



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.

## CALL FOR PROPOSALS

## TECHNOLOGY ACQUISITION AND DEPLOYMENT FUND

# Innovative Technologies: Disaster Management in South Africa

## BACKGROUND

South Africa faces escalating risks from floods, droughts, wildfires, pandemics, cyber-attacks, and technological disasters, driven by climate change and deep socio-economic vulnerabilities. Recent disasters, such as the Limpopo, KwaZulu-Natal and Eastern Cape floods, have exposed weaknesses in early warning, coordination, and resilience-building. There is a critical need to move from reactive crisis response to proactive, innovation-led disaster governance.

## PURPOSE OF THE CALL

The purpose of the Call is to invite applications for funding. This will include a selected number of technologies that address immediate needs, while also identifying and capturing additional technologies for inclusion in a database for future use. This call seeks market-ready, scalable, and context-appropriate technologies that can strengthen South Africa's disaster management system across all phases: risk assessment and early warning, preparedness, response, recovery, and resilience/mitigation. Solutions must integrate science, technology, and innovation (STI) with social and behavioural sciences to ensure uptake, trust, and equity.

## FOCUS AREAS

### Proposals are invited in the following areas:

- Risk Assessment & Early Warning
  - Satellite-based flood prediction, wildfire detection, and climate modelling.
  - AI-driven early warning systems, mobile alert platforms, and community-based risk communication tools.
- Preparedness
  - Scenario modelling, decision-support dashboards, and inclusive community drills.
  - Culturally tailored preparedness solutions and training platforms.
- Response
  - Drones for search and rescue, rapid mapping, and mobile command centres.
  - Water & Sanitation Technologies that can respond to Disaster Management.
  - AI-enabled chatbots for crisis communication and coordination.

- Recovery & Rehabilitation
  - Tools for equitable recovery, beneficiary profiling, and linking victims to support.
- Resilience Building & Mitigation
  - Smart infrastructure, insurance technology, climate-resilient agriculture, and water systems.
  - Alternative Building Housing for Disaster Relief
  - Emergency Housing
  - Integration of indigenous knowledge and social capital-building platforms.
- Community Engagement & Inclusion
  - Citizen science apps, co-created technologies with vulnerable groups, and awareness campaigns.
  - Solutions that address the needs of women, youth, and rural communities.

## ELIGIBILITY

- South African SMMEs, start-ups, non-profits, research institutions, and community-based organisations.
- Solutions must be commercially ready or at advanced pilot stage.
- Preference for technologies developed for African conditions and adaptable to local environments.

## FUNDING PARAMETERS

- Funding threshold: R 1 000 000 per project
- Project Implementation: 12 -18 Months

## SUBMISSION REQUIREMENTS

### Detailed proposal including:

- Technical description and innovation aspect.
- Implementation plan and timeline.
- Community engagement and inclusion strategy.
- Business model and sustainability plan.
- Budget and funding request.
- Risk assessment and mitigation strategies.
- Compliance with national disaster management policies and frameworks.

## EVALUATION CRITERIA

- Innovation and impact.
- Feasibility and scalability.
- Community ownership and inclusion.
- Alignment with national disaster management priorities.
- Sustainability and long-term viability.

## EXPECTED OUTCOMES

- Improved early warning and disaster preparedness.
- Faster, more effective response and recovery.
- Increased resilience and reduced vulnerability, especially for poor and marginalised communities.
- Strengthened collaboration between government, academia, industry, and communities.

## SUBMISSION DEADLINE

- **09 February 2026, 5pm**
- Submit to [Nondumiso.Ngwenya@tia.org.za](mailto:Nondumiso.Ngwenya@tia.org.za) and [Ashaal.roopchan@tia.org.za](mailto:Ashaal.roopchan@tia.org.za)
- Mandatory subject line “Call for Innovative Technologies: Disaster Management in South Africa”

## Contact & Further Information

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This call is grounded in the NSI Disaster Management Strategy and aligns with the Disaster Management Act (2002), Sendai Framework for Disaster Risk Reduction, Sustainable Development Goals, and the African Union Programme of Action for Disaster Risk Reduction.