

**Prior Information Notice (PIN)
for
Pre-Market Engagement for Quadruped robotic inspection platforms**

Sellafield are asking the supply chain or other organisations to indicate if they are interested in this opportunity, and if they have the technical capability to meet the requirements detailed below.

Responses to the Lines of Enquiry should be submitted through the Sellafield Ltd Atamis system by Thursday 8th February 2024 @ 12 noon against Atamis reference C17614 using the Message facility.

Supply Chain wishing to do business with Sellafield Ltd and the wider Nuclear Decommissioning Authority and to see other opportunities need to register on:

<https://atamis-2464.my.site.com/s/Welcome>

Introduction

Sellafield have been exploring the quadruped robotic inspection platforms. and are interested in the potential to create an in-house inspection capability for the enterprise.

We believe that quadruped inspection platforms provide an opportunity to realise business benefits and as such we are keen to understand what platforms exist within the international market that could help us with our aim of having an in-house inspection capability and realise all potential benefits

Background

Sellafield have conducted a number of inactive and active demonstrators on the use for quadruped platforms in nuclear decommissioning. As such sufficient evidence and business benefit has been documented to support a further investment activity in this area.

Requirement

Potential technology providers are invited to engage with Sellafield Ltd through this PIN for pre-market engagement and respond to the Lines of Enquiry detailed below to enable the technical team to gain an understanding of the supply chain and the potential benefit realisation of deploying at scale quadruped robotic inspection platforms.

Lines of Enquiry

- 1) Can you please share examples of other similar deployment successes in Nuclear and other similar sectors and the associated business benefits.

- 2) Can you please share examples of payload integration, this can include additional 3rd party payloads, and show examples of this in similar nuclear sectors or other highly regulated industries. The aim being to demonstrate a more capable overall inspection system.
- 3) Can you share and show that the quadruped inspection platform is ready now for scale deployment or indicate what TRL Level your technology is currently at outside of or within a nuclear environment.
- 4) Can you please share and show examples of where customer Operational Experience and deployment LFE has influenced the quadruped design iterations, to ensure a fit for purpose solution is maintained in a complex and hazardous environment.
- 5) Can you please indicate if you are in a position, subject to a potential future competition, to be able to supply 10 – 20 (subject to final decisions) quadruped inspection platforms and associated inspection equipment and commit to a lead time for delivery of same. This lead time should be realistic but of short duration. Supply will be between April 2024 and March 2025.
- 6) Can you please indicate if you are able to supply payload integration and quadruped robotic platform deployment support or have partnerships in place with companies who have experience of this in the nuclear industry or other highly regulated industries (please indicate what those industries are).
- 7) Can you please confirm that you have a manipulator arm capable of dexterous tasks with a minimum carrying capacity of 8kg.
- 8) Can you please confirm that your technology is able to be teleoperated to perform tasks such as carrying and manipulating various forms of waste, carrying equipment and be able to perform autonomous inspections.
- 9) Can you please confirm that your technology is able to have various sensor and inspection payload integration points.
- 10) Can you please confirm that your technology is able to support a payload/payloads of min 15kg on the back of the Quadruped.
- 11) Can you please share your experience of completing inspection and waste manipulation tasks in the nuclear sector or other highly regulated industries (please indicate what those industries are).
- 12) Can you please confirm that your technology has been tested to take a radiological dose rate of minimum 1.5Sv/Hr and total dose of at least 3Sv.

- 13) Can you please confirm that as a technology provider / manufacturer you would be willing to engage with Sellafield Ltd and have a proven record in identifying and making improvements to the Quadraped system through working with organisations where the system is deployed or undergoing trials.
- 14) A decision has not been made at this stage to consider maintenance support but can you confirm that is something your organisation would be able to support should we wish to add to any future procurement.