

## Request for Information (RFI)

### Track and Trace Solution

**RFI No. 7033/24/10/2022**

Date of Issue	10 October 2022	
Closing Date	24 October 2022	
Place	<b>Online only submission at <a href="mailto:tender@csir.co.za">tender@csir.co.za</a></b> If the size of the documents exceeds 25MB, send multiple emails. Use the RFI number and description as the subject on the email.	
Enquiries	Strategic Procurement Unit	E-mail: <a href="mailto:tender@csir.co.za">tender@csir.co.za</a>
CSIR business hours	08h00 – 16h30	
Category	Engineering	

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## Glossary

Abbreviation	Term	Description
CSIR	Council for Scientific and Industrial Research	A statutory body established in terms of Scientific Research Council Act 46 of 1988, as amended
DSI	Department of Science & Innovation	

## List of Acronyms

Acronym	Site Name
CSIR	Council for Scientific and Industrial Research
PDF	Portable Document Format
POPI	Protection of Personal Information
NOC	National Operations Centre
RFI	Request for Information
SABS	South African Bureau of Standards
TBD	To be determined
DOCX	Document format used for open Microsoft Word documents
XLSX	Document format used for open Microsoft Excel spreadsheets
MB	Megabyte

## SECTION A – TECHNICAL INFORMATION

### 1 INTRODUCTION

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

**Problem Statement:** To effectively manage and control firearms, the ability to track and trace is essential. A solution that will enable tracing of firearms from the time that they are dislodged from storage until they are lodged back is required. The solution needs to be able to track the firearms onsite the facilities and offsite while on operational locations. The location of the firearms and the person carrying the firearms will need to be sent to specific centres where the firearm was dislodged.

The request for information details the background and main requirements to allow prospective suppliers to provide CSIR with a brief on their respective products.

### 2 BACKGROUND

The CSIR is currently investigating the design and specification of a system that can address the tracking, tracing and reporting requirements as indicated below. The system will be implemented at multiple facilities across the country.

### 3 REQUEST FOR INFORMATION

The purpose of this RFI is to gather relevant information from industry to enable the CSIR client to:

- a. Determine what solutions are available in Industry to address the Problem Statement.
- b. Adopt technologies available in South Africa.
- c. Conduct technology evaluation and testing.
- d. Identify prospective bidders who have the capability to supply a firearm tracking and tracing solution, and
- e. Generate the specification that can be used to acquire such a system in a subsequent competitive bidding process.

Respondents must take note that a framework of detailed information on what is included or excluded from the scope of this RFI is not provided. The reason for this is to give respondents the opportunity to suggest approaches and technologies and to define their own tracking and tracing solution.

Respondents must provide explicit technical specification and network topology detail against the functional requirements defined. Additionally, all technical detail must be supported by manufacturer published literature. The evaluation team will only consider responses where manufacturer literature is provided.

The evaluation team will only consider responses from vendors formally recognised by the manufacturer/s.

Vendors who qualify may be requested to demonstrate their respective technology recommendations, including multi-vendor inter-operability and multi-technology inter-connectivity. Equipment suggested by the vendor must be available in South Africa for testing.

Interested parties should provide details of their Tracking, Tracing and biometrics offerings with regards to the following aspects.

1. Technologies proposed.
2. SABS approved technologies.
3. Adherence to Firearms Control Act.
4. Adherence to POPI Act.
5. The Track and Trace solution and technologies proposed must be able to integrate with other systems currently in use.

## 4 RFI Functional and NFR Requirements

The following table indicate the main functional requirements. Respondents must indicate how the proposed technologies and solutions will be able to cater for these requirements.

FR1	The Track and Trace solution must enable for tracking and tracing of firearms and personnel issued with the firearms
FR2	The Track and Trace solution must be able to track firearms onsite the different facilities.
FR3	The Track and Trace solution must have the capability to provide a full audit history for all firearm user activities.
FR4	The Track and Trace solution must provide the capability to track firearms from the time they are dislodged from where they are stored to when they are lodged back.
FR5	A firearm must have the capability to be linked with a (Track and Trace chip) that will correspond with the bar code and the serial number of each firearm.
FR6	The Track and Trace solution must have the capability to operate on different operational locations as defined by the user.
FR7	The Track and Trace solution must have the capability to alert when the firearm leaves its authorized location of operations.
FR8	The Track and Trace solution must have the capability to alert when the firearm is dislodged unauthorized.
FR9	The Track and Trace solution must have the capability to alert when the firearm and the person responsible for it are not in the same location.
FR10	The Track and Trace solution must have the capability to alert when the tasked operational time have elapsed.
FR11	The Track and Trace solution must provide a real-time update of firearm position on an hourly basis
FR12	Alerts must be sent via email and sms.
FR13	Alerts must be sent on a secure platform.
FR14	The Track and Trace solution shall use biometrics to authenticate users
FR15	The biometric system used in the Track and Trace solution shall record or log-all verification attempts, or transactions performed on the firearm
FR16	The biometric system used in the Track and Trace solution shall have its own power source
FR17	The biometric system used in the Track and Trace solution must use small size rechargeable batteries
FR18	The biometric system used in the Track and Trace solution must use the fingerprints
FR19	The biometric system used in the Track and Trace solution shall be able to record unsuccessful verification results if a different person, other than enrolled user is attempting to verify him/herself
FR20	The biometric device used in the Track and Trace solution must be small and portable without causing any discomfort to the user

FR21	The Biometric System used in the Track and Trace solution shall store only biometrics of a person enrolled for the particular firearm
FR22	The biometric system must be able to be integrated with the Trace and Track solution
NFR1	The tracking device must have the capability to be fitted to the firearm without altering the dimensions of the firearm.
NFR2	The tracking device must have the capability to be fitted to the firearm without affecting the proper functioning of the firearm.
NFR3	The tracking device should be tamper-proof.
NFR4	The tracking device must be SABS approved.
NFR5	The Track and Trace solution must adhere to the Firearms Control Act.



## SECTION B – TERMS AND CONDITIONS

### 5 VENUE FOR SUBMISSIONS

All submissions must be submitted electronically to: [tender@csir.co.za](mailto:tender@csir.co.za) .Use the RFI number 7033/24/10/2022 and description of the RFI as the subject on your email.

### 6 RFI PROGRAMME

The RFI programme, as currently envisaged, incorporates the following key dates:

Table 2: RFI Programme

• Issue of RFI documents:	10 October 2022
• Closing / submission Date:	24 October 2022

### 7 SUBMISSION OF RFI RESPONSE

Respondents are to submit at least the following (3) documents as part of their response:

1. Detailed technical description of the capabilities of the respondents response to be submitted in DOCX or PDF format
2. Pricing plan breakdown indicating the elements that will be once-off payments and the elements that will require renewable licenses.
3. Completed Technical Checklist indication how/if the functional requirements will be met by the proposed system.
4. List of client references that utilises the proposed solution.

Additional supporting documentation may be submitted as needed.

### 8 DEADLINE FOR SUBMISSION

RFI submissions shall be submitted to [tender@csir.co.za](mailto:tender@csir.co.za) no later than the closing date of **24 October 2022** during the CSIR's business hours. The CSIR business hours are between 08h00 and 16h30.

## **9 REVIEW PROCESS**

### **9.1 Review of RFI submissions**

All submissions will be reviewed by a review team.

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

Any enquiry regarding this RFI shall be submitted in writing to CSIR at [tender@csir.co.za](mailto:tender@csir.co.za) with **RFI No 7033/24/10/2022** as the subject.

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

## **11 MEDIUM OF COMMUNICATION**

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

## **12 COST OF SUBMISSION**

Respondents are expected to fully acquaint themselves with the conditions, requirements, and specifications of this RFI before submitting proposals. Each respondent assumes all risks for resource commitment and expenses, direct or indirect, of their submission preparation and participation throughout the RFI process. **The CSIR is not responsible directly or indirectly for any costs incurred by respondents.**

## **13 CORRECTNESS OF RESPONSES**

- 13.1** The respondents must confirm satisfaction regarding the correctness and validity of their submission and that all prices and rates quoted cover all the work/items specified in the RFI.
- 13.2** The respondents accepts that any mistakes regarding the solution and budgetary pricing and calculations will be at their own risk.

## **14 VERIFICATION OF DOCUMENTS**

- 14.1** Respondents 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.

## **15 ADDITIONAL TERMS AND CONDITIONS**

- 15.1** A respondent 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.
- 15.2** Copies of any affiliations, memberships and/or accreditations that support your submission can be included at the respondent's discretion.

## **16 CSIR RESERVES THE RIGHT TO**

- 16.1** Extend the closing date
- 16.2** Verify any information contained in a submission
- 16.3** Engage with specific respondents to clarify the technical specifications/performance of respondents' solution either through electronic communication or through site/facility visits to verify respondents' capabilities, infrastructure, processes, etc.

## **17 DISCLAIMER**

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