
Request for Information no PKN/2/004093/26

ORLEN Spółka Akcyjna, with registered seat in Płock, Poland, ul. Chemików 7, 09-411 Płock, Poland, entered into the Register of Entrepreneurs kept by the District Court for Łódź Śródmieście in Łódź, XX Commercial Division of the National Court Register, under KRS number 0000028860, with share capital in the amount of PLN 1.451.177.561,25, fully paid-up, NIP number 7740001454, BDO 000007103, REGON number: 610188201, being an active VAT tax payer - invites to submit a response in:

Subject: Development of the rounds platform with automated inspection processes using an autonomous inspection robot

Date: 22.10.2026

1 Introduction

This document constitutes a Request for Information (RFI) and is not a formal Request for Proposal (RFP) or a contract notice. The purpose of this RFI is solely to obtain information from potential Vendors and to identify available market solutions of this type. This RFI does not constitute a purchasing commitment or an invitation to negotiate within the meaning of Article 72 of the Polish Civil Code. Based on the results of this RFI, ORLEN S.A. may consider further formal purchasing or tender activities at a later stage.

1.1 The purpose

The purpose of this RFI is to gather market information and identify available solutions for the automation of industrial inspection processes using an autonomous inspection robot in refinery and petrochemical plant environments. The information collected through this RFI will be used to better understand available technologies, identify potential suppliers and support the preparation of a future procurement process.

1.2 Business confidentiality

The Vendor shall treat all information acquired as a result of receipt of this RFI as confidential. The Vendor shall take all reasonable efforts to protect the information contained herein in the same manner as the Vendor's confidential information.

The information concerning the fact of invitation of the Vendor to the RFI procedure, the fact of delivering the Proposal, the conducting of commercial negotiations and concluded contracts may be disclosed by the Vendor solely for the purpose of building a consortium of entities responding jointly to this RFI. It is the Vendor who will be responsible for maintenance of confidentiality of information acquired within the scope of this RFI by all participants in the consortium – the Vendor will be responsible for omissions or breaches with respect to information protection like for his own omissions and breaches.

ORLEN S.A. agrees to maintain a business secret and declares that without the written consent of the Vendor it shall not distribute and disclose to third parties any materials received in response to this RFI, with reservation of the possibility of engagement of consultants to support tasks related to the tender procedure.

ORLEN S.A. requests that the communication carried with the Vendor related to the RFI is to be treated as confidential. Simultaneously, ORLEN S.A. assures that information provided by the Vendor will be held in confidence and will be made available to participants of the evaluation process only.

In case the Vendor who received the RFI disagrees with its conditions, all documents shall be returned to ORLEN S.A. and all of its copies (paper or electronic) shall be destroyed.

1.3 Vendor's risk

ORLEN S.A. shall not be responsible for any expenses, losses, obligations or claims related to the tender procedure, made by the Vendor or their partner(s) or any other third party with whom the Vendor is or will be related during the procedure.

The Vendors, their partners and their subcontractors shall be responsible for all costs related to preparation and submission of responses. Under no circumstances will ORLEN S.A. be responsible for, obliged to cover, or pay any costs or losses incurred by Vendors, their partners or subcontractors in relation to preparation and submission of responses, regardless of the results of this RFI procedure.

This request is not an invitation for negotiations in the understanding of Art. 72 of the Polish Civil Code, thereby regulations concerning the bids do not apply in the understanding of Art. 66 and the following.

ORLEN S.A. reserves the right to:

- change the schedule of the RFI process without specifying a reason,
- cancel the RFI process at any phase without specifying a reason,

No claims may be made against ORLEN S.A. by Vendors due to the above. ORLEN S.A. does not plan any appeal procedure during the RFI process and after completion thereof.

2 Scope of the RFI

2.1 General information

ORLEN S.A. explores the use of autonomous inspection robots to support routine inspection and monitoring activities in refinery and petrochemical installations.

Currently, inspection rounds are performed manually by field operators who periodically verify the condition of equipment, process parameters and safety-related conditions.

Autonomous robotic solutions may improve personnel safety, reduce exposure to hazardous environments and provide more frequent and consistent inspection data.

2.2 Scope of request

The requested information should include details about the inspection robot, software used to manage inspection and result analysis, system architecture and deployment requirements. Vendor should also provide information about reference implementations, ATEX certification status, integration capabilities and planned product development.

2.2.1 Solution requirements

Based on the information provided above, ORLEN S.A. is interested in solutions that include the following functional areas and system characteristics:

2.2.1.1 Autonomous inspection robot:

Mobile industrial robotic platform, preferably a quadruped robot, intended for autonomous inspection rounds in refinery and petrochemical installations.

Requirements:

- Equipped with inspection sensors including:
 - a visual camera,
 - a thermal camera,
 - an infrared camera,
 - gas detection sensors,
 - hydrocarbon,
 - oxygen level,
 - carbon dioxide,
 - hydrogen sulfide,
 - explosimeter,
 - acoustic monitoring sensors,

- optional:
 - 3d scanner
 - robotic arm
- other.
- support autonomous navigation in industrial environments, including operation on stairs, platforms and other typical refinery infrastructure.
- navigation and safety mechanisms enable safe operation around personnel and industrial equipment.
- valid ATEX certification or include a documented plan and timeline for obtaining ATEX certification.
- autonomous charging, docking stations and automatic return-to-base functionality.
- highly resistant to environmental conditions and suitable for long-term operation in refinery and petrochemical environments.
- Stable wireless connectivity within the plant area, for example Wi-Fi 2.4 GHz / 5 GHz or other technologies (e. g. GSM 5G, LoraWan), support for data buffering and synchronization in the event of communication loss

2.2.1.2 Mission management system:

Software for planning, scheduling and monitoring robot missions.

Requirements:

- Support planning and scheduling of inspection routes,
- Provide dashboards presenting robot and mission statuses,
- Remote control,
- Online preview of robot's equipment data,
- Mechanisms for creating and managing users, roles and permissions,
- Supporting multiple robots and installations.

2.2.1.3 Analysis Software:

Software platform for analysis, visualization and reporting of inspection data.

Requirements:

- generate reports based on inspections results,

- support image analysis for automated detection of anomalies, analog gauges readings, equipment defects and leaks,
- support alarms and notifications management,
- allow configuration and training of additional analogue instruments and indicators,
- support integration with AVEVA PI System,

2.2.2 Use Cases

It is planned to use robot in areas listed below:

- reading data from analog instruments and indicators: reading the value from traditional pressure gauges or level gauges that are not connected to the DCS.
 - thermal imaging inspection of equipment: scanning of installations (distillation columns, pumps, heat exchangers). The robot automatically flags temperature anomalies—e.g., an overheating pump bearing or damaged pipeline thermal insulation
 - gas and chemical leak detection: The robot can detect micro-leaks on pipeline flanges before they become a fire hazard.
 - continuous measurement of atmosphere explosiveness conditions during activities requiring gas supervision
 - equipment diagnostic using available onboard sensors
 - 3D scanning and documentation of refinery installations
 - preventive patrols at a selected installation (e.g., hydrocracking). Inspection of the area (hydrocarbons, H₂S) in areas potentially prone to leaks and after overhauls and repairs of valves containing hazardous media.
 - delivery of tools and parts. During overhauls, the robot acts as a "courier" within the refinery, transporting heavy tools, gaskets, and documentation directly to the hands of mechanics working on the installations.
 - checking the correctness and completeness of PPE
 - automatic reporting of detected anomalies based on configured criteria
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- creation of digital twins. Regular 3D scanning (LiDAR) of installations to obtain a 3D scan, detect structural deformations, pipeline shifts or micro-cracks in supporting structures.

Inspection results should be available to transfer to Aveva PI System and other proper local IT systems.

2.2.3 Operational services offered by Vendor

Vendor should describe available methods of commissioning and operating the inspection process. The response should contain description of commercial and service models e.g robot purchase, leasing robot as a service and also services provided by the Vendor to support specific types of robot missions.

2.2.4 Technical restrictions

It is planned to implement inspection automation system on ORLEN S.A. IT virtual environment (on premise).

3 Requirements concerning the RFI response

3.1 Form of response

A Vendor's response must be submitted within ORLEN Group Purchasing Platform – Connect, according to the submission process and rules configured for the RFI.

ORLEN S.A. informs that there is no other way to submit a valid response regarding the RFI – responses submitted through a communication channel other than Connect platform will not be considered by ORLEN S.A.

The response should be submitted in a properly designated area within the Connect platform:

- **Response to RFI – attachment**

The required form of response is a document in PDF format (in the case of a larger number of files compressed in a ZIP).

Please do not attach any documents within “Documents to offer” section of Connect forms.

The response should be confirmed by person(s) authorized to represent the Parties – an extract from any applicable powers of attorney should be attached to the response.

3.2 Additional Questions

While preparing the response Vendors have a right to ask additional questions regarding the RFI. Questions should be delivered via Connect (**“Questions/Answers” form**) and formulated in a way which prevents identification of the Vendor who asked the question. On the basis of received questions ORLEN S.A. will prepare a response – the same to all Vendors.

ORLEN S.A. reserves the right to refuse to provide the answer to questions without giving a reason.

3.3 Required elements of the response:

Below there is a list of all mandatory elements to be contained in the response to this request:

- Summary / introduction to the Response – including an executive summary of the Response and the key parameters (date of submission, validity date, etc).
- Vendor's profile

- Specification of Vendor's Key Staff that is going to be engaged in the implementation project for ORLEN S.A
- Vendor's references and benefits of implementation achieved
- Technical specification of robot included in RFI (Vendor could include multiple robot types in the RFI)
- Description of the degree of fulfillment of the requirements specified in the RFI
- Description of equipment possible to be used by robot
- Industry use cases that can be executed by offered robot
- Software – description of functionality
- System software architecture
- Requirements for ORLEN regarding the provision of appropriate infrastructure for the operation of the robotic platform
- Description of solution deployment models: ownership, leasing and service-based scenarios.
- A general schedule for project development
- Licencing Model
- Other information from the Vendor to supplement the Response
- Commercial information (all estimated costs for budgetary information only):
 - Estimated calculation of implementation
 - Typical cost of licences and maintenance services for 1 year
 - Additional costs required for delivery and implementation – if any

3.4 Communication language

ORLEN S.A. accepts using both Polish and English as communication languages on the RFI process.

3.5 Price model of the proposal

Estimated prices presented in the response to RFI shall be quoted as net prices.

4 Additional information

This document along with all appendices hereto is owned by ORLEN S.A. and may not be used for any other purpose than related to this tender procedure without the consent of ORLEN S.A. Copying or distribution of this document in any form is prohibited without the prior written consent of ORLEN S.A.

ORLEN SA is not responsible for the content of auctions published on websites other than <https://connect.orsen.pl> and on ORLEN S.A. The access to all auctions on <https://connect.orsen.pl> is free.

The only contact allowed for communication between Vendors and ORLEN S.A. regarding the RFI is the CONNECT Purchasing Platform.

Person responsible for the RFI process:

Magdalena Markowska

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ORLEN S.A.

Procurement Department

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The above person will be responsible for the coordination of the process of providing replies to additional questions from the Vendors (including redirecting questions to the relevant ORLEN S.A. experts in particular business areas and consolidation of responses to the Vendors).