



Request for Proposals (RFP)

For The Provision of Joint Development of Electronic Warfare Mission Support Systems (EWMSS) for the South African National Defence Force (SANDF) to the CSIR

RFP No. 3353.1/27/01/2023

Date of Issue	13 January 2023
Compulsory briefing session	N/A
Closing Date	27 January 2023 at 16h30
Place of tender submission	tender@csir.co.za
Enquiries	tender@csir.co.za
CSIR business hours	08h00 – 16h30
Category	Engineering

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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 CSIR (South Africa) has been involved in the development of advanced radar technology since 1939 and Electronic Warfare (EW) technology since 1975. Successful developments include the following:

- Ka-band reference tracking radar
- X-band pulse Doppler radar
- VHF Synthetic Aperture Radar (SAR)
- Dynamic Radar Cross Section (RCS) measurement facility
- Near field Radar Cross Section (RCS) measurement facility
- Electronic Counter-measures (ECM) and radar target simulator
- EW receiver technology

The CSIR has during the past five years received orders for ECM and Radar Target simulator systems and subsystems for end users in several European, African and Asian countries.

The CSIR has successfully developed specialised test and evaluation facilities and simulators for international and local Defence and Evaluation Research Institutes (DERIs). This success can mainly be attributed to CSIR's partnering approach to development and to its in-depth understanding and experience of DERI goals and operations. Long-term co-operation between the supplier and user of the system is essential for achieving optimum results.

Electronic Warfare (EW) is the domain concerned with the use of the electromagnetic spectrum for sensing, protection and communication – using radio, radar, infra-red or lasers. It also covers the denial or disruption of adversaries' ability to use the electromagnetic spectrum. EW can be divided into three major categories:

- Electronic Attack: the ability to disrupt, degrade, destroy or deceive using the electromagnetic spectrum.
- Electronic Protection: the ability to prevent a receiver from being jammed or deceived by the adversaries' use of the electromagnetic spectrum.
- Electronic Support: the ability to sense and monitor the electromagnetic spectrum.

The CSIR has developed a strong track record in mission planning, modelling and simulation based software. The Electronic Warfare Mission Support System (EWMSS) provides support to EW systems pre-mission, in-mission and post-mission. The EWMSS is considered to be a continuation of the work that the CSIR has done on the Radar Jammer Mission Planner, EW Debrief and Analysis Tool (EWDAT) and EW Camp Debrief Tool.

The EWMSS shall cover multiple systems (both CSIR EW systems and third party systems) and missions including but not limited to:

- EW Range Mission(s)
- EW Mission(s)
- Border Safeguarding Mission(s)
- Air-to-Air Combat and Training Mission(s)
- Air-to Surface Combat and Training Mission(s)

The approach followed will involve relevant arms of service of the South African National Defence Force (SANDF) for sign-off on systems and missions that are applicable to them.

The EWMSS is also expected to cover functionality during:

- Pre-Mission Setup and Planning
- In-Mission Decision Support, Control and Situational Awareness
- Post-Mission Debrief and Analysis

The CSIR in collaboration with an industry partner has developed the following to date:

- EWMSS Business Case
- EWMSS User Requirement Statement

- EWMSS System Specification
- EWMSS Concept Design
- EWMSS Detailed Design
- EWMSS Functional Demonstrator
- EWMSS Minimum Viable Product Baseline Master Core
- EWMSS Minimum Viable Product Baseline Server Client

This task will be executed as a joint development between the CSIR and the supplier and primary focus will be to develop interfaces to live, virtual and constructive SANDF systems.

3 INVITATION FOR PROPOSAL

Proposals are hereby invited for the the provision of joint development of electronic warfare mission support systems (EWMSS) to the CSIR.

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.

The required services will require the Joint Development of Electronic Warfare Mission Support Systems (EWMSS) include:

- Development of an interfaces to external mission support systems.
- Development of an interfaces to external command and control systems.
- Development of an interfaces to external GBADS and Radar systems.
- Development of an interfaces to external data links.
- Development of an interfaces to simulators.
- Development of an interfaces to emulators

On this joint development, it is envisioned that the CSIR will provide:

- Stakeholder Engagement
- EW Subject Matter Expertise
- EW Modelling and Simulation
- EW System Engineering
- EW Software Development

The service provider will be required to provide:

- Stakeholder Engagement with Military Personnel
- Requirement Analysis
- Operational Military Mission Expertise
- EW Software Development
- Flight Safety and Mission Critical Application Expertise

The proposal will be evaluated based on technical capability and cost provided by the service provider should include:

- Track record of design and development of mission support systems.
- Track record of working with CSIR, Armscor and SANDF.
- CVs of the personnel that will be providing the services.
- Relevant qualification and experience information.
- Similar projects completed by the company.

The service provider will be required to provide cost in terms of hourly rates for financial year 2022-2023 for:

- Operational Military Mission Expert
- Senior Software Engineer
- Software Engineer

The number of actual hours the tasks will depend on the scope and budget available and will be subject to the CSIR receiving work authorizations by Armscor. 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 : Joint Development of Electronic Warfare Mission Support Systems (EWMSS).	Military Mission Expertise: Relevant South African Military Air-to-Air and Air-to-Ground Combat or Training Missions involving Radar and Electronic Warfare Sensors experience: <ul style="list-style-type: none"> List of actual involvement in South African Military air combat and air to ground training missions, mission planning and training exercises involving Radar and Electronic Warfare Sensors to understand the complexities and challenges of Military Operations with cumulative experience of over 30 years = 100 List of actual involvement in South African Military air combat and air to ground training missions, mission planning and training exercises involving Radar and Electronic Warfare Sensors to understand the complexities and challenges of Military Operations with cumulative experience of over 15 years = 50 No relevant involvement in air force missions = 0 	50%	Out of 100	
	Qualification: <ul style="list-style-type: none"> Personnel with fourth/fifth generation fighter pilot experience and personnel with university engineering degree and experience in EW software development with cumulative experience of over 50 years = 100 Personnel with fourth/fifth generation fighter pilot experience and personnel with university engineering degree and experience in EW software development with cumulative experience of over 20 years = 50 No relevant qualification = 0 	20%	Out of 100	
	Experience: Number of years of experience in <ul style="list-style-type: none"> Development and/or deployment of Radar and Electronic Warfare Mission systems, Flight Safety and Mission Critical Applications with cumulative experience Under 1 year = 0 1 – 4 years = 50 5 years + = 100 	30%	Out of 100	
	Totals	100%		

- 5.2 Proposals with functionality / technical points of less than the pre-determined minimum overall percentage of 50% and less than 70% on any of the individual criteria 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;
- Service providers with BBEE Level 1 will be considered for this work;
- Service providers without the following will not be considered for this work:
Military and Training experience in the SANDF with systems involving Radar and Electronic Warfare - references will be required.
- Suppliers listed on National Treasury List of restricted suppliers.
- Suppliers listed on National Treasury List of defaulters.
- Non submission of completed declaration by tenderer, SBD 1, and SBD 4 forms

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;
- provide the CSIR of their CSD registration number; and
- provide the CSIR with a certified copy of their B-BBEE certificate (SANAS approved or on DTI BBEE template). 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: tender@csir.co.za

9 TENDER PROGRAMME

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

- Issue of tender documents: 13/01/2023
- Last date of queries 24/01/2023
- Closing / submission Date: 27/01/2023

10 SUBMISSION OF PROPOSALS

10.1 All proposals are to be clearly marked with the RFP number and the name of the tenderer .

Proposals must consist of two parts, clearly marked:

PART 1: Technical Proposal: RFP No.: 3553.1/27/01/2023

PART 2: Pricing Proposal, B-BBEE and other Mandatory Documentation:

RFP No.: 3553.1/27/01/2023

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

10.3 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 **27 January 2023** 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 3553.1/27/01/2023 - The provision of joint development of electronic warfare mission support systems (EWMSS)”*** 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 Electronic copy of each proposal must be submitted.
- 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.

SUB-CONTRACTING

- 21.4 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.
- 21.5 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.

22 ENGAGEMENT OF CONSULTANTS

The consultants will only be remunerated at the rates:

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

23 TRAVEL EXPENSES

- 23.1 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:
 - 23.1.1 Only economy class tickets will be used.
 - 23.1.2 A maximum of R1400 per night for accommodation, dinner, breakfast and parking will be allowed.
 - 23.1.3 No car rentals of more than a Group B will be accommodated.

24 ADDITIONAL TERMS AND CONDITIONS

- 24.1 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.
- 24.2 Copies of any affiliations, memberships and/or accreditations that support your submission must be included in the tender.
- 24.3 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.

24.4 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.

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

25 CSIR RESERVES THE RIGHT TO

25.1 Extend the closing date;

25.2 Verify any information contained in a proposal;

25.3 Request documentary proof regarding any tendering issue;

25.4 Give preference to locally manufactured goods;

25.5 Appoint one or more service providers, separately or jointly (whether or not they submitted a joint proposal);

25.6 Award this RFP as a whole or in part;

25.7 Cancel or withdraw this RFP as a whole or in part.

26 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: 3553.1/27/01/2023

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.3553.1/27/01/2023 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: