



# expande

Impulsando soluciones para  
la minería del futuro

**Challenge:**  
“Mechanized system for  
routing and installation of  
drainage pipes in heap  
leaching platforms”

September  
2019

Patrocinadores:



Gracias al aporte de:



Apoya:



# Introduction and context

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The Mining Open Innovation Program, **Expande**, is a public-private initiative designed and executed by Fundación Chile. The purpose is to promote innovation and make possible a better future for global mining by enhancing the mining ecosystem in Chile together with constituting a collaborative model that enables the best solutions for the high complexity challenges of mining today and tomorrow.

In this context, **Codelco** has asked **Expande** to prospect the local and international ecosystem to identify technological solutions that respond to the technical challenge *“Mechanized system for routing and installation of drainage pipes in heap leaching”*

# Description of the challenge

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## General Framework

In the operation of dynamic heap leaching plants, sequential tasks such as: discharge of leaching tailings, repair and routing of platforms, installation of drainage systems, loading of fresh ore and installation of irrigation systems are required.

The routing operations of heap leaching platforms are carried out to prepare the ground where the drainage pipes are subsequently installed, which allow the channeling of percolated solutions from the heaps and reducing the phreatic level inside them. Currently routing tasks are carried out with mine equipment or external services, while the installation of drainage pipes is carried out manually, with a high staffing, which represents a low productivity and risk exposure.

# Description of the challenge

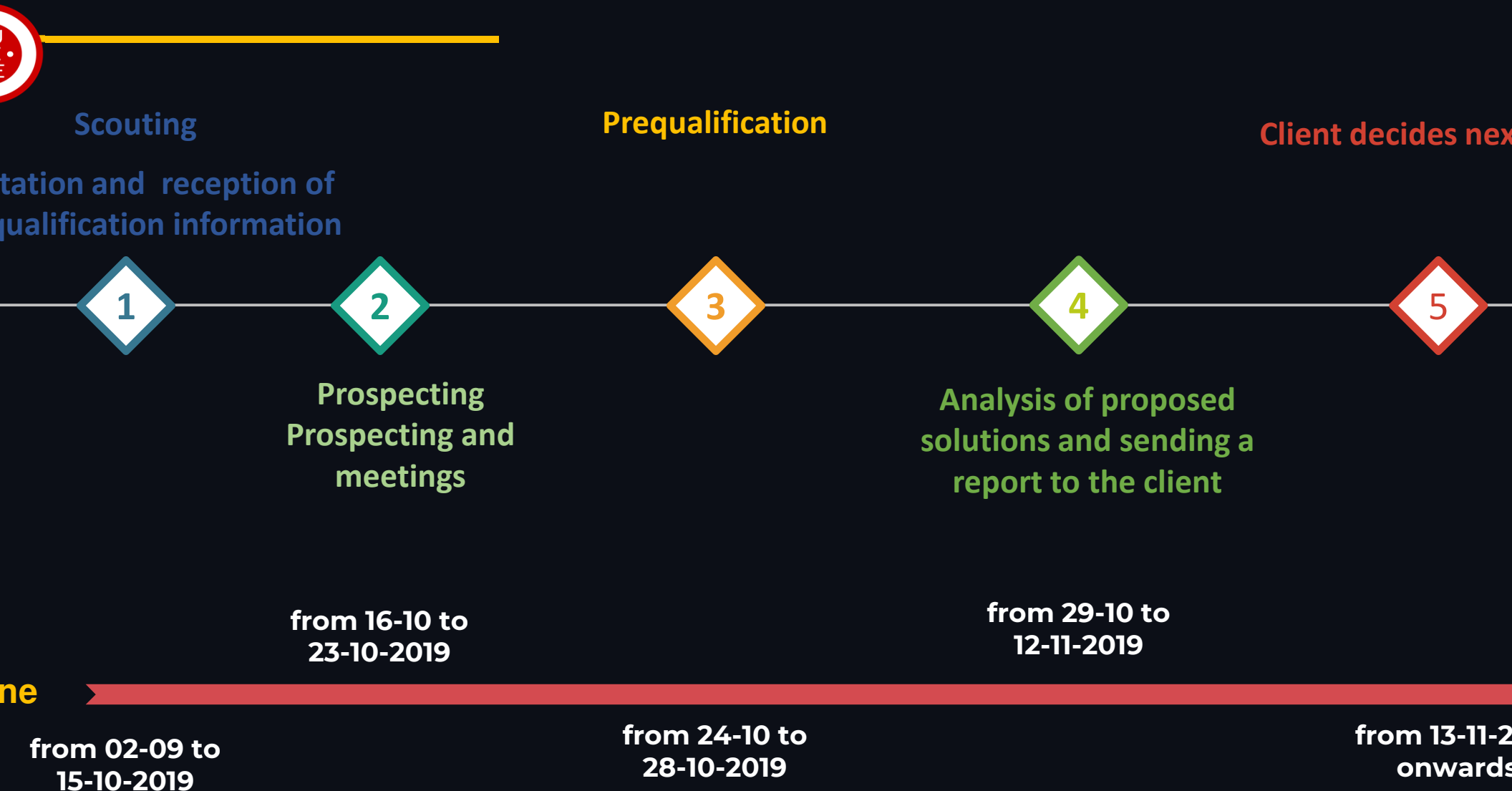
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## **Prospecting Objectives**

Identify suppliers that provide routing services and installation of drainage systems on heap leach platforms in a mechanized way and minimal presence of field staff.

The technological solution should increase productivity per linear meter and per prepared platform surface, minimizing interference with other equipment and improving operational continuity.

# Stages of the process



# Documentation requested

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To participate in the Scouting stage, please send the following information to [innovacion.abierta@fch.cl](mailto:innovacion.abierta@fch.cl):

- Company experience in technological solutions.
- Capabilities of the team of professionals.
- Technical background of the proposed solution.
- Degree of maturity of the proposed solution (according to Technology Readiness Level, TRL classification).
- Proposed Business Model: flexible, technology sales, services or other.

The information delivery format is free (pptx, pdf, image) and can be a brochure or presentation of the company's capabilities and technological solutions that apply to the proposed challenge.



Articula:



Socios estratégicos:



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Apoya:

