

# Expression of Interest

Request For

To Procure the Right to Develop and Commercialise  
DetectORE™

Closing date: 11pm AEDT, 7 December 2017

ISSUE DATE	
CLOSING TIME AND DATE	Expressions of Interest should be lodged electronically via email to the address listed in CSIRO Contact Details (in Section 5), on or before the Closing Time and Date.
LODGEMENT	Expressions of Interest must be lodged in accordance with the requirements in Section 5.
CSIRO CONTACT OFFICER	CSIRO Contact Officer details are provided in Section 5.1.

## Copyright

© Commonwealth Scientific and Industrial Research Organisation 2017. To the extent permitted by law, all rights are reserved and no part of this publication covered by copyright may be reproduced or copied in any form or by any means except with the written permission of CSIRO.

## Important disclaimer

*CSIRO advises that the information contained in this publication comprises general statements based on scientific research. The reader is advised and needs to be aware that such information may be incomplete or unable to be used in any specific situation. No reliance or actions must therefore be made on that information without seeking prior expert professional, scientific and technical advice. To the extent permitted by law, CSIRO (including its employees and consultants) excludes all liability to any person for any consequences, including but not limited to all losses, damages, costs, expenses and any other compensation, arising directly or indirectly from using this publication (in part or in whole) and any information or material contained in it.*

CSIRO is committed to providing web accessible content wherever possible. If you are having difficulties with accessing this document please contact [csiroyenquiries@csiro.au](mailto:csiroyenquiries@csiro.au).

# Table of Contents

Table of Contents .....	iii
-------------------------	-----

<b>1.</b>	<b>About CSIRO and Mineral Resources</b>	<b>1</b>
1.1	CSIRO .....	1
1.2	CSIRO Engagement Objectives .....	1
	Customer first .....	1
	Global Outlook, national benefit .....	1
	Collaboration hub .....	2
	Breakthrough innovation .....	2
	Excellent science .....	2
	Health, Safety and Environment .....	2
	Inclusion, trust and respect .....	2
	Deliver on commitments .....	2
1.3	Mineral Resources .....	2
<b>2.</b>	<b>Definitions and interpretation</b>	<b>4</b>
<b>3.</b>	<b>About this Expression of Interest</b>	<b>5</b>
3.1	Overview .....	5
3.2	Product Background .....	5
3.3	The detectORE™ Product .....	6
3.4	Objectives of this EOI .....	7
3.5	EOI Documents .....	7
<b>4.</b>	<b>Conditions and Acknowledgements</b>	<b>8</b>
4.1	Right Not to Proceed .....	8
4.2	Costs Borne by Respondent .....	8
4.3	No Legal Relationship .....	8
4.4	Information .....	8
4.5	Respondents to Inform Themselves .....	9
4.6	Respondent Acknowledgements .....	9
4.7	Relevant Legislative Provisions .....	9
4.8	CSIRO Rights .....	10

4.9	Disclaimer .....	10
4.10	Conditions for Participation.....	11
4.11	Minimum Content and Format Requirements .....	11
4.12	Unintentional Errors of Form.....	12
4.13	Respondent Acceptance .....	12
<b>5.</b>	<b>Expression of Interest</b>	<b>13</b>
5.1	CSIRO Contact Officer .....	13
5.2	EOI Closing Time and Date.....	13
5.3	Timetable .....	13
5.4	Confidential information .....	14
5.5	Permitted disclosure.....	14
5.6	Complaints .....	14
5.7	Lodging a EOI Response .....	15
5.8	Electronic Lodgement .....	15
5.9	Late Responses .....	15
5.10	Clarifications and Addenda.....	15
5.11	EOI Modification Procedure .....	16
5.12	Assessment Criteria .....	16
5.13	Industry Briefing .....	17
5.14	Notification of EOI outcome .....	17
5.15	Subsequent Process.....	17
	Attachment A: OPPORTUNITY BACKGROUND .....	18
A1.	Business Opportunity.....	18
A2.	Markets.....	18
A3.	Market Segment by Application .....	19
A4.	Geographic distribution of Markets .....	19
A5.	Product Benefits .....	19
A6.	What is the competitive advantage?.....	19
A7.	Current Implementation.....	19
A8.	Intellectual Property .....	20
A9.	Trade Marks .....	20

# 1. About CSIRO and Mineral Resources

CSIRO is an Australian Government corporate entity, with a Board and Chief Executive, constituted and operating under the provisions of the Science and Industry Research Act 1949 (Cth), which sets out our functions and powers, as well as those of our Minister, Board and Chief Executive. The governance, performance and accountability of our operations, including the use and management of public resources are set out in the Public Governance, Performance and Accountability Act 2013 (Cth) (PGPA Act) and related rules. Further information about CSIRO is at [www.csiro.au](http://www.csiro.au).

## 1.1 CSIRO

We operate through three lines of business:

- **Impact science:** Nine National Research Business Units with focus on the biggest challenges facing the nation.
- **National Facilities and Collections:** We manage infrastructure and biological collections for the benefit of research and industry.
- **CSIRO Services:** Commercial, customer-centric products and services for industry, government and the community, including education, publishing, infrastructure technologies, Small and Medium Enterprise engagement and CSIRO Futures.

CSIRO's 2020 strategy reinforces this structure as fundamental to our future. The strategy builds on our previous strategies and particularly grows our role as a national collaborator, connector and trusted advisor, while laying the foundations for an expanded global role and reach.

## 1.2 CSIRO Engagement Objectives

CSIRO seeks to engage with quality Respondents who align with CSIRO objectives.

### Customer first

To create deeper innovation relationships with our customers and prioritise the highest value investments.

### Global Outlook, national benefit

To deliver connectivity to the global science, technology and innovation frontier as well as access new markets for Australian innovation.

### Collaboration hub

To integrate the best solutions for our customers, increase our flexibility and enhance Australia's innovation performance.

### Breakthrough innovation

To increase our capacity to help reinvent existing industries and create new industries for Australia and deliver public good.

### Excellent science

To create breakthrough technology and knowledge and be a trusted advisor for Australia.

### Health, Safety and Environment

To enhance staff safety and wellbeing and to further our aspiration towards zero harm.

### Inclusion, trust and respect

To fully enable and support the innovation capacity of our creative people and teams to take risks and deliver to customers.

### Deliver on commitments

To enhance our agility, financial sustainability and capacity to respond at the speed of business.

## 1.3 Mineral Resources

Mineral Resources is a Business Unit within CSIRO. Working closely with industry partners, the Mineral Resources Business unit aims to deliver innovation to grow Australia's resource base, increase productivity and drive environmental performance.

We partner with companies large and small to provide innovative solutions for mineral resource discovery, processing, productivity and sustainability. We welcome the opportunity to work with you to tailor solutions to your specific needs

### Working together for mineral resource solutions

We are one of the largest minerals research groups in the world, with more than 40 years' experience in delivering innovation and solutions across the mineral resources value chain. Our ability to understand and work through individual and industry challenges has been developed through collaboration with several hundred companies each year. We work with large and small mining, exploration, processing and manufacturing companies in Australia and internationally as well as other industry stakeholders, local, state and national governments, universities and other research centres.

We work with our partners on research that aims to:

- uncover resource potential through technology and expertise in fast and accurate mineral characterisation, resource discovery and exploration
- mine more effectively through innovation in sensors, automation, cutting and drilling technologies and mining systems
- optimise process performance through development of unit processes and systems that maintain or improve output while reducing energy and water use, operating costs and equipment downtime
- foster more sustainable operations through practical tools, knowledge and innovation in the areas of decision-making, environmental management, social responsibility and social licence to operate

Our Advanced Characterisation Facility, based at the Australian Resources and Research Centre in Perth and with nodes in our Melbourne laboratories, houses a diverse array of state-of-the-art equipment used to analyse and characterise materials specific to the minerals and resource sector. We offer industry access to specialised equipment, expertise and customised service.

**Further information about Mineral Resources is at <https://www.csiro.au/en/Research/MRF>**

## 2. Definitions and interpretation

In this Expression of Interest, unless the context otherwise requires, the following terms shall have the following meanings:

Terms	Meanings
Addendum	means a notice issued after the Issue Date and before the Closing Time and Date.
Closing Time and Date	means the final time and date for lodgement of responses as provided by Section 5.2
Contract	means the Contract or Official Order between CSIRO and Supplier.
CSIRO	means the Commonwealth Scientific and Industrial Research Organisation, operating under the <i>Science, Industry and Research Act 1949</i> (Cth).
CSIRO Contact Officer	means the person or persons nominated in Section 5.1 to represent CSIRO during the term of this EOI process.
EOI	means this Expression of Interest.
EOI Conditions	means the EOI conditions set out in these EOI documents.
Information	means any information issued or to be issued by or on behalf of CSIRO in relation to or in connection with the EOI process.
Issue Date	means the date CSIRO publically publishes this EOI, via lodgement on the following website. <a href="https://research.csiro.au/detector/">https://research.csiro.au/detector/</a>
Late Response	means an EOI Response that is not lodged by the Closing Time and Date.
Lodgement Office	means the location specified by CSIRO for submitting a physical EOI Response.
Requirement	means the goods and/or services described in this EOI.
Respondent	means a potential supplier who submits an EOI Response in accordance with the EOI Conditions.
Response	means a written submission in response to this EOI by a Respondent.

## 3. About this Expression of Interest

### 3.1 Overview

CSIRO is issuing this Expression of Interest ("EOI") to elicit proposals from suitably qualified and experienced companies for obtaining the rights to further develop and commercialise the detectORE™ technology, an innovative product that allows for the analysis of low level gold in the field during mineral exploration. The proposals are sought from companies for which the procurement of a commercial opportunity based on the marketing and development of detectORE™ is a natural and profitable extension of their current business operations. CSIRO welcomes proposals that demonstrate a desire to extend the application of detectORE™ beyond just the gold exploration sector.

Specifically, companies who may have an interest in adding to their current suite of field portable measurement devices, contracting companies who collect samples as part of their service to exploration companies, mineral assay labs, and drilling/sampling contractors.

detectORE™ technology improves the process of exploring for gold by providing a simple field based analysis process that can detect low levels (ppb) in samples collected during a field exploration campaign. It provides users an ability to undertake cheap and easy analysis of gold samples in the field outside of the traditional laboratory based workflow thus giving a significant reduction in time to have samples processed and results obtained.

detectORE™ offers an exciting opportunities for productivity improvement (time lost sending samples to the laboratory, less field campaigns and mobilisation). It provides early results that empowers geologist to "chase the lode" and modify sample plans on a daily basis while still in the field. Low level gold analyses cannot be undertaken and is not routinely undertaken in the field at present.

The commercial opportunity includes the rights to further develop and commercialise detectORE™ globally, including the use and commercial exploitation of the intellectual property (IP) and related technical knowhow of the technology upon which detectORE™ has been developed.

### 3.2 Product Background

detectORE™ was developed as a result of gold mineral explorers expressing a strong desire to be able to detect low level gold in exploration samples, in the field using currently available field measuring devices such as portable X-ray fluorescence, which are commonly used through-out the industry globally. It has been long recognised that the ability to analyse elements in the field outside of the traditional laboratory is highly advantageous for a number of reasons, including the ability to plan and then implement field activities 'on the fly' while actually still in the field. While analyses of geochemical data has been possible in the field for a range of elements the same analysis for gold has not been practical or possible at very low levels. For the gold mineral

explorer, the ability to analyse geological samples in the field, such as soils and drill cuttings will lead to the discovery of mineral deposits faster and thus at lower cost. Geochemical data from drilling or soil sampling programs can alter the programs themselves and lead to additional samples being taken and analysed, a technique known as adaptive or interactive sampling.

Interactive or adaptive sampling has been practised by gold prospectors for millennia in order to optimize their exploration time and resources. Physical techniques include panning, loaming, puddling, dry blowing, and more recently, metal detecting which can give semi-quantitative information on the presence or absence of coarse particulate gold or nuggets in a particular area. However, commercial exploration cannot employ these techniques as the gold is too small to isolate by physical methods. Attempts have been made to use chemical assaying in the field but these have involved unwieldy and unviable procedures. detectORE™ is a new process, a consumable chemical system and software application used in combination with a commercially available portable X-Ray fluorescence machine (pXRF) that analyses gold in the field.

### 3.3 The detectORE™ Product

The CSIRO detectORE™ product combines three unique components for gold analysis. It links a consumable, process and software into a system that, when used with a commercially available off-the-shelf portable XRF field instruments, provides in field analysis capability for gold in mineral samples. The product is not restricted for use in the field but may be used in any suitable analysis area such as a portable field lab, garage or small shed, anywhere where samples can be sorted, prepared and analysed. The system is portable enough to be packed into a 4WD and driven to a gold exploration camp where it may analyse drill cuttings or soil samples.

It is envisaged that the consumable will be mass produced and sold as a product to allow independent stand-alone gold analysis by the geologist. The pXRF software will be licensed or sold to the user so that gold analyses may be performed independently and confidentially. CSIRO envisages that this part of the data analysis process is also suitable for setting up as a cloud based service offering to clients with very fast turnaround times.

Currently, the consumable consists of a plastic bottle containing proprietary chemicals and a collector device (CD). A geological sample is weighed into the container, water added and the sample mixed for a period of time, typically a day. During this digestion process, gold is dissolved and preferentially accumulates on the CD. The CD is removed, analysed by the pXRF and raw data output from the pXRF is then processed by the detectORE™ software, which gives an analysis of gold in the sample.

The detectORE™ technology does not analyse total gold in a sample. For this the mineral explorer is required to undertake fire assay or neutron activation analysis in a laboratory. Rather, detectORE™ is able to report operationally-defined extractable gold from the sample that is proportionate to the total gold in the sample. Mineral explorers are less driven by knowledge of total gold in a sample than they are to the determination of geochemical anomalies. That is, it is important for them to know differences between areas where higher gold content is found compared to background areas of lower gold. In this way explorers can discriminate more prospective targets from 'noise' and plan an appropriate follow up investigation.

The detectORE™ product offers a comprehensive solution to the problem of not knowing the gold content of the sample that you have just collected. By exploring smarter, detectORE™ will assist the geologist to discover gold faster.

### 3.4 Objectives of this EOI

CSIRO is pursuing the following objectives through the issue of this EOI:

1. To invite interested parties to submit a proposal to acquire the rights to further develop and commercially exploit the detectORE™ technology including access to the Patent (PCT Application: PCT/AU2017/050676) and know-how underpinning the technology and technical support;
2. To identify from those parties who submit proposals, a suitable company that is able to demonstrate their ability to fully exploit the commercial potential of the detectORE™ technology based on their experience in commercialising similar technologies. We seek:
  - Their knowledge and experience of the addressable market opportunity and the application and deployment of the product or a similar product;
  - Their ability to integrate the activity into their existing business, and further develop and market for detectORE™ and provide ongoing product support.

### 3.5 EOI Documents

This EOI and any attachments set out all of the details concerning CSIRO's requirements in relation to the products/services, conditions of responding, evaluation criteria and all other matters concerning this process.

## 4. Conditions and Acknowledgements

### 4.1 Right Not to Proceed

CSIRO is not bound contractually, or in any other way to the Respondents who respond to this EOI. CSIRO reserves the right not to proceed with this EOI or any part of it, and to suspend or vary the EOI and/or its requirements at any stage.

### 4.2 Costs Borne by Respondent

All costs and expenses incurred by Respondents in any way associated with the development, preparation and submission of the EOI response, including but not limited to attendance at meetings, discussions, presentations and providing any additional material required by CSIRO, will be borne exclusively by the Respondents.

### 4.3 No Legal Relationship

No binding legal relationship will arise out of this EOI.

### 4.4 Information

The statements, opinions, projections, forecasts or other information contained in this EOI may change. Where any such information relates to future matters, no steps have been taken to verify that the information is based upon reasonable grounds, and no representation or warranty, expressed or implied, is made by CSIRO, or any of its officers, employees, advisers or agents that the statements contained in this EOI will be achieved.

This EOI is designed to reflect and summarise the information concerning the Requirements only and is not a comprehensive description of them.

Except as required by law, and only to the extent so required, neither CSIRO, nor its respective agents or advisers will in any way be liable to any person or body for any loss, damage, cost and expense of any nature arising in any way out of or in connection with the statements, opinions, projections, forecasts or other representations, actual or implied, contained in or omitted from this EOI or other information provided to any Respondent or by reason of any reliance thereon by any person or body.

Any time and/or date in this EOI is for the sole convenience of CSIRO. The establishment of a time and/or date in this EOI does not create an obligation on the part of CSIRO to take any action or any right in any Respondent that any action is taken on the date established. CSIRO may change any date or time. CSIRO will notify affected Respondents if it changes the date and/or time but will not be obliged to provide any reasons for its actions.

## 4.5 Respondents to Inform Themselves

Respondents are considered to have:

- Examined this EOI, any documents referenced in this EOI, and any other information made available by CSIRO to Respondents for the purpose of responding;
- Examined all further information which is obtainable by the making of reasonable inquiries relevant to the risks, contingencies, and other circumstances having an effect on their EOI response;
- Obtained their own professional advice in respect of this EOI, any other information provided to Respondents, and the EOI process generally, as appropriate; and
- Satisfied themselves as to the correctness and sufficiency of their EOI response including submitted prices.

## 4.6 Respondent Acknowledgements

Responses are submitted on the basis that Respondents acknowledge:

- They do not rely on any representation, letter, document or arrangement, whether oral or in writing, or other conduct as adding to or amending these conditions other than amendments in accordance with clause 5.10; and
- They do not rely upon any warranty or representation made by or on behalf of CSIRO, except as are expressly provided for in this EOI, but they have relied entirely upon their own inquiries and inspection in respect of the subject of their EOI response.

## 4.7 Relevant Legislative Provisions

CSIRO policy is to not enter into a contract with suppliers who have been named in Parliament as not complying with the *Workplace Gender Equality Act 2012 (Cth)*.

CSIRO expects its suppliers to always act in a safe manner and perform all relevant services in a way that is without risk to the health, safety or welfare of any person and eliminates health and safety risks so far as is practicable.

CSIRO will not enter into a contract with suppliers who are listed as a designated entity by the Minister of Foreign Affairs by notice in the Gazette under s 15 of the *Charter of the United Nations Act 1945 (Cth)* or who intend to engage subcontractors who are listed as a designated entity by the Minister for Foreign Affairs by notice in the Gazette under s 15 of the *Charter of the United Nations Act 1945 (Cth)*. A consolidated list of such persons, entities and associated assets is maintained by the Department of Foreign Affairs and Trade under the *Charter of the United Nations (Dealing with Assets) Regulations 2008* and can be found at:

[http://www.dfat.gov.au/icat/UNSC\\_financial\\_sanctions.html](http://www.dfat.gov.au/icat/UNSC_financial_sanctions.html)

CSIRO will not enter into a contract with Respondents engaging illegal workers. For more information refer to 'A Guide on Work Rights' available at [www.immi.gov.au/employers](http://www.immi.gov.au/employers).

## 4.8 CSIRO Rights

The issue of this EOI does not in any way commit CSIRO to proceed with any aspect of acquisition of the Requirement, whether from any of the Respondents to this EOI or from any other source.

Without limiting any other part of these EOI conditions CSIRO may:

- Amend this EOI at any time in any way including any aspect of the EOI process;
- Choose to negotiate with (if applicable), any Respondent including one whose EOI Response:
  - i is a non-compliant EOI Response, or
  - ii does not have the lowest indicative price of all EOI Responses;
- Not negotiate with (if applicable), any Respondent at any time whose EOI Response complies with this EOI;
- At any time (including in negotiations) disqualify any Respondent from participating in the EOI process or exclude their EOI Response from further consideration;
- Allow any Respondent to change their EOI Response at any time;
- Stop or suspend negotiations with any preferred Respondent;
- Select preferred Respondents or choose not to do so;
- Request all or certain Respondents participate in a further procurement process for the Requirement;
- At any time use non CSIRO personnel in assessing EOI Responses;
- at any time use a probity auditor in connection with this EOI;
- Terminate the EOI process at any time (including in the course of contract negotiations);
- Contract with more than one party for supply of the Requirement;
- Enter into a contract outside the EOI process;
- Negotiate with a Respondent whose EOI Response is for a different requirement than set out in this EOI;
- Undertake or allow any other actions or inaction in relation to this EOI, on such terms as CSIRO deems appropriate;
- Use information gained through the EOI process to feed into any further procurement CSIRO may undertake in connection with the Requirement (or one similar to it), including further development of the Requirement; and
- Allow, or not allow, any Respondent to enter into a contract for the Requirement in the name of a different legal entity from the one that provided an EOI.

## 4.9 Disclaimer

This EOI is not an invitation to treat and is not to be taken to be or relied upon as an offer capable of acceptance by any person or as creating any form of contractual (including a

process contract), quasi contractual, restitutionary or promissory estoppel rights, or rights based on similar legal or equitable grounds.

CSIRO will not be liable to any Respondent on the basis of any promissory estoppel, quantum meruit or other contractual, quasi contractual or restitutionary grounds whatsoever or in negligence as a consequence of any matter relating or incidental to a Respondent's participation in this EOI including instances where:

- A Respondent is not invited to participate in any subsequent process following completion of this EOI;
- CSIRO varies the EOI;
- For reasons of public interest, CSIRO decides to terminate this EOI or not to contract for all or any of the requirements; or
- CSIRO exercises or fails to exercise any of its other rights under or in relation to this EOI.

#### 4.10 Conditions for Participation

Subject to clause 4.12, Unintentional Errors of Form, CSIRO will exclude a Respondent from further consideration and evaluation if CSIRO considers in its absolute discretion that the conditions for participation set out in this clause have not been met by the Respondent. Notwithstanding anything else contained in this EOI, only requirements listed in this clause will be deemed conditions for participation.

- The Respondent exists as a legal entity at the EOI Closing Time and Date; and
- At the time of lodgement of their Response, Respondents must not have been:
  - Precluded from tendering for Australian Government funded work; or
  - Subject to a judicial decision against them relating to employee entitlements (not including decisions under appeal, and have not paid the claim).

#### 4.11 Minimum Content and Format Requirements

Subject to clause 4.12, Unintentional Errors of Form, CSIRO will exclude a Respondent from further consideration if CSIRO considers in its absolute discretion that the Respondent's Response does not meet the minimum content and format requirements listed in this clause. Notwithstanding anything else contained in this EOI, only requirements listed in this clause will be deemed minimum content and format requirements for the purposes of this Tender.

- The Tender must be lodged electronically via Email in accordance with clause 5.7;
- Respondents must complete the EOI Response Form; and
- The Response, including all attachments and supporting material, must be written in English.

## 4.12 Unintentional Errors of Form

If an unintentional error of form in a Respondent's Response is identified prior to short-listing Respondents (if any), CSIRO may in its absolute discretion allow correction of that error by the Respondent by the submission of a correction, variation or additional information.

An unintentional error of form is an error that CSIRO is satisfied in its absolute discretion:

- Represents incomplete information not consistent with the Respondent's intentions and (if relevant) capabilities at the time the submission was lodged
- Does not materially affect the competitiveness of the Respondent's Response.

## 4.13 Respondent Acceptance

By submitting a Response to this EOI, the Respondent accepts the terms and conditions as set out in this EOI.

## 5. Expression of Interest

### 5.1 CSIRO Contact Officer

Respondents should direct any queries arising from this EOI to the CSIRO Contact Officer.

**Interested parties will need to register their details by email with the Contact Officer, before the closure date, if they intend to submit an application after they have downloaded EOI application. Details should include company name and address, a company contact and their details, ACN, and website address (if applicable).**

<b>CSIRO Contact Officer Name</b>	Wayne Robertson
<b>Email</b>	<a href="mailto:wayne.robertson@csiro.au">wayne.robertson@csiro.au</a>

All such queries are to be directed to the CSIRO Contact Officer via email only. Telephone enquiries will not be taken.

### 5.2 EOI Closing Time and Date

The EOI Closing Time and Date for this EOI is: **11pm AEDT, 7 December 2017**

Completed EOI responses must be lodged electronically in pdf format via Email at or before the EOI Closing Time and Date in accordance with the EOI Rules.

### 5.3 Timetable

An indicative timetable for the conduct of this EOI is described below. The timetable may be amended by CSIRO at any time.

<b>Event</b>	<b>Date</b>
Issue of EOI	16 November 2017
Industry Briefing Session (Video Conference)	2pm AEDT 30 November 2017*
EOI Response Closing Time and Date	11pm AEDT 14 December 2017*
Selection and notification of short-listed Respondents	20 December 2017

## 5.4 Confidential information

### CSIRO

Information provided to Respondents by CSIRO in the course of the EOI process (in whatever form) must be used solely for the purpose of preparing and lodging an EOI.

Respondents must not disclose CSIRO Information or otherwise provide any information (in whatever form) in connection with this EOI to any person that is not a party to the Respondent's EOI without CSIRO's prior written approval.

On request at any time Respondents must immediately return to CSIRO all copies of any CSIRO information provided in the course of the EOI process.

### Respondent

If any part of an EOI Response is confidential to the Respondent it must be clearly marked as confidential. Respondents must mark only those parts of their EOI that are actually confidential.

## 5.5 Permitted disclosure

CSIRO may disclose any part of any EOI Response:

- to CSIRO Representatives solely in order to conduct this EOI process;
- to its responsible Minister;
- to any Commonwealth Minister, department, agency or authority for any purpose relating to CSIRO;
- in response to a request by a House or Committee of the Parliament of the Commonwealth of Australia, or
- where that disclosure is authorised or required by law.

## 5.6 Complaints

Any complaints arising out of this EOI process should be directed to the Complaints Officer:

<b>Complaints Officer:</b>	Complaints Officer National Manager, Strategic Procurement
<b>Business Area:</b>	CSIRO Business and Infrastructure Services
<b>Email:</b>	<a href="mailto:procurement@csiro.au">procurement@csiro.au</a>

All such queries are to be directed to the Complaints Officer via email only. Telephone enquiries will not be taken.

## 5.7 Lodging a EOI Response

EOI Responses must be lodged before the Closing Time and Date as outlined at Section 5.2.

EOI Responses must be lodged electronically in pdf format, via Email before the Closing Time and Date and in accordance with the procedures set out in this EOI documentation.

Lodgement email: [commercialisation@csiro.au](mailto:commercialisation@csiro.au)

## 5.8 Electronic Lodgement

EOI Responses will be accepted in PDF format only. The EOI Response file name/s:

- should incorporate the Respondent's company name
- should reflect the various parts of the offer they represent, where the EOI Response comprises multiple files.

EOI Response files should not exceed a combined file size of 10 megabytes per upload.

EOI Responses must be completely self-contained. No hyperlinked or other material may be incorporated by reference.

## 5.9 Late Responses

CSIRO will exclude a Late Response from the EOI process, and will not admit them to evaluation.

The EOI Response is a Late Response if:

- It is not received by CSIRO at the Lodgement Office by the Closing Time and Date, or
- the EOI Response includes electronic files that cannot be read or unencrypted.

However, the EOI Response is not a Late Response where:

- The EOI Response is late due solely to a mishandling by CSIRO as determined by CSIRO.

## 5.10 Clarifications and Addenda

Respondents may seek clarification of the meaning of the content of this EOI from the CSIRO Contact Officer at any time prior to the Closing Time and Date. All enquiries must be in writing submitted to the CSIRO Contact e-mail as identified at Section 5.1.

If requests for clarifications are received after the closing date, CSIRO will, in its sole discretion, determine whether or not to respond to such requests. If CSIRO elects not to respond, it will notify the Respondent asking the question.

In all cases CSIRO reserves the right to forward any clarification of the meaning of the content of this EOI to all Respondents on a non-attributable basis without disclosing the source of the questions.

If a Respondent believes it has found a discrepancy, error, ambiguity, inconsistency or omission in this EOI or any other information given or made available by CSIRO, the Respondent should

#### Statement of Requirement

---

promptly notify the CSIRO Contact Officer setting out the error in sufficient detail so that CSIRO may take any corrective action it considers appropriate.

If a question by a Respondent reveals new information that, in the sole opinion of CSIRO may be material to the outcome of the EOI, or such questioning reveals an error in information previously distributed by CSIRO, the new or corrected information will be distributed to all Respondents in accordance with the EOI Modifications Procedure at Section 5.11.

### 5.11 EOI Modification Procedure

Without limiting any of CSIRO's rights, CSIRO may at any time:

- Amend this EOI in any way including any aspect of the process; or
- terminate this EOI process for any reason.

CSIRO may, in its absolute discretion, issue modifications to this EOI. Such modifications may include variations to the EOI or additional information in relation to the EOI.

If CSIRO elects to issue modifications to the EOI prior to the Closing Time and Date, CSIRO will issue a formal addendum to the EOI. An electronic advice will be issued automatically to all Respondents correctly registered as having downloaded the EOI. Respondents should ensure their contact details are correct for this purpose.

All conditions and rules of this EOI will apply to all addenda unless modified by the addenda. Any such addenda will become part of the EOI.

### 5.12 Assessment Criteria

EOI Responses will be assessed based on the following criteria below. As much detail as possible should be submitted by the Respondent to allow CSIRO to properly assess the suitability of the Respondent's EOI Response:

- Experience and/or capability in developing, manufacturing, marketing and supporting similar technologies in mining or related sectors
- Proposed approach to developing, manufacturing, marketing and supporting the detectORE™ technology in mining and other sectors
- Ability to service users of the detectORE™ technology
- Financial capacity
- Indicative technology transfer strategy
- Indicate preferred IP transfer model
- Indicative offer in Australian dollars

The order in which the evaluation criteria are listed does not indicate their importance relative to each other. CSIRO reserves the right to allocate weightings to the criteria in its evaluation process, at its discretion.

### 5.13 Industry Briefing

An industry briefing will be held via Video Conferencing at the date and time set out in Section 5.3. Attendance at the industry briefing is recommended but not mandatory. Copies of any presentations and responses to questions provided at the briefing will be provided to Respondents following the briefing. Individual briefings will not be provided.

Respondents should indicate if they intend to attend the briefing by providing written details of the name, company and position of each person attending to the CSIRO Contact Officer by close of business on **21<sup>th</sup> November, 2017**.

Questions are requested to be forwarded to the CSIRO Contact Officer at least one day prior to the Industry Briefing by **11pm AEDT on 23<sup>rd</sup> November, 2017**.

Industry briefings are conducted for the purpose of providing background information only. Respondents should note the effect of the disclaimers and limitations of liability set out in this EOI. Respondents should not rely on any statement made at an industry briefing as amending or adding to this EOI unless that amendment or addition is confirmed by the CSIRO in writing.

### 5.14 Notification of EOI outcome

All Respondents that lodge an EOI may be informed in writing of the outcome of their EOI at the conclusion of the EOI process.

### 5.15 Subsequent Process

Following careful consideration, CSIRO will determine the next step. This may include shortlisting submissions from the EOI based on an evaluation of the information supplied in the EOI Responses received.

Shortlisting of proponents and a subsequent procurement process is subject to the requirements of CSIRO. CSIRO may decide to not proceed further.

Where CSIRO elects to proceed, CSIRO will select from the short-listed Respondents suitably qualified and experienced individuals, companies, and organisations for invitation to license.

## Attachment A: OPPORTUNITY BACKGROUND

### A1. Business Opportunity

The commercial opportunity on offer is for a company to acquire the rights to further develop and commercially exploit the detectORE™ technology, identify or create markets for its use in the in the area of in the field gold mineral sample analysis or related areas globally. Initially the opportunity relates to further productisation of the technology to make it truly field portable, piloting of the technology under real workflow conditions and the marketing of a new product (and potential services) to the minerals industry to develop a strong customer user base that will drive sales.

This opportunity provides to the exploration industry:

- An ability to undertake cheap and easy analysis of gold samples in the field outside of the traditional laboratory based workflow
- A significant reduction in time to process samples and get results
- Lower overall sample analysis and mobilisation costs.
- The ability to modify a planned field sampling program during the campaign itself ('real time' adaptive and/or interactive sampling techniques).

The opportunity provides a company with a practical field based gold sample analysis technique that is cheap, detect gold at levels (sub ppm), without having to send samples off to a laboratory, that will accelerate gold mineral exploration.

The commercial opportunity includes the rights to further develop and commercialise detectORE™ globally, including the use and commercial exploitation of the intellectual property (IP) and related technical knowhow of the technology upon which detectORE™ has been developed.

CSIRO welcomes proposals that would extend the development and marketing of detectORE™ to areas beyond the minerals industry should such areas be of interest to the applicant.

### A2. Markets

The markets that should benefit from detectORE™ include the following:

- Exploration companies
- In field service providers of analyses/drilling using pXRF
- Gold mines who require on site analyses
- pXRF or other in the field analysis instrument manufacturers
- Independent geological consultants

### A3. Market Segment by Application

The Technology has been specifically designed for the gold mineral exploration industry. It is particularly suited to remote locations where immediate access to laboratories is an issue. Applications to other sectors of the minerals industry is a possibility.

### A4. Geographic distribution of Markets

The market for detectORE™ is global. It is suited anywhere a company is exploring for gold and in that process is collecting samples in the field to test for low levels of gold.

### A5. Product Benefits

The detectORE™ technology offers significant benefits to investors and geologist:

- Gold analysis in the field
- Results-based decision empowers geologist to “chase the lode”
- Competitively-priced analysis with lab (1 consumable for each gold analysis)
- Accelerates exploration to generate investor-sensitive data quicker
- Specialised software required to interpret data
- Low capital start-up costs

### A6. What is the competitive advantage?

Low level gold analyses cannot be undertaken and is not routinely undertaken in the field at present. Exploration companies currently send samples from the field, to a laboratory to have them assayed. detectORE™ would be competing with companies that would prefer to analyse samples solely within laboratories and would this would include those companies with samples located close to laboratory facilities, and have a priority agreement to reduce wait time. The cost of each detectORE™ analysis is anticipated to be competitive with existing gold assay performed in a laboratory.

### A7. Current Implementation

detectORE™ has not been offered or being operated commercially in any field situation. Currently, samples are brought to the laboratory to be tested and processed by the detectORE™ technology. Marketing of detectORE™ has not been undertaken except for selected conference presentations.

## A8. Intellectual Property

The IP around detectORE™ is owned by CSIRO. There are two types of IP:

1. There is a patent application (PCT/AU2017/050676)
2. Trade secrets and know how

Further details will be disclosed to the prospective licensee under an appropriate confidentiality agreement.

## A9. Trade Marks

No Trade Marks have been registered as of 12 November, 2017.

**EOI Summary Response Form**

<b>Section 1 – General Respondent Information</b>	
a) Name of respondent.	Name
b) Structure (eg. partnership, consortium, limited liability company, trust).	Structure
c) Domicile.	Domicile
d) Turnover (per annum in AUD).	Turnover
e) Number of Employees.	Number of Employees
f) Industry sector.	Sector
h) Briefly describe your organisation's mission and why you are interested in commercialising detectORE™. (maximum 400 words)	

<b>Section 2 – Experience in commercialising similar technologies</b>
a) Describe your experience and/or capability in developing, manufacturing, marketing and supporting similar technologies in mining or related sectors. (maximum 600 words)
b) Briefly describe your proposed approach to developing, manufacturing, marketing and supporting the detectORE™ technology in the mining sectors. (maximum 600 words)
c) Briefly explain your plans to further develop and market the detectORE™ technology in other sectors. (maximum 400 words)
d) Briefly explain your ability to service users of the detectORE™ technology. (maximum 400 words)

<b>Section 3 – Financial capacity</b>
a) Briefly outline your proposed model for financing the further development of the detectORE™. (maximum 300 words)
b) Outline your bid price and bid criteria. (maximum 300 words)

<b>Section 4 – Proposed customers for detectORE™</b>
a) Outline the market sector(s) you intend to target with detectORE™ and explain your proposed access to those customers. (maximum 300 words)

Statement of Requirement

b) Briefly describe how your proposed application of detectORE™ would benefit and add-value to your organisation. Specifically, how will detectORE™ complement your current products and services? (maximum 400 words)



#### CONTACT US

**t** 1300 363 400  
+61 3 9545 2176  
**e** [csiroenquiries@csiro.au](mailto:csiroenquiries@csiro.au)  
**w** [www.csiro.au](http://www.csiro.au)

#### AT CSIRO, WE DO THE EXTRAORDINARY EVERY DAY

We innovate for tomorrow and help improve today – for our customers, all Australians and the world.

Our innovations contribute billions of dollars to the Australian economy every year. As the largest patent holder in the nation, our vast wealth of intellectual property has led to more than 150 spin-off companies.

With more than 5,000 experts and a burning desire to get things done, we are Australia's catalyst for innovation.

CSIRO. WE IMAGINE. WE COLLABORATE.  
WE INNOVATE.

#### FOR FURTHER INFORMATION

##### **CSIRO Mineral Resources**

Dr Mel Lintern  
**t** +61 8 6436 8683  
**e** [mel.lintern@csiro.au](mailto:mel.lintern@csiro.au)  
**w** [www.csiro.au/mineralresources](http://www.csiro.au/mineralresources)

##### **CSIRO Mineral Resources**

Mr Wayne Robertson  
**t** +61 8 6436 8612  
**e** [wayne.robertson@csiro.au](mailto:wayne.robertson@csiro.au)  
**w** [www.csiro.au/mineralresources](http://www.csiro.au/mineralresources)

##### **CSIRO Mineral Resources**

Mr Leong Mar  
**t** +61 2 9490 8204  
**e** [leong.mar@csiro.au](mailto:leong.mar@csiro.au)  
**w** [www.csiro.au/Commercial](http://www.csiro.au/Commercial)