE (CIG) LOT 1: 72055743C5 – TENDER ID CODE (CIG) LOT 2: 7205587E7C - PROCEDURE ID CODE (CUP): D86G17001800003

1. TYPE OF TENDER

Supply of equipment for the research and development of combustors at Sesta Lab (S.P. 35 km 2.7 - 53030 Radicondoli SI - [Sesta Lab Map](#)), to be awarded by means of open procedure according to Art. 60 of Legislative Decree 50/2016 and subsequent additions and amendments.

The supply is divided into two lots:

- **Lot 1: supply of laser systems for PIV, PLIF and Rayleigh Thermometry, under combustion conditions;**
- **Lot 2 - provision of an optical probe for the monitoring of combustion dynamics.**

2. AWARDING AUTHORITY

- Company name: Co.Svi.G. S.c.r.l. – Consorzio per lo Sviluppo delle Aree Geotermiche (Consortium for the Development of Geothermal Areas)
- Tax Code/VAT Code: 00725800528
- Registered address: Via Tiberio Gazzei 89 - 53030 Radicondoli (SI)
- Registered address Tel/Fax: +39 0577-752950
- Registered email: amministrazione@cosvig.it
- Administrative Office: Via Vincenzo bellini 58 - 50127 Florence
- Admin. Office Tel: +39 055-368123 – Fax: +39 055-3217026
- Admin. Office email: segreteria@cosvig.it
- Admin Office certified email (PEC): posta@pec.cosvig.it
- Website www.cosvig.it
- Place of execution of the tender: Sesta Lab, S.P. 35 km 2.7 – 53030 Radicondoli (SI), [Sesta Lab Map](#)
- PEC for official tender notifications: contratti@pec.cosvig.it
- Unique Responsible of Procedure (RUP): Giulio Grassi, tel. +39 0577-1698581, mobile +39 3311527872, email g.grassi@sestalab.com

3. DOCUMENTATION

The present Tender Policy Document and all the attached documents, are available on the website at



the following link [Bandi di gara](#). The documents are drafted in Italian and shall also be available in English, though it is to be noted that, for legal purposes, only the Italian documents shall apply.

The tender documents include:

- A. PUBLIC CALL FOR TENDERS;
- B. TENDER POLICY DOCUMENT ;
- C. TECHNICAL SPECIFICATION AND ATTACHMENTS, LOT 1;
- D. TECHNICAL SPECIFICATION AND ATTACHMENTS, LOT 2;
- E. CONTRACT TEMPLATE, LOT 1;
- F. CONTRACT TEMPLATE, LOT 2;
- G. ESTD (DGUE), LOT 1;
- H. ESTD (DGUE), LOT 2;
- I. DECLARATION OF SPECIAL REQUIREMENTS, LOT 1;
- J. DECLARATION OF SPECIAL REQUIREMENTS, LOT 2;
- K. FURTHER DECLARATIONS REGARDING THE TENDER;
- L. STATEMENT LEG. DECREE 196/2003, PERSONAL DATA PROCESSING;
- M. TECHNICAL OFFER TEMPLATE, LOT 1;
- N. TECHNICAL OFFER TEMPLATE, LOT 2;
- O. ECONOMIC OFFER TEMPLATE, LOT 1;
- P. ECONOMIC OFFER TEMPLATE, LOT 2.

4. CPV CODE

Lot 1 – 38636110-6.

Lot 2 – 3862100-4

5. NATIONAL STATISTICS INSTITUTE CODE OF THE MAIN PLACE OF EXECUTION OF THE TENDER

Radicondoli (SI): 052025.

6. TENDER DESCRIPTION, NATURE AND EXTENT OF THE SERVICES

The scope of the tender is the supply of turnkey equipments for the research and development of combustors at Sesta Lab, in compliance with the provisions of the Technical Specifications.

The supply is divided into two lots:

- **Lot 1: supply of laser systems for PIV, PLIF and Rayleigh Thermometry, under combustion conditions;**
- **Lot 2 - provision of an optical probe for the monitoring of combustion dynamics.**

Pursuant to Art. 51, Par. 2 and 3 of Legislative Decree 50/2016 and subsequent additions and amendments, participation is permitted for both lots. There is no limitation to the number of lots that can be awarded to a sole bidder.

It is to be noted that, for both lots, the minimum technical and application specifications that the contractor must ensure in the execution of the supply under this tender are listed in the Technical Specifications and related attachments. The technical offer of the bidder must define any further specifications that the contractor undertakes to implement.

Within the scope of each individual lot, the supplies requested must be integrated to create a functioning assembly. The designs, materials, engineering, certifications and all that proves necessary for the operation of the supplies requested are to be considered included.

The total value of the tender is **€ 1,155,000.00 (one million one hundred and fifty-five thousand euro), excluding VAT, of which:**



- **Lot 1 for € 825,000.00 (eight hundred and twenty five thousand euro)**, tender basic amount, to be discounted.
- **Lot 2 for € 330,000.00 (three hundred and thirty thousand euro)**, tender basic amount, to be discounted.

The safety liabilities amount to zero.

The total value of € 1,155,000.00 is financed as specified in more detail in the Sole Administrator Resolution no. 84 of 26/09/2017, cited above.

The due contract amount shall be paid as a “lump sum” for both lots, pursuant to Art. 3, Par. 1, letter d of Legislative Decree 50/2016 and subsequent additions and amendments, therefore the contract fee refers to the complete service as performed and as deduced from the contract.

The amount payment shall be made in compliance with the deadlines established under Legislative Decree no. 231 of 09.10.2002 and subsequent additions and amendments.

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7. AWARDING CRITERIA

The most economically advantageous offer for both lots, pursuant to Art. 95 of Legislative Decree 50/2016 and subsequent additions and amendments.

8. DELIVERY TIMES

Final delivery of the turnkey supplies (following acceptance tests, performance tests and delivery of all the manuals and documents outlined under the Technical Specifications) must be made within:

- **Lot 1 - 98 (ninety-eight) consecutive calendar days** from the date of signing the contract (or of advance delivery).
- **Lot 2 - 210 (two hundred and ten) consecutive calendar days** from the date of signing the contract (or of advance delivery).

9. SUBCONTRACTABLE SERVICES

All the services in this contract can be subcontracted, up to a maximum of 30% (thirty percent) of the total value of the contract, to economic operators suitably qualified pursuant to Art. 105, Par. 2 of Legislative Decree 50/2016 and subsequent additions and amendments.

In order to subcontract, the Contractor must have indicated the services (or parts of services) he intends to subcontract in the tender documents, in accordance with that provided for by Art. 105 of Legislative Decree 50/2016 and subsequent additions and amendments (see in particular Par. 4, letter b). If this is not the case, Co.Svi.G. shall be unable to authorise any subcontract.

In the event that the bidder intends to subcontract, he must indicate a list of three subcontractors, given that the tender value exceeds the EU public procurement threshold.

Given that the supply is of unusual and especially complex technology, the bidder may be admitted to the call for tenders even without indicating three subcontractors, where he presents a valid justification of being unable to identify three suitable subcontractors. The justification shall be assessed by the awarding authority. This is without prejudice to the obligation to indicate the name of at least one subcontractor, should the bidder declare the intention to subcontract.

It is to be remembered, in particular, that, pursuant to Art. 105, Par. 4 of Legislative Decree 50/2016 and subsequent additions and amendments, contractors may subcontract the services under the contract, subject to prior authorisation by the awarding authority, as long as **the subcontractor has not participated in the tender procedure**. For the remainder, reference is made to the provisions of Art. 105, Par. 4, cited above.

Therefore, indication of a subcontractor who was also a bidder in the tender cannot be taken into



consideration by the awarding authority.

Consequently, the bidder must include in the administrative envelope the relative declarations of possession of requirements from the subcontractors indicated in the list of three, as established under Art. 80 of Legislative Decree 50/2016 and subsequent additions and amendments.

Where the cases outlined under Art. 105, Par. 13 of Legislative Decree no. 50/2016 and subsequent additions and amendments (to which to refer) do not apply, payments for services undertaken by the subcontractor shall be made by the contractor. Where, however, the cases outlined under Art. 105, Par. 13 of Legislative Decree no. 50/2016 and subsequent additions and amendments apply, payments due to the subcontractor shall be made directly by the awarding authority (in this case, the contractor must inform the RUP of the part of the service performed by the subcontractor, specifying the relative total sum and with a justified payment proposal).

10. BID PRESENTATION TERMS AND METHODS

The bidders must present, **under penalty of exclusion**, a single (**one for each lot**) sealed and non-transparent envelope, with written on the outside, **under penalty of exclusion**, the words **SUPPLY OF EQUIPMENT FOR THE RESEARCH AND DEVELOPMENT OF COMBUSTORS AT SESTA LAB**, as well as the **details of the lot for which they intend to bid** and **details of the bidding economic operator** (company name, registered address, tax code).

It is to be noted that, in the case of bidders with **multiple eligible bodies** (temporary associations, ordinary consortia, aggregations of companies under the network contract, EEIGs), the names and details of all the individual participants must be displayed on the envelope, whether they be already constituted or yet to be constituted.

The envelope must contain, **under penalty of exclusion**, **3 separate envelopes**, also sealed and non-transparent, displaying the name of the sender, tender details and, respectively, the words:

- **A - Administrative documents**
- **B - Technical offer**
- **C - Economic offer**

In turn, these 3 envelopes must contain the documents described under Articles 16, 17 and 18 respectively of these Tender Policy Document.

It is recommended not to insert administrative documents in envelopes B and C, insofar as the absence of an administrative document in envelope A shall lead to **exclusion, if essential**, or to the implementation of the procedure to remedy deficiencies, pursuant to Art. 83 of Legislative Decree 50/2016 and subsequent additions and amendments; and not to place any documents regarding the financial bid made in envelopes A and B, insofar as this shall be **cause for exclusion** from the tender procedure, in the same way as inclusion of technical offer documents in envelopes A and C.

To avoid any doubts of interpretation, it is specified that “seal” shall be understood to mean airtight closure with a mark or stamp, such as to close the outside and inside envelopes and prove the authenticity of the original closure by the sender, as well as to guarantee that no tampering has occurred.

The outside envelope must, **under penalty of exclusion**, be addressed to **SESTA LAB - Strada Provinciale 35 KM 2.7 53030 Radicondoli (SI) - ([Sesta Lab Map](#) open every day 24/24h)**, and must be delivered, **under penalty of exclusion**, within the final deadline of **3 pm on 13/11/2017** by one of the following methods:

- State postal service registered post (postal service with receipt of delivery),
- Authorised delivery agency or express courier,
- Hand delivery of the envelope.

Delivery of the envelope is at the full and exclusive risk of the sender, with the exclusion of any



liability on the part of the awarding authority in the event that the envelope should fail to arrive within the deadline.

Once the set deadline has expired, no further bids shall be recognised as valid, even if as a replacement of or addition to preceding offers, and the presentation of other bids under the tender procedure shall not be permitted. Envelopes that do not arrive within the established deadline shall not be opened.

It is to be noted that failure to separate the financial offer from the technical offer, i.e. the inclusion of elements concerning the price in documents not sealed in the financial offer envelope, shall be **cause for exclusion**.

Offers that are either plural, conditional, alternative or increased as compared to the basic tender amount value **shall be excluded**.

11. ADMISSION TO THE TENDER

Admission to the tender is granted to economic operators according to Art. 3, Par. 1, letter p) of Legislative Decree no. 50/2016 and subsequent additions and amendments, as recalled under Art. 45 of the same decree, as well as to economic operators established in other Member States, founded in compliance with the existing legislation in their respective countries, in possession of the requirements provided for by Legislative Decree no. 50/2016 and subsequent additions and amendments and by the present tender policy document.

Pursuant to Art. 49 of Legislative Decree 50/2016 and subsequent additions and amendments, participation is granted to economic operators established in countries provided for by the general notes of Annex 1 of the European Union of the GPA and by other international agreements to which the European Union is bound. Economic operators belonging to third-party countries bound by such agreements shall be treated no less favourably than pursuant to Legislative Decree 50/2016 and subsequent additions and amendments.

It is recommended that bidders established in the aforementioned countries check in applicable international agreements the thresholds above which participation is permitted.

More specifically, admission is awarded to:

- economic operators with individual eligibility (in singular form), as under letter a) (individual entrepreneurs, including craftsmen, commercial companies and cooperatives), b) (consortia of production and worker cooperatives and consortia of craft enterprises) and c) (permanent consortia), of Art. 45, Par. 2 of Legislative Decree 50/2016 and subsequent additions and amendments;
- economic operators with multiple eligibility (in the form of multiple bodies), as under letter d) (temporary groupings of consortia or enterprises), e) (ordinary consortia of bidders according to Art. 2602 of the Civil Code) and f) (aggregations of companies under a network contract) of Art. 45, Par. 2 of Legislative Decree 50/2016 and subsequent additions and amendments; admission is also granted to temporary groupings of consortia and ordinary consortia that intend to group together or create a consortium only after the contract has been awarded, pursuant to Art. 48, Par. 8 of Legislative Decree 50/2016 and subsequent additions and amendments;
- economic operators as under letter g) of Art. 45, Par. 2 of Legislative Decree 50/2016 and subsequent additions and amendments, who have signed a contract of European Economic Interest Grouping (hereinafter referred to as EEIGs) pursuant to Legislative Decree no. 240 of 23.07.1991.

In the case of temporary groupings of enterprises (RTIs) or consortia, as under Art. 45, Par. 2, letters d) and e) of Legislative Decree 50/2016 and subsequent additions and amendments, that have not yet been formed, the economic operators that will make up the grouping or consortium must



undertake to award a collective, irrevocable mandate of representation to a group leader and to indicate the services or percentage share of services that the group leader and mandator/s shall perform.

Consortia of production and worker cooperatives, craft company consortia and permanent consortia are subject to the provisions of Art. 47 of Legislative Decree no. 50/2016 and subsequent additions and amendments

Temporary groupings of consortia (RTCs) and ordinary consortia are subject to the provisions of Art. 48 of Legislative Decree no. 50/2016 and subsequent additions and amendments; the same provisions, where compatible, apply to the aggregations insofar as indicated under Par. 14 of the same Art. 48.

Bidders for the same lot for whom the awarding authority ascertains that their relative offers are attributable to a sole decision-making body, based on unequivocal elements, shall be **excluded**.

Permanent consortia are obliged to indicate the consortium members in their offer; these consortium member are prohibited from participating in the tender in any other form. In the case of breach of this prohibition, both the consortium member and the consortium shall be **excluded** from the tender. In the case of non-compliance with this prohibition, Article 353 of the Penal Code shall apply. Membership in more than one permanent consortium is prohibited. Joint bidding is prohibited.

Participation is permitted to companies, in or in the course of forming temporary groupings established in foreign countries, in the grouping forms provided for by the country of establishment.

12. PARTICIPATION REQUIREMENTS

The specific requirements for participating in this tender procedure are as follows:

GENERAL REQUIREMENTS

Participation is not permitted for bidders to which the following apply:

- the **exclusion** clauses under Art. 80 of Legislative Decree 50/2016 and subsequent additions and amendments;
- the conditions under Art. 53, Par. 16-iii of Legislative Decree no. 165 of 2001 and subsequent additions and amendments, or who have incurred, pursuant to regulations in force, further prohibitions from entering into contractual agreements with public administration.

These requirements must be met by any subcontractors indicated pursuant to Art. 105, Par. 6 of Legislative Decree 50/2016 and subsequent additions and amendments.

Economic operators with registered address, residence or domicile in countries included on the so-called “black list”, as outlined under Decree of the Minister of Finance of May, 4 1999 and under the Decree of the Minister of the Economy of November, 21 2001, must possess authorisation issued pursuant to Ministerial Decree of 14 December 2010 of the Ministry of Economy and Finance (Art. 37 of Legislative Decree no. 78 of 31 May 2010), under **penalty of exclusion** from the tender.

Pursuant to Art. 48, Par. 7, first punctuation of Legislative Decree 50/2016 and subsequent additions and amendments, it is forbidden for competing economic operators to participate in the tender in more than one temporary grouping or ordinary consortium of bidders, or participate in the tender individually, if they have participated in the same tender in a grouping or ordinary consortium of bidders or aggregation of companies belonging to the network contract.

Consortium members as described under Art. 45, Par. 2, letter b) of Legislative Decree 50/2016 and subsequent additions and amendments (consortia of cooperatives and consortia of craft companies), pursuant to Art. 48, Par. 7, second punctuation of Legislative Decree 50/2016 and subsequent additions and amendments, are forbidden from participating in the same tender in any other form; the same prohibition applies for consortium members as outlined under Art. 45, Par. 2, letter c) of



Legislative Decree 50/2016 and subsequent additions and amendments (permanent consortia).

SPECIAL REQUIREMENTS

Economic/financial and technical/professional requirements for provision execution - Lot 1:

- to have successfully supplied, in the last five financial years, 2012-2016, at least one **similar PIV system (with acquisition frequency of at least 1 kHz) and at least one similar PLIF system**, for a total sum (derived from the addition of the aforementioned supplies) of at least **€400,000.00 (four hundred thousand euro)**; each supply declared must include details of a physical contact person, available to provide information and verification (e-mail, telephone, registered address, name of body/organisation).

Economic/financial and technical/professional requirements for provision execution - Lot 2:

- to have successfully supplied, in the last three financial years, 2014-2016, **similar systems (i.e. optical, optoelectronic and optomechanical systems)**, for a total sum of at least **€ 330,000.00 (three hundred and thirty thousand euro)**; each supply declared must include details of a physical contact person, available to provide information and verification (e-mail, telephone, registered address, name of body/organisation).

For temporary groupings, aggregations of network enterprises and horizontal ordinary consortia, as under Art. 45, Par. 2, letters d), e), f) and g) of Legislative Decree 50/2016 and subsequent additions and amendments, at least 40% of the economic/financial and technical/organisational requirements of the tender must be possessed by the representative company or by one consortium member. The remainder must be possessed cumulatively by the mandators or by the other consortium members, each with at least 10% of that required for the whole grouping. The grouping or consortium shareholdings, indicated as part of the offer, can be freely established within the limits of the qualification requirements possessed by the associate or consortium member company. Within the scope of the requirements it possesses, the representative company shall assume, in any case, a larger share of the requirements as compared to each of the mandator bodies. Services are performed by the bidders grouped according to the shares indicated in the offer, without prejudice to the right to amend these shares, subject to prior authorisation from the contracting authority, which ensures compatibility with the qualification requirements held by the companies in question.

For groupings, compliance with the provisions of Art. 48 of Legislative Decree 50/2016 and subsequent additions and amendments shall apply in all cases.

13. PARTICIPATION REQUIREMENT AND TENDER ADMISSION VERIFICATION METHODS

Verification of the possession of general, technical/organisational and economic/financial requirements shall be undertaken, pursuant to Art. 81 and Art. 216, Par. 13 of Legislative Decree 50/2016 and subsequent additions and amendments., by means of the [AVCpass](#), system, made available by ANAC with Implementing Resolution no. 111 of 20 December 2012 and subsequent additions and amendments. Therefore, all bodies interested in participating in the tender must register with the AVCpass system via the ANAC portal (reserved access services - avcpass), according to the instructions displayed, and acquire the "PASSOE" described under Art. 2, Par. 3.2 of the aforementioned resolution, to be presented during tender participation.

14. POOLING

Pursuant to Art. 89 of Legislative Decree 50/2016 and subsequent additions and amendments, **pooling is permitted** for this tender.

15. CLARIFICATIONS



Further clarifications with regard to this tender procedure can be obtained by means of a written request to the Procedure Manager, Giulio Grassi, at g.grassi@sestalab.com, **no later than 7 days prior to the offer presentation deadline**. Queries delivered after this deadline shall not receive a reply.

Requests for clarifications must be written in Italian or, exceptionally, in English. Replies to all the requests presented within the deadline will be provided no later than 5 days prior to the set offer presentation deadline.

The contracting authority shall publish anonymously the replies to the requests for clarification and/or any other substantial information regarding this tender procedure on its website in the section [Bandi di gara \(Calls to Tender\)](#), on the page relating to the tender in question.

16. CONTENTS OF ENVELOPE “A - ADMINISTRATIVE DOCUMENTS”

Envelope “A - Administrative documents” must contain, **under penalty of exclusion** (with the exception of the cases outlined under Art. 83, Par. 9 of Legislative Decree 50/2016 and subsequent additions and amendments), the following documents:

A.1) ESTD (DGUE).

Pursuant to Art. 85 of Legislative Decree 50/2016 and subsequent additions and amendments, **European Single Tender Document - ESTD application form (attachments G and H)** signed, **under penalty of exclusion**, by the legal representative of the bidder, with an attached photocopy of an identity document of said representative. The ESTD may also be signed by a proxy of the legal representative and, in this case, a true copy of the mandate must be attached, **under penalty of exclusion**.

It is to be noted, in addition, that, in the case of a bidder made up (or to be made up in the event that the contract is awarded) in the form of an **aggregation/multiple bodies**, each member of the grouping, consortium or other **must provide a separate ESTD**.

Equally, in the cases as described under Art. 105, Par. 6, letter of Legislative Decree 50/2016 and subsequent additions and amendments, (list of three subcontractors), a separate ESTD must be presented for each subcontractor indicated, for the purposes of ensuring possession of the requirements under Art. 80 of Legislative Decree 50/2016 and subsequent additions and amendments.

In the ESTD, for each lot, the bidder must declare and provide details of:

- personal details;
- personal qualification;
- the form of participation, individual or multiple bodies;
- personal representatives;
- subcontract;
- the absence of causes for **exclusion** under Art. 80 of Legislative Decree 50/2016 and subsequent additions and amendments;
- Possession of the economic/financial and technical/professional capacity required by the present policy document in Paragraph 12 (for Lot 1, **under penalty of exclusion**, the bidder must provide the details of **Annex I**; for Lot 2, **under penalty of exclusion**, the bidder must provide the details of **Annex J**);
- possession of quality guarantee systems and environmental management standards.

NB: *It is to be pointed out that, for the purposes of facilitating the compilation of the ESTD by the bidders and to reduce missing important information and/or irregularities, the Infrastructure and Transport Ministry Circular no. 3 of 18/07/16 (published in Official Journal no. 174 of 27/07/2016) is provided as an attachment, containing the guidelines for use.*



WARNING

The bidder must certify, within the ESTD, possession of the special requirements requested in terms of economic/financial and technical/professional capacity.

Participating economic operators are invited, where possible, to attach to their offer, in envelope “A - Administrative documents”, true copies of documents proving their possession of the special requirements, which must comply with that outlined under Art. 86 of Legislative Decree 50/2016 and subsequent additions and amendments.

Failure to present proof of requirements under Art. 83 of Legislative Decree 50/2016 and subsequent additions and amendments at this stage does not imply exclusion of the bidder, given that it is requested purely by way of cooperation, useful to speed up the certification of requirements held by the contract winner and the delivery of supplies. It is, in any case, the duty of the bidding companies to make up in advance the documents necessary for proof of requirements, in consideration of the unconditional and short tender deadline for presenting documentary evidence, set at 7 days from the date of request. Presentation of the aforementioned proof of requirements together with the administrative documents does not exclude the possibility of the awarding authority requesting further relative specifications or clarifications.

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A.2) FURTHER DECLARATIONS REGARDING THE CONTRACT

These declarations must be submitted using the attached form (Annex K), duly completed and signed according to the methods specified at the bottom of the document itself. The document must be signed by the legal representative of the bidder or by a proxy of the legal representative.

A.3) PROVISIONAL GUARANTEE

The provisional guarantee, **containing the undertaking to constitute the definitive guarantee**, must be placed in envelope A and must be for the sum of:

- € 16,500.00 (sixteen thousand five hundred euro), equal to 2% of the value of Lot 1;
- €6,600.00 (six thousand six hundred euro), equal to 2% of the value of Lot 2.

Possession of the quality certification necessary in order to benefit from the discounts described under Art. 93, Par. 7 of Legislative Decree 50/2016 and subsequent additions and amendments must be proved by attaching the original certificate or a copy declared to be a true to the original according to the methods as outlined by Presidential Decree no. 445 of 2000, or via a declaration in lieu drafted according to the provisions of this same decree. In the case of temporary grouping of bidders or consortium, proof of quality certification must be provided according to that provided for by the regulations in force.

In the case of already formed temporary grouping of bidders or consortium as under Art. 45, Par. 2, letter e) of Legislative Decree 50/2016 or bodies as under Art. 45, Par. 2, letter g) of the same decree (EEIGs), the guarantee must be presented by the group leader in the name and on behalf of all the grouping companies or consortium members. In the case of temporary grouping of bidders or consortium as under Art. 45, Par. 2,) of Legislative Decree 50/2016 or bodies as under Art. 45, Par. 2, letter g) of the same decree (EEIGs) yet to be formed, the guarantee must be in the name of all the companies that intend to form the group.

A.4) PASSOE

Bidders must include the **PASSOE (Economic Operator Pass)** as outlined under Art. 2, Par. 3.2 of Resolution no. 111 of 20 December 2012 of the National Anti-corruption Authority (ANAC).

The “**PASSOE**” document, as described under Art.2, Par. 3.2 of Resolution no. 111 of 20.12.2012 of the former AVCP (now A.N.A.C.), is made available to the bidder via the “**AVCpass system**”. The awarding body uses this as a basis for verifying, wholly or in part, the general and special bidder requirements, under Art. 216, Par. 13 of Legislative Decree no. 50/2016 and subsequent additions and amendments.



It is to be noted that failure by the bidder to include the “**PASSOE**” in the documents submitted for admission to the tender shall not constitute cause for exclusion from the procurement procedure in question; only in the event of the need to verify possession of requirements of a bidder that is in this situation, the RUP shall implement the **procedure for remedying deficiencies** with regard to this bidder (applying the criteria under Art. 83, Par. 9 of Legislative Decree 50/2016 and subsequent additions and amendments) and, therefore, the bidder shall be obliged to produce the same “**PASSOE**” and upload the required documents and data to the AVCPass system, within the deadline established by the RUP, in order that the awarding body may carry out the verifications envisaged under law.

A.5) ANAC CONTRIBUTION PAYMENT

The bidder must include in envelope A a proof of payment of the National Anti-corruption Authority contribution, for the following amounts:

- **Lot 1 - € 80.00 (eighty euro);**
- **Lot 2 - € 35.00 (thirty-five euro).**

A.6) STATEMENT LEG. DECREE 196/2003

The bidder must include in envelope A a statement (**Annex L**) with which he certifies that he understands that, pursuant to and in accordance with Legislative Decree no. 196 of 30 June 2003, no. 196, personal data shall be processed, even with IT tools, exclusively within the scope of the procedure for which the declaration is issued, duly completed and signed according to the methods specified at the bottom of the document itself.

A.7) PHOTOCOPY OF AN ID DOCUMENT

The bidder must include in envelope A a photocopy of a valid **identity document**, of the persons who sign the ESTD, all the declarations, the technical and financial offers and all the documents required for participation in this tender.

NB:

- The awarding authority, pursuant to Art. 86 of Legislative Decree no. 50 of 2016, may ask the bidders at any time to provide proof of the declarations made as part of the tender at any time, via the request to produce the certificates, declarations and other means of proof, such as proof of the absence of cause for **exclusion** under Art.80 and compliance with the criteria of Art. 83. With regard to the economic operator’s obligation to provide evidence and any documents produced, see Art. 86 of Legislative Decree no. 50 of 2016 cited above.*
- It is to be pointed out that the forms mentioned above are merely tools of support to the bidding economic operators. Therefore, they may be replaced by substitute declarations drafted in a different form, as long as they conform to the provisions of Presidential Decree no. 445 of 2000 and include the same minimum required content as the forms for the purpose of admission to the tender. For the purposes of qualification, the bidder is free to attach additional declarations and/or certifications.*
- It is to be pointed out that the bidder is liable for all the declarations made, pursuant to Presidential Decree 445/2000, therefore he is responsible for any errors contained therein. The Administration accepts the content of the declarations as they are submitted by the bidder and uses them as the basis for verifying the conformity of all the documents requested for tender participation.*

17. CONTENTS OF ENVELOPE “B - TECHNICAL OFFER”

Envelope “B - Technical offer, Lot 1” must contain, under penalty of exclusion, the following documents:

The technical offer, made up of the documentation necessary to describe clearly and exhaustively



the methods that the bidder intends to adopt to fulfil the requirements of the Technical Specifications.

The essential documents that make up the technical offer, **under penalty of exclusion**, are the following:

- 1) **TECHNICAL OFFER SHEET, LOT 1 (Annex M) and attachments.** The bidder must explain clearly on the form the parameters A, B, C, D, E, F, G, H, I, L, M, N, O, Q, R, S described below, using the same units of measurement:

PIV system		
Item	Article	Plus
A	PIV laser	E > 5mJ/pulse @5kHz
B	PIV laser	E > 13mJ/pulse @1kHz
C	High speed camera for PIV	R = 1600 x 1200 pixel R ≥ 2048 x 1536 pixel >12 bit
D	Lens	200mm F/2.8
E	Scheimpflug	Motorised Scheimpflug
F	Seeding particle	Seeding particle [1 – 15]bar, 600°C, 0.25kg/s
PLIF/Rayleigh thermometry system		
G	LIF Pump Laser	Output at 355nm, 120mJ/pulse
H	LIF Dye Laser	E > 20mJ/pulse @10Hz @283.2nm
I	LIF Dye Laser	F > 10Hz with at least 5mJ/pulse @20Hz @ 283.2nm
L	High speed camera for LIF	R = 1600 x 1200 pixel R ≥ 2048 x 1536 pixel > 12bit
M	LIF lens	UV Lens f = 200mm, at least F/2.8, F-mount, transparent to UV from at least 200nm
N	Structured foil	System for creating structured light sheet for Rayleigh scattering
Common parts / software		
O	PIV and PLEF trigger	Synchronisation on the combustion pressure 1 st harmonic, acquired during the test
Q	Mechanics	Mechanical supports (structures) by ad hoc design for delivering laser beams to the test section
Services		
R	Free after-sales service (collection, damage report, repair quote), including component operations at the parent company.	
S	Extension of the warranty from 24 to 36 months, from the moment of successful delivery to the Sesta Lab.	

It is to be noted that the technical offer, **under penalty of exclusion**:

- must, in the case of an individual bidder, be **signed by the legal representative of the bidder or by his proxy** (in the latter case, a true copy of the original mandate must be attached, **at the risk of non-consideration**);



- in the case of a temporary grouping of bidders or ordinary consortium yet to be formed, must be signed by the same subjects as referred to in the preceding point, of each grouping (leader and mandators).
- in the case of an already established temporary grouping of bidders or ordinary consortium, must be signed by the same persons, referred to in the first point, of the leader or representative company only;
- in the case of a consortium, both for the consortium and for each consortium member for which the consortium bids, must be signed by the same subjects as mentioned in the first point.

***NB:** It is recommended to report any parts of the documents that make up the technical offer (including accessory reports and documents) that fall under trade secret.*

Envelope “B - Technical offer, Lot 2” must contain, under penalty of exclusion, the following documents:

The technical offer, made up of the documentation necessary to describe clearly and exhaustively the methods that the bidder intends to adopt to fulfil the requirements of the Technical Specifications.

The essential documents that must make up the technical offer, **under penalty of exclusion**, are the following:

- 1) **Constitutive and Functional sketch of the “Assembled Ensemble” + “Beam Splitter” or “Fiber Splitter” (and eventually of the “external measurement chain”)** in the configuration selected by the bidder from among those described in the Technical Specification (under Par. 2, parts 3, 4, 6 and 7). The sketch must include an itemized list of materials showing the individual elements of the system and the corresponding features according to the Technical Specification requirements.

***WARNING:** It is to be specified that, **under penalty of exclusion**, the bidder is obliged to present the technical offer for only one of the alternative configurations of the “assembled ensemble” and external optical measurement chain described in the Technical Specifications.*

- 2) **TECHNICAL OFFER FORM, LOT 2 (Annex N) and attachments.** In the technical offer form and attachments, the bidder must explain clearly the parameters P, R₁, R₂, R₃, R₄, R₅, R₆, A, described below, using the same unit of measurement:

- P = As an assessment parameter, this shall consider any existing publications in international scientific journals, with peer reviews, that describe the results of tests performed using optical fiber diagnostic systems for gas turbine combustors already produced by the bidder (the bidder must indicate the author, journal, volume, issue, start page, title and year).
- R = Realization. Under the Realization requirements, the offer shall be assessed as follows:
 1. Willingness of bidder (YES/NO) to provide the product certification following the PED 2014/68/EU standard.
 2. Willingness of the bidder (YES/NO) to integrate the supply with the optical materials of the “External Measurement Chain” (see Technical Specifications Lot #2, Part 2, Point 7).
 3. Willingness of the bidder to carry out preliminary numerical simulations for the purpose of quantifying the focusing capacity and spectral response characteristics of the “Assembled Ensemble” + “Fiber Splitter” or “Beam Splitter” and of the “External Measurement Chain” (see Technical Specifications Lot #2, Par. 2, Point 6). If willing to fulfil this point (YES/NO), the bidder must describe clearly and in detail the instrumental resources for this purpose. In order to assess fulfilment of this point, the bidder must present technical documents describing the software that he intends to use, focusing



particularly on the specific functions devoted to the evaluations described above, by way of example only: optical material and sources modelling methods, physical and numerical models used to predict the “optical path” and the distributed and concentrated attenuation, possibility of varying the surrounding temperature conditions (infra-red self-emission at high temperature, effects of high-temperature annealing on transmittance) and coating (anti-reflection coating, fibre protection, etc.). The same suitability evidence must be presented if the simulations are commissioned to an independent design studio.

4. Willingness of the bidder to characterize the “Assembled Unit” + “Fiber Splitter” or “Beam Splitter” and of the “External Measurement Chain” (see Technical Specifications Lot #2, Part 2, Point 6). If willing to fulfil this point (YES/NO), the bidder must describe clearly and in detail the instrumental resources for this purpose. In particular, he must provide sufficient detail to assess whether the existing laboratory equipment is suitable for the intended use. By way of example only, the descriptions must include: spectrometers suitable for wavelength range of 250-4500 nm, sample sources with adjustable incidence in relation to sapphire optics, systems for entering the characterizing system between source and spectrometer with estimable insertion losses, test benches able to replicate real conditions of probe operation (infra-red self emission at high temperature, effects of high temperature annealing on transmittance). The same suitability evidence must be presented if the characterization is commissioned to an independent laboratory.
 5. Capacity of the bidder to perform thermo-structural analysis of the product. If willing to fulfil this point (YES/NO), the bidder must describe clearly and in detail the instrumental resources for this purpose. In order to assess fulfilment of this point, the bidder must present technical documents describing the software that he intends to use, focusing particularly on the specific functions devoted to the evaluations described above, by way of example only: thermo-elastic behaviour modelling methods, physical and numerical models used to assess the thermo-mechanical load, modelling of the heat exchange between optics, frame and fluids (internal and external), consideration of the problems of differential thermal expansion between the metal frame of the optics and the lenses. The same suitability evidence must be presented if the simulations are commissioned to an independent design studio.
 6. Bidder’s capacity to create “sapphire waveguides” within the oil gun (Execution 1) or within the body of the aero-derivative burner (Execution 2), in the form of a single fibre optic, guaranteeing correct focusing (of the sapphire micro-optic on the end of the fibre). If willing to fulfil this point (YES/NO), the bidder must present a clear and detailed technical/economical feasibility study that included a technical report on the results of the optical simulations referred to in point 3 above.
- A = Assistance. The after-sales service offer must specify whether, in the event of failure of the “Assembled Ensemble” for any reason, diagnosis and the quote for repairs shall be carried out free of charge (A₁) guaranteeing a maximum intervention time, including pick-up at Sesta Lab, of 72 hours (A₂).

It is to be noted that the essential documents that make up the technical offer (functional “assembled ensemble” sketch and technical offer form), as referred to under points 1) and 2), **at the risk of non-consideration:**

➤ must, in the case of an individual bidder, be **signed and stamped by the legal representative**



of the bidder or by his proxy (in the latter case, a true copy of the original mandate must be attached, **at the risk of non-consideration**);

- in the case of a temporary grouping of bidders or ordinary consortium yet to be formed, must be signed by the same subjects as referred to in the preceding point, of each grouping (leader and mandators).
- in the case of an already established temporary grouping of bidders or ordinary consortium, must be signed by the same persons, referred to in the first point, of the leader or representative company only;
- in the case of a consortium, both for the consortium and for each consortium member for which the consortium bids, must be signed by the same subjects as mentioned in the first point.

***NB:** It is recommended to print out any parts of the documents that make up the technical offer (including accessory reports and documents) that fall under trade secret.*

18. CONTENTS OF ENVELOPE “C – ECONOMIC OFFER”

Envelope “C – Economic offer” must contain, **under penalty of exclusion**, the following documents:

Stamped declaration (revenue stamp of € 16.00), signed by the legal representative or by his proxy, containing the **overall lump sum price** that bidder asks for to perform the tender service (one for each lot, **attachments O and P**). This price must be less than the tender base price and must be expressed in both numbers and letters, **under penalty of exclusion**.

It is to be noted that the financial offer, **under penalty of exclusion**:

- must, in the case of an individual bidder, be **signed by the legal representative of the bidder or by his proxy** (in the latter case, a true copy of the original mandate must be attached, **at the risk of exclusion**);
- in the case of a temporary grouping of bidders or ordinary consortium yet to be formed, must be signed by the same subjects as referred to in the preceding point, of each grouping (leader and mandators);
- in the case of an already established temporary grouping of bidders or ordinary consortium, must be signed by the same persons, referred to in the first point, of the leader or representative company only;
- in the case of a consortium, both for the consortium and for each consortium member for which the consortium bids, must be signed by the same subjects as mentioned in the first point.

***NB:** The bidder may include the justifications outlined under Art. 97, Par. 4 of Legislative Decree no. 50/2016 in envelope “C – Economic offer” (in a separate closed and sealed envelope). The envelope must display on the outside the bidder’s details, i.e. the company name, and the following words: “SESTA LAB INSTRUMENTATION TENDER - JUSTIFICATIONS”. Failure to present at this stage the documents to justify offer irregularities, as under the aforementioned Art. 97, does not give rise to exclusion of the bidder, insofar as it is a purely voluntary fulfilment, useful to speeding up the awarding process.*

19. PROCEDURE FOR REMEDYING DEFICIENCIES

Missing or incorrect formal elements of the documents in envelope A can be rectified by means of the procedure for remedying deficiencies, as established under Art. 83, Par. 9 of Legislative Decree no. 50//2016 and subsequent additions and amendments, in particular missing or incomplete documents or any other irregularity in the essential elements and in the European Single Procurement Document under Art. 85 of Legislative Decree no. 50/2016 and subsequent additions and amendments, with the exclusion of those belonging to the technical and financial offers.



For the purposes of rectification, the bidder will be assigned a deadline of 10 (ten) consecutive calendar days from the request of the awarding authority to perform the necessary submissions, additions or corrections. In the case of failure to act within the deadline, the bidder shall be **excluded** from the tender procedure.

20. REQUESTED DEPOSITS AND GUARANTEES AND PENALTIES

The bidder's offer must be accompanied, under **penalty of exclusion**, by a provisional security deposit, as outlined under Art. 93 of Legislative Decree 50/2016 and subsequent additions and amendments, for the sum of:

- € 16,500.00 (sixteen thousand five hundred euro), equal to 2% of the value of Lot 1;
- €6,600.00 (six thousand six hundred euro), equal to 2% of the value of Lot 2.

The provisional security deposit is made up, as chosen by the bidder, of:

- a) **government bonds**, held at a provincial treasury office or authorised firm, as a pledge to the awarding authority; the value must be of legal tender status of the day it was deposited;
- b) **cash**, paid to the Co.Svi.G. Treasury. - Tax Code 00725800528 – Cassa di Risparmio di Volterra Agenzia di Pomarance – IBAN: IT28L0637071110000010002375, indicating the following reason for payment: *provisional security deposit, tender CIG 7000598439*;
- c) **bank guarantee or insurance policy**, or guarantee issued by intermediaries registered on the register outlined under Art. 106 of Legislative Decree no. 385 of 1 September 1993, who perform exclusively or prevalently the issue of guarantees and who are audited by an auditing firm registered on the register outlined under Art. 161 of Legislative Decree no. 58 of 24 February 1998.

In the case of a **provisional security deposit in cash or in government bonds**, it must be accompanied by a **statement** from a bank or insurance company declaring its commitment to issue the bidder with a guarantee, should he be awarded the contract, to cover the **definitive guarantee** in favour of the awarding authority, valid until the date of issue of the certificate of provisional approval or in any case at least 12 (twelve) months from the date of the completion of services.

In the case of a **provisional security deposit** by means of **bank or insurance guarantee**, these must:

- conform to the standard policy templates established by Ministerial Decree no. 123 of 12 March 2004, published in the Ordinary Supplement no. 89/L of the Official Journal no. 109 of 11 May 2004, appropriately integrated with the inclusion of the waiver clause to the exception under Art. 1957, Par. 2 of the Civil Code;
- be original copies with express mention of the subject and body guaranteed;
- **be accompanied by a declaration in lieu of notary deed of the guarantor, attesting to his power to commit the guarantor company, with his signature, with regard to the contracting authority;**
- **be accompanied by the undertaking** of the guarantor to renew the guarantee, upon request by the contracting authority, in the case that, at the time of its expiry, the contract has not yet been awarded;
- be valid for at least **180 days from the deadline for the presentation of the offers of this tender procedure;**
- in reference to as yet unformed temporary groupings, aggregations of network enterprises or ordinary consortia or EEIGs, be strictly in the name of all the companies that make up the grouping, aggregation of network enterprises, consortium or EEIG (Council of State Plenary Conference no. 8 of 4.10.205);
- include the express waiver of the right to enforce prior payment by the principal debtor, waiver



of the exception under Art. 1957, Par. 2 of the Civil Code, as well as the guarantee activation (validity, effectiveness) within 15 (fifteen) days, upon the simple written request of the contracting authority.

- include a statement declaring the commitment to issue the bidder with a guarantee, should he be awarded the contract, to cover the definitive guarantee referred to in Art. 103 of Legislative Decree 50/2016 and subsequent additions and amendments, in favour of the contracting authority, valid until the date of issue of the certificate of provisional approval or in any case at least 12 (twelve) months from the date of the completion of services.

The provisional guarantee is subject to the reductions outlined under Art. 93, Par. 7 of Legislative Decree 50/2016 and subsequent additions and amendments.

In the case of temporary groupings of enterprises, the reduction is acknowledged according to that indicated by the Authority under Resolution no .44 of 27/09/2000 (in O.J. No. 245 of 18/10/2000) and Resolution no. 408 of 06/12/2001:

- a) in the case of horizontal temporary groupings of enterprises, pursuant to Art. 48, Par. 2 of Legislative Decree 50/2016 and subsequent additions and amendments, or ordinary consortium of bidders as under Art. 45, Par. 2, letter e) of Legislative Decree 50/2016 and subsequent additions and amendments, the bidder can benefit from the reduction in guarantee only if all the enterprises that make up the grouping and/or ordinary consortium possess the aforementioned certification;
- b) In the case of vertical temporary groupings of enterprises, in the case that only some of the enterprises that make up the vertical grouping possess certification, the grouping itself may benefit from the reduction, based on the portion of the contract services that each enterprise of the existing and/or future grouping assumes when dividing the contract services within the grouping;
- c) in the case of membership of a consortium, under letters b) and c) of Art. 45, Par. 2 of Legislative Decree 50/2016 and subsequent additions and amendments, the bidder may benefit from the reduction of the guarantee in the event that the aforementioned certificate is held by the consortium.

A particular reminder is made of the necessity to produce “written evidence” for insurance policies, as envisaged under Art. 1888 of the Civil Code.

A paper copy bearing the original signature of the guarantor is required. In the event that the insurance agreement has been finalised “at a distance”, pursuant to Presidential Decree 207/2010, ISVAP (Institute of Private Insurance Control) no. 34 of 19.03.2010, it shall still be required to produce a paper copy with an original signature (see aforementioned Art. 10, Par. 4 of Presidential Decree 207/2010).

In the event that the distance insurance agreement has been made as a digital document signed with qualified electronic signature or digital signature, a paper copy of the policy shall still be required, with a declaration of conformity to the original issued pursuant to Presidential Decree 445/00. In the event that of negative conformity checks, the document shall be considered not produced, with consequent **exclusion** of the bidder from the tender.

Failure to present the provisional guarantee, or presentation of a guarantee of a lesser value or without one or more of the specifications indicated above, constitutes cause for exclusion, pursuant to Art. 83, Par. 9 of Legislative Decree 50/2016 and subsequent additions and amendments.

Pursuant to Art. 93, Par. 6 of Legislative Decree 50/2016 and subsequent additions and amendments, the bidder awarded the contract shall automatically be released from the provisional guarantee at the time of signing the agreement, whilst the other bidders, pursuant to Art. 93, Par. 9



of Legislative Decree 50/2016 and subsequent additions and amendments, shall be released within thirty days of notification of the awarding of the contract.

Furthermore, at the time of signing the agreement, the bidder awarded the contract must provide:

- **definitive security deposit** for the value and according to the methods provided for by Art. 103 of Legislative Decree 50/2016 and subsequent additions and amendments;
- an **All Risks insurance policy** on the transport of the supply as per the contract, with limit of liability equal to the value of the contract of the reference lot.

The aforementioned definitive security deposit shall guarantee the correct fulfilment of the contractual obligations by the successful bidder and, therefore, must also cover the following penalties (up to a maximum of 10% of the contract value, beyond which Co.Svi.G. shall have the right, pursuant to Art. 1456 of the Civil Code, to apply the contract termination clause, without this giving the Contractor the right to compensation of any kind), without prejudice to the right of Co.Svi.G. to obtain due compensation in the event that the deposit is insufficient:

- for every calendar day beyond the date of final delivery of the supplies outlined under Art. 8 of these specifications, starting from the date of the signing of the contract (or date of the advance delivery acceptance report), the supplier must pay a penalty of 1 ‰ (one tenth of a percent) of the contract value.

21. ANAC PAYMENT

The bidders, **under penalty of exclusion**, must pay the contribution provided for by law to ANAC ([contribution collection service](#)), for a total of:

- **Lot 1 - € 80.00 (eighty euro);**
- **Lot 2 - € 35.00 (thirty-five euro).**

Payment can be made according to one of the following methods, as per ANAC Resolution no. 1377 of 21 December 2016:

- Online payment by Visa and Visa Electron (using “Verified by”), MasterCard (using “Secure Code”), Diners, American Express. As proof of payment, the user shall obtain receipt of payment (to be printed and attached to the offer) sent to the email address indicated during registration. The receipt shall be made available via access to the list of “payments made” under the Contribution Collection Service.
- By cash, using the payment form issued by the Contribution Collection Service at all the sales points of the lottery seller tobacconists authorised to accept utility and tax bill payments. At the time of payment, the economic operator must check that the details on the receipt issued at the sales point are correct (personal tax code and the CIG of the intended tender procedure). The original receipt must be attached to the offer.
- For foreign economic operators only, payment may also be made via international bank transfer to the current account held by the Italian National Anti-corruption Authority. The reason for payment must include the tax reference code used in the country of residence or registered business address of the participant (e.g. VAT number) and the CIG of the tender procedure in which the bidder intends to participate. Foreign economic operators must attach the receipt for the bank transfer to the offer.

It is to be pointed out that the awarding body shall check via SIMOG (Tender Monitoring Information System) that ANAC contributions have been paid for the correct sum and that the CIG on the receipt of payment corresponds with that assigned to the tender in question.



22. SCORE CALCULATION METHODS

The contract shall be awarded to the most economically advantageous offer, determined by an tender board duly appointed by the awarding authority, based on the criteria indicated in these tender specifications.

Technical Offer (OT) Lot 1 (maximum 86/100 points)

The score for the technical offer shall be composed of the subheadings Fulfilment and Services.

Fulfilment

The score for fulfilment shall be assigned according to the supply of the components with the specifications indicated in the table below. For parameters A, B and H, the score allocation formula detailed below the table shall be used.

PIV system			
Item	Article	Plus	Points
A	PIV laser	$E > 5\text{mJ/pulse @}5\text{kHz}$	Max 5 pts see Formula
B	PIV laser	$E > 13\text{mJ/pulse @}1\text{kHz}$	Max 4 pts see Formula
C	High speed camera for PIV	R = 1600 x 1200 pixel R \geq 2048 x 1536 pixel >12 bit	1 pt 2 pts 1 pt
D	Lens	200mm F/2.8	2 pts
E	Scheimpflug	Motorised Scheimpflug	8 pts
F	Seeding particle	Seeding particle [1 – 15]bar, 600°C, 0.25kg/s	4 pts
PLIF/Rayleigh thermometry system			
G	LIF Pump Laser	Output at 355nm, 120mJ/pulse	5 pts
H	LIF Dye Laser	$E > 20\text{mJ/pulse @}10\text{Hz @}283.2\text{nm}$	5 pts see Formula
I	LIF Dye Laser	$F > 10\text{Hz}$ with at least 5mJ/pulse @20Hz @ 283.2nm	5 pts
L	High speed camera for LIF	R = 1600 x 1200 pixel R \geq 2048 x 1536 pixel > 12bit	1 pt 3 pts 2 pts
M	LIF lens	UV Lens f = 200mm, at least F/2.8, F-mount, transparent to UV from at least 200nm	2 pts
N	Structured foil	System for creating structured light sheet for Rayleigh scattering	10 pts
Common parts / software			
O	PIV and PLEF trigger	Synchronisation on the combustion pressure first harmonic, acquired during the test	11 pts
Q	Mechanics	Mechanical supports (structures) by ad hoc design for delivering laser beams to the test section	8 pts
Total fulfilment			77 pts

The formula for calculating the scores of parameters A, B and H is detailed as follows:



- $A = 5 \times (\text{mJ/pulse offered} - 5 \text{ mJ/pulse}) / (\text{mJ/pulse best offer} - 5 \text{ mJ/pulse})$
- $B = 5 \times (\text{mJ/pulse offered} - 13 \text{ mJ/pulse}) / (\text{mJ/pulse best offer} - 13 \text{ mJ/pulse})$
- $H = 5 \times (\text{mJ/pulse offered} - 20 \text{ mJ/pulse}) / (\text{mJ/pulse best offer} - 20 \text{ mJ/pulse})$

It is to be noted that the minimum score allocated for parameters A, B and H cannot be negative and shall thus be 0.

Services

The service score shall be allocated according to the table below.

Item	Service	Points
R	Free after-sales service (pick up, damage report, quote for repairs).	2 pts
S	Extension of the warranty beyond the 24 months (to at least 36 months), from the moment of successful delivery to the Sesta Lab.	7 pts
Total services		9 pts

WARNING: *It is to be noted that the scores for parameters R and S are On/Off, therefore the relative score shall be allocated only if the description of the assistance offer proves to be the same or better than according to requirements. If not, a score of 0 points shall be assigned.*

The **total score for the Technical Offer of Lot 1** shall be calculated as follows:

$$OT = A+B+C+D+E+F+G+H+I+L+M+N+O+Q+R+S$$

The technical score resulting from this sum shall not undergo any form of recalculation.

Economic Offer (OE) Lot 1 (maximum 14/100 points)

- Economic offers of a value equal to the tender base price shall be assigned a score of 0.
- The best financial offer (OM, lowest price) shall be assigned a score of 14.
- The intermediary financial offers (OI), between the tender base price (BG) and the best offer (OM), shall be assigned a score based on the formula $OE = 14 \times (BG - OI) / (BG - OM)$.

Overall Total Score Lot 1 = OT+ OE (maximum 100/100 points)

The lot shall be awarded to the bidder who has obtained the highest overall score, adding up the points as shown above.

In the case of a tie in overall scores, the winner shall be the bidder assigned the highest technical score (OT). In the case of a further tie, the winner shall be the bidder who has presented the best financial offer (OE) and, in the final instance, in the case of a perfect tie in both technical score and financial offer, first, the bidders shall be given the chance to publicly improve their offers and, failing that, the contract shall be awarded by drawing lots.

Technical Offer (OT) Lot 2 (maximum 88/100 points)

The score for the technical offer shall be composed of the subheadings Experience, Realization and Assistance.

Experience (P = 0-5 pts)

As an assessment parameter, this shall consider any existing publications in international scientific journals that describe the results of tests using fibre optic diagnostic systems for gas turbine combustors already produced by the bidder.

To summarise, the score for experience shall be calculated based on the following formula:

$$P = 5 \cdot \left(\frac{I_f}{I_{f,max}} \right)$$

Where:

I_f is the average impact factor of the journals in which the articles appeared on the previous optical probes for combustion systems produced by the bidder;

$I_{f,max}$ is the maximum I_f obtained by the individual bidder.



In the case in which no publication is presented, $P=0$.

Realization (R = 0.79 pts)

Under Realization, the offer shall be assessed as follows.

1. Willingness of bidder (YES/NO) to provide the product certification following the PED 2014/68/EU standard. Score $R_1=5$.
2. Willingness of the bidder (YES/NO) to integrate the supply with the optical materials of the “External Measurement Chain” (see Technical Specifications Lot #2, Par. 2, Point 7). Score $R_2=10$.
3. Willingness of the bidder (YES/NO) to perform preliminary numerical simulations to quantify focusing capacity and spectral response characteristics. Score $R_3=R_{3,1}+R_{3,2}=10+7=17$. Where $R_{3,1}$ relates to the simulation of the optical behaviour of the “Assembled Ensemble”+ “Fiber Splitter” or “Beam Splitter” system, whilst $R_{3,2}$ relates to the simulation of the “External Measurement Chain” (see Technical Specifications Lot #2, Par. 2, Point 6).
4. Willingness of the bidder (YES/NO) to characterize the optical measurement chain. Score $R_4=R_{4,1}+R_{4,2}=15+7=22$. Where $R_{4,1}$ relates to the optical characterization of the “Assembled Ensemble”+ “Fiber Splitter” or “Beam Splitter” system, whilst $R_{4,2}$ relates to the characterization of the “External Measurement Chain” (see Technical Specifications Lot #2, Par. 2, Point 6).
5. Capacity of the bidder (YES/NO) to perform thermo-structural analysis of the product. Score $R_5=12$.
6. Bidder’s capacity (YES/NO) to create “sapphire waveguides” within the oil gun (Execution 1) or within the body of the aero-derivative burner (Execution 2), in the form of a single fibre optic, guaranteeing correct focusing (of the sapphire micro-optic on the end of the fibre). Score $R_6=13$.

WARNING: It is to be noted that the scores for parameters from R_3 to R_6 are On/Off, therefore the relative score shall be allocated only if the documents and/or descriptions requested as evidence are found to be adequate upon verification of the statements of capacity and/or willingness. If not, a score of 0 points shall be assigned.

Total fulfilment: $R = R_1 + R_2 + R_3 + R_4 + R_5 + R_6$

Assistance (A=4 pts)

The after-sales service offer shall be evaluated as follows: If, in the event of failure of the “Assembled Ensemble” for any reason, pick up, diagnosis and the quote for repairs are carried out free of charge, the assigned score shall be 2 points (A_1). A further 2 points shall be allocated if a maximum intervention time of 72 hours, including pick-up at Sesta Lab, is guaranteed (A_2).

WARNING: It is to be noted that the scores for parameters A_1 and A_2 are On/Off, therefore the relative score shall be allocated only if the description of the assistance offer proves to be the same or better than according to requirements. If not, a score of 0 points shall be assigned.

Total assistance: $A = A_1 + A_2$

The **total score for the Technical Offer of Lot 2** shall be calculated as follows:

$OT = P + R + A$

The technical score resulting from this sum shall not undergo any form of recalculation.

WARNING: It is to be noted that the total score for the technical offer must not be less than 35, under penalty of exclusion.

Financial Offer (OE) Lot 2 (maximum 12/100 points)

- Economic offers of a value equal to the tender base price shall be assigned a score of 0.
- The best financial offer (O_M , lowest price) shall be assigned a score of 12.



- The intermediary financial offers (O_I), between the tender base price (B_G) and the best offer (O_M), shall be assigned a score based on the formula $OE = 12 \cdot \left(\frac{B_G - O_I}{B_G - O_M} \right)$

Overall Total Score Lot 2 = OT+ OE (maximum 100/100 points)

The lot shall be awarded to the bidder who has obtained the highest overall score, adding up the points as shown above.

In the case of a tie in overall scores, the winner shall be the bidder assigned the highest technical score (OT). In the case of a further tie, the winner shall be the bidder who has presented the best financial offer (OE) and, in the final instance, in the case of a perfect tie in both technical score and financial offer, first, the bidders shall be given the chance to publicly improve their offers and, failing that, the contract shall be awarded by drawing lots.

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23. AWARDING PROCEDURE

The first public session shall be held **on 14/11/2017 at 10 am at the Sesta Lab headquarters of Co.Svi.G. (S.P. 35 Km 2.7, Radicondoli SI [Sesta Lab Map](#))**. **At the public session, the envelope “A - Administrative documents” shall be opened, followed by the verification and evaluation of the documents contained.** Participation is granted to the legal representatives of the interested companies or persons holding a special mandate awarded by the aforementioned legal representatives. The tender operations may be updated at another time or in the days that follow. Subsequent public sessions shall be held at the headquarters, at a time and date to be communicated to the bidders *via certified email (PEC) to the email address indicated by the bidder* at least 2 (two) days before the set date.

24. VERIFICATION OF ADMINISTRATIVE DOCUMENTS

Based on the documents contained in envelope “A - Administrative documents”, the tender board proceeds as follows:

- checks that the documents and statements are correct and complete and, if they are not, excludes the bidders in question from the tender, with the exception of that provided for by Art. 83, Par. 9 of Legislative Decree 50/2016 and subsequent additions and amendments;
- Checks that the consortium members on behalf of which the consortia referred to in Art. 45, Par. 2, letters b) and c) of Legislative Decree 50/2016 and subsequent additions and amendments (consortia of cooperatives and craft companies and permanent consortia) are bidding have not presented an offer in any other form and, if they have, excludes the consortium and consortium member involved;
- checks that none of the bidders participates as part of more than one temporary grouping, EEIG, aggregation of network enterprises or ordinary consortium, or even in individual form, should they have also participated in the same tender as part of a grouping, aggregation or ordinary consortium of bidders and, if this should be the case, excludes them from the tender;
- Opens and checks in a formal manner the content of envelope “B - Technical offer”.

25. EVALUATION OF THE CONTENT OF THE TECHNICAL OFFER

The tender board, in subsequent dedicated sessions, shall determine the score of the technical offer, creating a bidder rankings based on the formulas and parameters referred to under Art. 22.

26. OPENING THE FINANCIAL OFFER

In a subsequent public session, the date and time of which shall be communicated to the bidders



participating in the tender *via certified email (PEC) to the email address indicated by the bidder*, at least 2 (two) days before the set date, the tender board shall open envelope “ C - Financial offer” and allocate the relative scores according to the criteria outlined under Art. 22 above.

The tender board shall then calculate the overall score assigned to the bidders and, finally, draw up the final rankings.

Pursuant to Art. 95 of Legislative Decree 50/2016 and subsequent additions and amendments, should the tender board identify an irregular offer, according to the limits envisaged by said article, it shall report such an event to the Procedure Manager.

27. OFFER IRREGULARITIES

The verification of offer irregularities shall be undertaken pursuant to Art. 97, Par. 3 of Legislative Decree 50/2016 and subsequent additions and amendments

It is to be noted that a threshold of irregularity shall be determined only in the presence of at least five eligible offers. Determination of an irregularity threshold shall not be determined otherwise, pursuant to the aforementioned Art. 97, Par. 3-i.

28. DEFINITION OF DISPUTES

All disputes arising from this procedure are referred to the jurisdiction of the judicial authority of the Court of Siena and to the Regional Administrative Tribunal for Tuscany, with arbitral jurisdiction excluded.

29. PERSONAL DATA PROCESSING

In compliance with that provided for by “Legislative Decree 50/2016 and subsequent additions and amendments on the subject of personal data protection”, as referred to under Legislative Decree 196/2003, Articles 13 and 22, Co.Svi.G. provides the following information with regard to the processing of personal data and sensitive and/or judicial information:

- the processing of data relative to individuals who have submitted statements during participation of the tender shall be governed by the principles of fairness, lawfulness and transparency, in full respect of privacy and rights;
- the data provided by these individuals shall be processed for the purposes of significant public interest (in relation to the drafting of the tender contract) and, in particular, data of a judicial nature, acquired as part of the verification of self-declarations, shall be processed pursuant to Authorisation no. 7/2004 of the Guarantor for the protection of personal data as described under Art. 21 of Legislative Decree 196/2003;
- processing shall be undertaken using paper, digital and online methods;
- data shall be forwarded to bodies of legal or regulatory authority only for purposes relating to the contract awarding procedure.
- The data controller is Co.Svi.G.
- The Data Processing Manager is Sergio Chiacchella;
- Rights with regard to the data controller may be exercised at any time, pursuant to Art. 7 of Legislative Decree 196/2003.

30. OTHER INFORMATION

You are informed that, pursuant to Art. 32, Par. 14 of Legislative Decree 50/2016 and subsequent additions and amendments, the contract shall be drafted in electronic format. Therefore, the successful bidder must be in possession of a digital signature with valid certificate.

Self-certifications, certifications, documents and the offer (essentially all the documents required to



participate in the tender) must be drafted in Italian or accompanied by a sworn Italian translation. Information concerning the outcome of the tender (number of participating companies, discounts, successful bidder, etc.) shall be available on the website [Bandi di gara \(Calls for tender\)](#) within five days of the tender session.

You are informed that, pursuant to Art. 1, Par. 52 of Law no. 190/2012 (as amended by Legislative Decree no. 90/2014), Co.Svi.G. is obliged to acquire the antimafia disclaimer information and statement, for contracts of any value, by means of consulting the so-called White List, in the following activity sectors (Art. 1, Par. 53):

- transport of landfill material on behalf of third parties;
- transport, including cross-border, and disposal of waste on behalf of third parties;
- extraction, supply and transport of earth and inert materials;
- packaging, supply and transport of concrete and bitumen;
- hire of machinery without an operator;
- supply of cast iron;
- hire with an operator/driver;
- road haulage on behalf of third parties;
- building site security.

Therefore, pursuant to these provisions, as interpreted by ANAC with Official Statement no. 1 of 21 January 2015, companies that operate in these sectors (and thus also for the purposes of authorisation to subcontract) are obliged to register with the dedicated list held by the prefecture of the province in which the company is registered.

31. OFFER VALIDITY

The bidders shall be released from the offer after **180 (one hundred and eighty) days** from the deadline for its presentation if, for reasons attributable to Co.Svi.G., no contract has yet been awarded. Co.Svi.G. May ask the bidders to defer the aforementioned deadline.

32. FINAL AWARD DECISION AND SIGNING THE CONTRACT

The final awarding of the contract is subject to the positive outcome of verification of the declarations made as part of the offer presentation on the non-existence of cause for **exclusion**, as referred to under Art. 80 of Legislative Decree no. 50/2016 and subsequent additions and amendments, and on the possession of qualification requirements.

In the event of proven irregularity of the successful bidder, he shall be excluded and the rankings will be reformulated, with the consequent selection of a new provisional contractor, without prejudice to the application of additional penalties under existing legislation. The final decision is formalised with the due directors' provision.

The awarding authority may decide not to award the contract to the bidder who has presented the most economically advantageous offer, if it has ascertained that the offer does not satisfy the obligations under Art. 30, Par. 3 of Legislative Decree 50/2016 and subsequent additions and amendments

The contract shall not, in any case, be signed until at least 35 days after notification of the the final decision order is delivered to the other stakeholders, with the exception of that provided for by Art. 32, Par. 10, 11, 12, 13 of Legislative Decree no. 50/2016 and subsequent additions and amendments.

The successful bidder is responsible for all contract expenses. These expenses are measured, by way of indication only, in revenue stamps of € 16.00 every 4 sides.

The contract must be signed within 60 days of the final decision coming into effect. Contract



execution may begin even under legal reservations subject to the drafting of a special order of advance delivery.

Before signing the contract, the contractor must:

- refund the costs of the compulsory publication of the tender notifications and calls for tender incurred by Co.Svi.G., pursuant to Decree of the Ministry of Infrastructure and Transport of 02/12/2016, within 60 days of the final award decision;
- put together a suitable deposit for the contract expenses (revenue stamps, etc.);
- provide the final security deposit as outlined under Art. 20 of these specifications;
- in the case of temporary groupings of enterprises, present the constitutional document;
- in the case of subcontracting, present the documents of authorisation from Co.Svi.G. according to the methods outlined under Art. 105 of Legislative Decree 50/2016 and subsequent additions and amendments

33. ADDITIONAL PROVISIONS

The contract shall be awarded even in the presence of a single valid offer, as long as it is deemed congruous and favourable pursuant to Art. 97 of Legislative Decree 50/2016 and subsequent additions and amendments.

The awarding authority has the right not to award the contract, in the event that none of the offers proves favourable or eligible in relation to the subject of the contract or, if awarded, the right not to sign the tender agreement, pursuant to Art. 95, Par. 12 of Legislative Decree 50/2016 and subsequent additions and amendments.

Co.Svi.G. reserves the right, in any case, to cancel the tender procedure for reasons of lack of funds or for unexpected reasons and/or hindrances or due to changes in de facto situation or a new evaluation of the original interest, without this giving rise to any rights of the bidder in terms of either the final contract award decision or the expenses incurred by participating in the tender or compensation of any kind.

34. CASH FLOW TRACEABILITY

In order to ensure the traceability of cash flows linked to the tender in question, without prejudice to that outlined under Art. 3, Par. 5 of Law no. 136 of 13/08/2010, the contractor assumes the obligation to use one or more dedicated bank or postal accounts held with banks or with *Società Poste Italiane S.P.A.*, even used in a non-exclusive manner. All transactions must be recorded in dedicated current accounts and, with the exception of that provided for by Art. 3, Par. 3 of the aforementioned Law no. 136 of 13/09/2010, must be made exclusively by means of bank or post office transfer.

Any failure to fulfil the above shall constitute cause for termination of the contract, pursuant to Art. 3, Par. 8 of the aforementioned Law no. 136 of 13/08/2010, with the consequent cashing and forfeiture of the guarantee policy presented as final security deposit and without prejudice to the right to demand compensation for any further damages.

The Administration also reserves the right to perform all the necessary checks to ensure that agreements signed with subcontractors in the supply chain of any interested companies contain a contract clause, under penalty of being declared null and void, with which each subcontractor assumes the cash flow traceability obligations under Law 136/2010.

35. TENDER ADVERTISING

- Client profile <http://www.distrettoenergierrinnovabili.it/der/s/cosvig/bandi-cosvig/bandi-di-gara;>
- GUCE (OJEU);



- GURI (OJ of the Italian Republic) following the OJEU;
- BURT (Official Bulletin of the Region of Tuscany) pursuant to Art. 5 of Regional Law 23/2007 and of Art. 2 of the Presidential Decree of the Regional Council 30/R of 27.05.2008;
- Website of the Ministry of Infrastructure and website of the ANAC Observatory;
- SITAT (Online Tender Information System of Tuscany) no later than two working days after publication in the GURI, pursuant to Art. 10 of Regional Law 38/2007;
- From the original in 2 national daily newspapers and 2 local daily newspapers in the area in which the services are to be performed, after sending the advert to the GUCE.

Radicondoli 27/09/2017

Sole Procedure Manager
Giulio Grassi