

Abu Dhabi's Technology Innovation Institute launches challenge to advance rocket telemetry and citizen space innovation

Crowdsourcing partnership with Wazoku seeks solutions for a telemetry, tracking, and command data link between a sub-orbital sounding rocket and ground station

ABU DHABI, UNITED ARAB EMIRATES, December 4, 2024 /EINPresswire.com/ -- The Technology Innovation Institute (TII), part of Abu Dhabi's Advanced Technology Research Council (ATRC), has partnered with global innovation scale-up [Wazoku](#) to launch a crowdsourcing challenge that seeks a comprehensive telemetry, tracking, and command (TT&C) data link solution between a suborbital sounding rocket and a ground station.



TII and Wazoku Open Innovation

Wazoku has previously worked on successful space-focused challenges for the likes of NASA, and the [Rocket Telemetry Challenge](#) invites ideas from innovators, startups, research institutes, and university students worldwide. It marks a continuation of TII's collaboration with Wazoku, drawing on Wazoku's 700,000-strong Crowd. This is a global network of problem solvers that includes scientists, engineers, PhD students, CEOs, startups, and business leaders.

“

Space innovation is advancing rapidly, and we're excited to support TII in empowering citizen space innovation.”

Schonning Eysturoy, Senior Director of Innovation Ecosystems, Wazoku

The Technology Innovation Institute (TII) is currently developing a hybrid rocket engine designed for safe, cost-effective access to space. Their research and development

roadmap includes launching sounding rockets powered by hybrid engines, which will act as progressively complex technology demonstrators.

Dr. Elias Tsoutsanis, Acting Chief Researcher of The Propulsion and Space Research Center at TII, said:

“The Rocket Telemetry Challenge offers a unique platform for innovators from around the world to develop advanced TT&C systems. These systems are crucial for ensuring the successful operation of the sounding rocket by providing vital communication links. By advancing TT&C technology, our objective is to enhance the precision and reliability of these missions, ultimately propelling our understanding of space and atmospheric phenomena to new heights.”

Telemetry is the primary means of collecting data from the rocket. Essential data collected includes pressure, temperature, altitude, spin rate, acceleration, and velocity. Additionally, the system must enable commands to be sent from the ground to the rocket to initiate specific phases, such as flight termination or parachute deployment.

The challenge seeks a TT&C solution incorporating all mechanical, electronic, and software components, including the transmission chain (emitter, antennas, and receiver) and the software required for data handling and transmission.

“Space innovation is advancing rapidly, and we’re excited to support TII in empowering citizen space innovation,” said Schonning Eysturoy, Senior Director of Innovation Ecosystems, Wazoku. “We have vast experience working with space organisations including NASA and we’re excited to add TII to the list. We’re confident that the Wazoku Crowd can add tremendous value to help TII advance its space program.”

TII drives global research and educational empowerment in Propulsion and Beyond Earth Exploration, advancing aircraft propulsion, aerodynamics, computational methods and AI, and space exploration. It is part of the TII, the global scientific research centre attracting the world’s foremost scientists and researchers, which belongs to the Abu Dhabi Government’s Advanced Technology Research Council.

Wazoku is increasingly working with organisations in the GCC, and in November 2024, announced a dedicated presence in the UAE, a new UAE server infrastructure, and a partnership with [Fikra Transformative Consultancy](#). Fikra Consultancy is dedicated to transforming workplace cultures through innovative engagement programmes that enhance productivity and nurture a positive environment. Founder Njoud Majali emphasises that the partnership with Wazoku represents a forward-thinking and progressive approach to innovation in the UAE and the broader GCC region.

“Innovation is gaining significant momentum across the Middle East, and organisations are recognising the importance of transforming their cultures to embrace open innovation,” said Majali. “TII is a recognised leader in this field, and it is encouraging to see other organisations in the GCC adopting similarly visionary approaches. The future of innovation in the region is undoubtedly bright and full of potential.”

The Rocket Telemetry Challenge offers a total prize fund of \$55,000, with awards of \$30,000 for 1st place, \$15,000 for 2nd, and \$10,000 for 3rd place. Winners will also receive an all-expenses-paid trip to the UAE in 2025 to prepare for and participate in an on-site demonstration of their solutions.

The challenge closes on 16 December 2024.

For further information about Wazoku, visit <https://www.wazoku.com>

For further information about TII, visit <https://www.tii.ae/>

For Further information about Fikra, Visit <https://fkra.space/>

PR Contact:

Paul Allen – Rise PR

+ 44 (0) 7515 199 487 / paul@risepr.co.uk

Paul Allen

Rise PR

+44 7515 199487

[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

[LinkedIn](#)

[YouTube](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/765836035>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.