Build the Games.

ENGINEERING CHALLENGE / NAIROBI RIVER / RHINOS VS ZEBRAS

Three dates. Three different milestones.

PROPOSALS DUE: 18 November 2026 | 11:59 PM EAT (Nairobi).

PRESENTATION EVENT: 21 November 2026. This is the concept and engineering presentation, not the river race.

FIRST RACE EPISODE: February 2027 target. Exact day, course and operating rules remain subject to approvals and readiness.

Choose one problem. Show how you will deliver.

Engineers, programmers, makers, safety specialists, filmmakers, landscape designers and architects can propose one defined part of the challenge. Submit an executable mini business plan, not just an idea pitch.

How to apply

1. Read the 12-area outline on the next three pages. Prepare your implementation PDF: recommended 5-8 pages, maximum 10 MB. Add useful diagrams or appendices.

2. Complete the short AI fit check. Explain why engineering is essential to a competitive, measurable cleanup event and how your solution can transfer to at least two other uses.

3. Complete the guided application, including contact details and concise design, budget, delivery and risk answers. You may reuse text from your proposal.

4. Attach your PDF. The automatic AI completeness review must find substantive information for every required area before the submit button unlocks. It is not engineering approval or selection.

5. Submit before the deadline. Wait for your application number, then download your numbered application copy. The organizer dashboard stores your answers and technical PDF separately. No email is sent.

No applicant login is required. Keep the page open while applying: drafts are not saved across a refresh. Do not include passwords, identity documents or unnecessary personal data.

Understand the Games.

YOUR REQUIRED PDF / SECTIONS 01-04

01 Executive summary

Define the problem, users, proposed deliverable and measurable environmental or operational benefit. Explain what is in scope and what is not.

02 Event purpose and engineering role

Explain why this is a competitive, measurable and repeatable event rather than a one-day volunteer cleanup. Show how engineering enables safety, verification, logistics, audience engagement or scale.

03 Wider applications and transferability

Name at least two credible uses beyond the river race, such as wildlife tracking, inventory control, logistics, construction or emergency response. State what transfers and what must be adapted.

04 Race integration

Rhinos and Zebras share one river section and both banks, with separate carts and a controlled final haul to verified weighing. Show where your solution fits and who it connects to. Course and load assumptions are provisional.

Safety and purpose are part of the design

Specialist crews, not competing volunteers, handle sewage, contaminated sediment, needles, chemicals and other hazardous material. Explain how your engineering work supports a safe, measurable and repeatable event.

Design for the field.

YOUR REQUIRED PDF / SECTIONS 05-08

05 Technical design

Provide labelled drawings, a system architecture or a bill of materials as appropriate. State specifications, interfaces, equipment, software, materials and the evidence behind your choices.

06 Field operations

Explain staffing, training, power, connectivity, maintenance and recovery from failure. Include low-data/offline operation where relevant and name the person responsible for event-day support.

07 Risk register

List hazards, likelihood and severity, controls, owners and stop-work triggers. Cover contamination, PPE, safe loads, brakes, heat, privacy/consent and specialist approvals as relevant. No proposal authorizes unsafe river access.

08 Implementation schedule

Give milestones and accountable owners for design, build, bench testing, supervised field testing and handover. Plan toward the February 2027 target without treating the exact race day as confirmed.

Safety and purpose are part of the design

Specialist crews, not competing volunteers, handle sewage, contaminated sediment, needles, chemicals and other hazardous material. Explain how your engineering work supports a safe, measurable and repeatable event.

Plan the delivery.

YOUR REQUIRED PDF / SECTIONS 09-12

09 Budget

Show itemized amounts and currency for labour, equipment, materials, transport, testing and contingency. Separate prototype, event-day and repeat-event costs. Identify funding already secured and support requested.

10 Team

Name contributors, relevant skills, roles and time commitments. Identify capacity gaps and external specialists. Explain who will own maintenance after the event.

11 Test plan

Set numeric pass/fail targets, methods, evidence and sign-off responsibility. Test normal operation and failure cases. Unsupported performance claims are not a substitute for a validation plan.

12 Dependencies, ownership & handover

Separate verified facts from assumptions. List permissions, site surveys, safety approvals, sponsors and recycling dependencies. Explain ownership/licensing, documentation, training and adaptation for future events.

Before you press submit

Check all 12 required areas, costs, accountable owners, measurable tests and declared assumptions. The AI completeness screen must pass before submission; receipt is not selection.