science, technology & innovation
Department:
Science, Technology and Innovation
REPUBLIC OF SOUTH AFRICA

technology innovation AGENCY
Innovating Tomorrow Together

Technology Innovation Agency (TIA), an entity of the Department of Science, Technology and Innovation (DSTI) was established in terms of the TIA Act, 2008 (Act No. 26 of 2008), with the objective to stimulate, intensify and exploit technological innovation to improve economic growth and the quality of life of all South Africans.

# EXPRESSION OF INTEREST

# COMMERCIALISATION OPPORTUNITY: MECHANICAL EXPANDER TECHNOLOGY

## PURPOSE

The purpose of this Expression of Interest (EOI) is to identify and assess suitably qualified strategic partners to support the development and commercialisation of the patented Mechanical Expander technology for catheter-based heart valve delivery. TIA seeks partners with capabilities, resources, market access, and expertise required to advance the technology through further development, clinical validation, regulatory approval, manufacturing, licensing, investment, and market deployment. The EOI aims to explore viable commercialisation and partnership models that can unlock the value of the technology and facilitate its adoption in South Africa, emerging markets, and other global markets, with a particular focus on affordable and accessible heart valve treatment solutions.

## BACKGROUND

The Mechanical Expander is a patented cardiovascular medical device technology developed with support from the Technology Innovation Agency (TIA) under Project No. T11-00096-OC. The technology is a catheter-based transcatheter heart valve delivery system designed to facilitate minimally invasive heart valve implantation without the need for open-heart surgery. It was developed with a particular focus on addressing the need for cost-effective heart valve treatment solutions in emerging and developing markets where rheumatic heart disease remains a significant healthcare burden. The technology has undergone substantial development and validation and has secured international patent protection, including patent grants in Brazil, China, Europe, India, South Africa, and the United States.

## OBJECTIVE

**The objective of the EOI is to identify potential partners capable of advancing the Mechanical Expander from its current development and intellectual property position towards clinical, regulatory, manufacturing, and commercial deployment. TIA intends to assess opportunities for:**

- Technology licensing or acquisition of intellectual property rights;
- Joint development and commercialisation;
- Strategic investment;
- Manufacturing and market access partnerships;
- Clinical development and regulatory advancement.

## ELIGIBILITY CRITERIA

**EOIs are invited from suitably qualified organisations with relevant technical, commercial, financial, clinical, manufacturing, regulatory, or market-access capabilities. Eligible respondents may include:**

- Medical device manufacturers;
- Cardiovascular technology companies;
- Multinational healthcare and medical technology companies;
- Venture capital and private equity investors focused on life sciences;
- Research and development organisations;
- Clinical development and innovation partners;
- Universities and healthcare innovation hubs; and
- Other strategic partners with demonstrable capabilities relevant to the development and commercialisation of cardiovascular medical devices.

Respondents should demonstrate relevant experience, technical and/or commercial capabilities, appropriate resources, and the ability to contribute to the proposed commercialisation or partnership pathway.

## SUBMISSION REQUIREMENTS

**Interested parties should submit a written EOI containing, at a minimum, the following information:**

1. Company profile and relevant experience.
2. Details of commercialisation, licensing, investment, or partnership interest.
3. Technical capabilities and market reach.
4. Proposed commercialisation approach.
5. Contact details of the authorised representative.

EOIs should be submitted under the reference **"EOI: Commercialisation of Mechanical Expander Technology."** Submission of an EOI does not constitute a commitment by TIA to enter into a transaction, and shortlisted respondents may be invited to participate in further discussions and due diligence, including the execution of confidentiality agreements where required.

**Submission of EOI**

Interested parties are invited to submit a written Expression of Interest marked:
**"EOI: Commercialisation of Mechanical Expander Technology"**
to: Eoi.mechanicalexpander@tia.org.za.

**Closing Date: 13 January 2027**