

## **Request for Proposals (RFP)**

### **The provision of Technical Advisory and Modelling Services to CSIR in the area of Aeronautics**

**RFP No. 3240/23/10/2018**

Date of Issue	9 October 2018	
Closing Date	23 October 2018	
Place	Tender box, CSIR Main Reception, Gate 3 (North Gate)	
Enquiries	Strategic Procurement Unit	E-mail: <a href="mailto:tender@csir.co.za">tender@csir.co.za</a>
CSIR business hours	08h00 – 16h30	
Category	Professional services	

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## **SECTION A – TECHNICAL INFORMATION**

### **1 INTRODUCTION**

The Council for Scientific and Industrial Research (CSIR) is one of the leading scientific research and technology development organisations in Africa. In partnership with national and international research and technology institutions, CSIR undertakes directed and multidisciplinary research and technology innovation that contributes to the improvement of the quality of life of South Africans. The CSIR's main site is in Pretoria while it is represented in other provinces of South Africa through regional offices.

### **2 BACKGROUND**

The Aeronautics Systems Competency of the CSIR, which houses the Aeronautical Defence and Evaluation Research Institute (ADERI) function, supports the core defence capability of the SANDF by developing, maintaining and applying a ready aeronautical technology base in a broad spectrum of the strategic domains which are key in providing the SANDF with a competitive and strategic advantage. The SANDF requires research and technological support for the acquisition and operation of Aeronautics Systems and Air Weapons.

Support is provided to the DOD, especially the SAAF, through the development and application of technology in a number of domains including:

1. Simulation Based Acquisition and Operational Support
2. Integration of Stores and Weapons on Aircraft

### **3 INVITATION FOR PROPOSAL**

Proposals are hereby invited for the supply of technical advisory and modelling services to the CSIR's Aeronautics Systems Competency, Defence Peace Safety and Security Unit.

### **4 PROPOSAL SPECIFICATION**

All proposals are to be submitted in a format specified in this enquiry. However, tenderers are welcome to submit additional / alternative proposals over and above the originally specified format.

#### **Task 1: Simulation Based Acquisition and Operational Support for Gripen.**

##### *1.1 Task Outcomes and Objectives*

This three year task aims to develop a systems modelling capability for South African Air Force Mission Simulations for (i) Beyond-Visual-Range (BVR) Missile Scenarios with Gripen and (ii) Stand-Off Weapon (SOW) Scenarios with Gripen. This systems modelling capability will be used to generate simulations to advise acquisition, modelling of tactical scenarios, support the development of Gripen doctrine and tactics and understanding threats. The simulations aim to

provide insight, knowledge and training with respect to scenarios to enable Air Force mission success. The outcome would include the development of an advisory and modelling capability to support South African Air Force operations and acquisition of complex systems, development of concepts of operation as well as assistance with operator training.

### *1.2 Tasks Specification and Expected Outputs*

The service provider will be required to:

- a) Identify relevant stakeholders appropriate to BVR and SOW specific missions (Output: Document identifying names of stakeholders as well as rationale used to identify these stakeholders)
- b) Support the CSIR to identify and achieve agreement on requirements for BVR and SOW missions, including relevant concepts of operations, scenarios as well as other relevant life cycle operations with the appropriate stakeholders (Output: Inputs to the CSIR on mission requirements including concepts of operations, scenarios and other relevant life cycle operations in order for the CSIR to compile final User Requirements document.)
- c) Analyse stakeholder requirements to verify their completeness (Output: Documented analysis of requirements breakdown indicating completeness of requirements, outcomes, scenarios, missions, constraints, etc.)
- d) Support the CSIR to validate the content and significance of each requirement with the relevant stakeholders to establish rationale for its existence (Output: Inputs to the CSIR requirements validation process)
- e) Through analysis, transform stakeholder requirements into simulation model requirements necessary to develop the required models and scenarios (Output: Document with simulation model requirements).
- f) At this point the CSIR will co-develop a three year plan with the service provider to develop the necessary models and simulations. If the estimated cost cannot be accommodated in the budget, the modelling effort will have to be adjusted accordingly. The CSIR will be required to discuss and get agreement on the trade-offs (scope or fidelity) with the relevant stakeholders (Output: Documented joint project plan with costs, timescales and milestones).
- g) Co-develop models, simulate scenarios and missions with the CSIR Modelling team. The simulation environment of choice will necessarily be a CSIR “in-house” developed system coded in the C++ programming language. The service provider will be granted access to this system for this project. Due to the nature of this modelling task and the uncertainty in the complexity of the task at this stage, the service provider is expected to only quote an hourly rate (the complexity of the scenarios and the modelling challenge will only become evident during steps a - f above). At this stage, it is expected that the modelling effort will be of the order 2000 hours per year.

- h) Support the CSIR to solicit user inputs on the performance and relevance of the models and scenarios (Output: Stakeholder comments on performance of models and scenarios).

The service provider will be required to provide a cost and schedule for items (a) – (f) and (h). Only an hourly rate will be required for task (g). The number of actual hours in task (g) will depend on the scope of the modelling task and budget available. Proceeding to new tasks will be subject to the CSIR accepting outputs of previous tasks.

## 5 FUNCTIONAL EVALUATION CRITERIA

5.1 The evaluation of the functional / technical detail of the proposal will be based on the following criteria:

Task	Evaluation Criteria	Weight	Score	Result
Task 1: Development of a systems modelling capability for SAAF Gripen Air Force Mission Simulations for (i) Beyond-Visual-Range (BVR) Missile Scenarios and (ii) Stand-Off Weapon (SOW) Scenarios	Relevant South African Air Force Air-to-Air and Air-to-Ground Combat Mission experience: <ul style="list-style-type: none"> <li>List of actual involvement in South African Air Force air combat and air to ground training missions, mission planning and training exercises to understand the complexities and challenges of Air Operations=100 %</li> <li>No relevant involvement in air force missions = 0%</li> </ul>	60%	Out of 100	60
	Qualification: <ul style="list-style-type: none"> <li>University science or engineering degree with mathematics/applied mathematics and computer programming included = 100 %</li> <li>No relevant qualification = 0%</li> </ul>	20%	Out of 100	20
	Experience: Number of years of experience in developing mathematical models and performing simulation using c, c++, or related programming languages: <ul style="list-style-type: none"> <li>1 – 4 years: 50%</li> <li>5 years + = 100%</li> </ul>	20%	Out of 100	20
Totals		100%		100

5.2 Proposals with functionality / technical points of less than the pre-determined minimum overall percentage of 65% will be eliminated from further evaluation.

## **6 ELIMINATION CRITERIA**

Proposals will be eliminated under the following conditions:

- Submission after the deadline;
- Proposals submitted at incorrect location;
- Service providers must be in possession of a valid Armscor Facility Security Clearance;
- Only BBBEE Level 1 suppliers will be considered for this work;
- Service providers without the following will not be considered for this work:
  - Qualified Gripen Fighter Weapons/Attack instructor with training experience in the South African Air Force (SAAF) - references will be required.
  - SAAF Gripen Fighter system and sub-system knowledge and experience.
  - SAAF Gripen Flight test and Gripen Operational Test and Evaluation experience.

## **7 NATIONAL TREASURY CENTRAL SUPPLIER DATABASE REGISTRATION**

Before any negotiations will start with the winning bidder it will be required from the winning bidder to:

- be registered on National Treasury's Central Supplier Database (CSD). Registrations can be completed online at: [www.csd.gov.za](http://www.csd.gov.za);
- provide the CSIR of their CSD registration number; and
- provide the CSIR with a certified copy of their B-BBEE certificate. If no certificate can be provided, no points will be scored during the evaluation process. (RSA suppliers only)

## SECTION B – TERMS AND CONDITIONS

### 8 VENUE FOR PROPOSAL SUBMISSION

All proposals must be submitted at:

- **CSIR GATE 03 - Main Reception Area** (in the **Tender box**) at the following address  
Council for Scientific and Industrial Research (CSIR)  
Meiring Naudé Road  
Brummeria  
Pretoria

### 9 TENDER PROGRAMME

The tender program, as currently envisaged, incorporates the following key dates:

- Issue of tender documents: 9 October 2018
- Closing / submission Date: 23 October 2018

### 10 SUBMISSION OF PROPOSALS

10.1 All proposals are to be sealed. No open proposals will be accepted.

10.2 All proposals are to be clearly marked with the RFP number and the name of the tenderer on the outside of the main package. Proposals must consist of two parts, each of which is placed in a separate sealed package clearly marked:

**PART 1:** Technical Proposal: RFP No.: 3240/23/10/2018

**PART 2:** Pricing Proposal, B-BBEE and other Mandatory Documentation:  
RFP No.: 3240/23/10/2018

10.3 Proposals submitted by companies must be signed by a person or persons duly authorised.

10.4 The CSIR will award the contract to qualified tenderer(s)' whose proposal is determined to be the most advantageous to the CSIR, taking into consideration the technical (functional) solution, price and B-BBEE.

### 11 DEADLINE FOR SUBMISSION

Proposals shall be submitted at the address mentioned above no later than the closing date of **23 October 2018** during CSIR's business hours. The CSIR business hours are between 08h00 and 16h30.

Where a proposal is not received by the CSIR by the due date and stipulated place, it will be regarded as a late tender. Late tenders will not be considered.

### 12 AWARDING OF TENDERS

- 12.1 Awarding of tenders will be published on the National Treasury e-tender portal. No regret letters will be sent out.

## 13 EVALUATION PROCESS

### 13.1 Evaluation of proposals

All proposals will be evaluated by an evaluation team for functionality, price and B-BBEE. Based on the results of the evaluation process and upon successful negotiations, the CSIR will approve the awarding of the contract to successful tenderers.

A two-phase evaluation process will be followed.

- The first phase includes evaluation of **elimination** and **functionality criteria**,
- The second phase includes the evaluation of **price** and **B-BBEE** status.

Pricing Proposals will only be considered after functionality phase has been adjudicated and accepted. Only proposals that achieved the specified minimum qualification scores for functionality will be evaluated further using the preference points system.

### 13.2 Preference points system

*The 80/20 preference point system will be used where 80 points will be dedicated to price and 20 points to B-BBEE status.*

## 14 PRICING PROPOSAL

- 14.1 Pricing proposal must be cross-referenced to the sections in the Technical Proposal. Any options offered must be clearly labelled. Separate pricing must be provided for each option offered to ensure that pricing comparisons are clear and unambiguous.
- 14.2 Price needs to be provided in South African Rand (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.
- 14.3 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable.
- 14.4 Only firm prices\* will be accepted during the tender validity period. Non-firm prices\*\* (including prices subject to rates of exchange variations) will not be considered.

*\*Firm price is the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax which, in terms of a law or regulation is binding on the*



*contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;*

*\*\*Non-firm price is all prices other than “firm” prices.*

14.5 Payment will be according to the CSIR Payment Terms and Conditions.

## **15 VALIDITY PERIOD OF PROPOSAL**

Each **proposal** shall be valid for a minimum period of three (3) months calculated from the closing date.

## **16 APPOINTMENT OF SERVICE PROVIDER**

16.1 The contract will be awarded to the tenderer who scores the highest total number of points during the evaluation process, except where the law permits otherwise.

16.2 Appointment as a successful service provider shall be subject to the parties agreeing to mutually acceptable contractual terms and conditions. In the event of the parties failing to reach such agreement CSIR reserves the right to appoint an alternative supplier.

16.3 Awarding of contracts will be announced on the National Treasury website and no regret letters will be sent to unsuccessful bidders.

## **17 ENQUIRIES AND CONTACT WITH THE CSIR**

Any enquiry regarding this RFP shall be submitted in writing to CSIR at tender@csir.co.za with ***“RFP No 3240/23/10/2018 – The provision of technical advisory and modelling services to CSIR in area of Aeronautics”*** as the subject.

Any other contact with CSIR personnel involved in this tender is not permitted during the RFP process other than as required through existing service arrangements or as requested by the CSIR as part of the RFP process.

## **18 MEDIUM OF COMMUNICATION**

All documentation submitted in response to this RFP must be in English.

## **19 COST OF PROPOSAL**

Tenderers are expected to fully acquaint themselves with the conditions, requirements and specifications of this RFP before submitting proposals. Each tenderer assumes all risks for

resource commitment and expenses, direct or indirect, of proposal preparation and participation throughout the RFP process. The CSIR is not responsible directly or indirectly for any costs incurred by tenderers.

## **20 CORRECTNESS OF RESPONSES**

- 20.1 The tenderer must confirm satisfaction regarding the correctness and validity of their proposal and that all prices and rates quoted cover all the work/items specified in the RFP. The prices and rates quoted must cover all obligations under any resulting contract.
- 20.2 The tenderer accepts that any mistakes regarding prices and calculations will be at their own risk.

## **21 VERIFICATION OF DOCUMENTS**

- 21.1 Tenderers should check the numbers of the pages to satisfy themselves that none are missing or duplicated. No liability will be accepted by the CSIR in regard to anything arising from the fact that pages are missing or duplicated.
- 21.2 *One hard copy and one electronic copy (CD or USB memory key)* of each proposal must be submitted. In the event of a contradiction between the submitted copies, the hard copy shall take precedence.
- 21.3 Pricing schedule and B-BBEE credentials should be submitted with the proposal, but as a separate document and no such information should be available in the technical proposal.
- 21.4 If a courier service company is being used for delivery of the proposal document, the RFP description must be endorsed on the delivery note/courier packaging to ensure that documents are delivered to the tender box, by the stipulated due date.

## **22 SUB-CONTRACTING**

- 22.1 A tenderer will not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub-contracting more than **25%** of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for, unless the intended sub-contractor is an exempted micro enterprise that has the capability and ability to execute the sub-contract.
- 22.2 A tenderer awarded a contract may not sub-contract more than **25%** of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an exempted micro enterprise that has the capability and ability to execute the sub-contract.

## **23 ENGAGEMENT OF CONSULTANTS**

The consultants will only be remunerated at the rates:

- 23.1 Determined in the "Guideline for fees", issued by the South African Institute of Chartered Accountants (SAICA); or
- 23.2 Set out in the "Guide on Hourly Fee Rates for Consultants", by the Department of Public Service and Administration (DPSA); or
- 23.3 Prescribed by the body - regulating the profession of the consultant.

## **24 TRAVEL EXPENSES**

- 24.1 All travel expenses for the CSIR's account, be it directly via the CSIR's travel agent or indirectly via re-imbursements, must be in line with the CSIR's travel policy. The following will apply:
  - 24.1.1 Only economy class tickets will be used.
  - 24.1.2 A maximum of R1300 per night for accommodation, dinner, breakfast and parking will be allowed.
  - 24.1.3 No car rentals of more than a Group B will be accommodated.

## **25 ADDITIONAL TERMS AND CONDITIONS**

- 25.1 A tenderer shall not assume that information and/or documents supplied to CSIR, at any time prior to this request, are still available to CSIR, and shall consequently not make any reference to such information document in its response to this request.
- 25.2 Copies of any affiliations, memberships and/or accreditations that support your submission must be included in the tender.
- 25.3 In case of proposal from a joint venture, the following must be submitted together with the proposal:
  - Joint venture Agreement including split of work signed by both parties;
  - The original or certified copy of the B-BBEE certificate of the joint venture;
  - The Tax Clearance Certificate of each joint venture member;
  - Proof of ownership/shareholder certificates/copies; and
  - Company registration certificates.
- 25.4 An omission to disclose material information, a factual inaccuracy, and/or a misrepresentation of fact may result in the disqualification of a tender, or cancellation of any subsequent contract.

25.5 Failure to comply with any of the terms and conditions as set out in this document will invalidate the Proposal.

## **26 CSIR RESERVES THE RIGHT TO**

- 26.1 Extend the closing date;
- 26.2 Verify any information contained in a proposal;
- 26.3 Request documentary proof regarding any tendering issue;
- 26.4 Give preference to locally manufactured goods;
- 26.5 Appoint one or more service providers, separately or jointly (whether or not they submitted a joint proposal);
- 26.6 Award this RFP as a whole or in part;
- 26.7 Cancel or withdraw this RFP as a whole or in part.

## **27 DISCLAIMER**

This RFP is a request for proposals only and not an offer document. Answers to this RFP must not be construed as acceptance of an offer or imply the existence of a contract between the parties. By submission of its proposal, tenderers shall be deemed to have satisfied themselves with and to have accepted all Terms & Conditions of this RFP. The CSIR makes no representation, warranty, assurance, guarantee or endorsements to tenderer concerning the RFP, whether with regard to its accuracy, completeness or otherwise and the CSIR shall have no liability towards the tenderer or any other party in connection therewith.

## DECLARATION BY TENDERER

**Only tenderers who completed the declaration below will be considered for evaluation.**

**RFP No: 3240/23/10/2018**

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / proposal specifications stipulated in RFP No. 3240/23/10/2018 at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the proposal.

I confirm that I am satisfied with regards to the correctness and validity of my proposal; that the price(s) and rate(s) quoted cover all the services specified in the proposal documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this proposal as the principal liable for the due fulfilment of this proposal.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT) .....  
CAPACITY .....  
SIGNATURE .....  
NAME OF FIRM .....  
DATE .....

### WITNESSES

1 .....

2 .....

DATE: .....