

Agenda item 4 (a) iv. Digital Technologies

# Concept Note: Innovation Grand Challenge TEC/2023/27/9

Technology Executive Committee, 27<sup>th</sup> meeting and TEC-CTCN Joint session  
19-21 and 22 September 2023, Bonn, Germany



**Bill Wright, Enterprise Neurosystem** in support of the TEC Activity Group  
on Digital Technologies

### **TEC Activity Group on Digital Technologies**

Co-Leads: Ambrosio Yobanolo, Dietram Oppelt, Erwin Rose, Stephen Minas

Other members: Clara Brown (YOUNGO), Giuseppe Villalaz (IPO), Fernando Barrio (RINGO)

#### **I. Background**

- TEC 26 requested the Activity Group on Digital Technologies to continue engaging with Enterprise Neurosystem on the preparation of a concept note on the Innovation Grand Challenge.
- Enterprise Neurosystem supported the AIM4Climate AI Grand Challenge with planning and support logistics. AIM4Climate managed the publicity and submission website.
- EN assisted with semifinal and finalist selection and voting, and secured awards from Kove, IBM, Amazon and Red Hat, in addition to consulting hours from EN.
- Winner AgroSpace was announced at the AIM4Climate Summit, with Envoy Kerry's address.
- AgroSpace and other AIM4Climate AI finalists will be used for the CTCN Tanzania Irrigation project.



### II. Objectives

- Drive global AI innovation in climate applications and initiate new solution development, as part of an open competition.
- Emphasis on proposals that would not be supported by venture capital, but would have a clear benefit for developing nations.
- Global representation of submissions, with LDCs and SIDs assigned priority for review.
- Both open source and proprietary solutions are welcome, to cover all emerging technologies.
- Enterprise Neurosystem will support the finalists in development of their solutions into prototypes.
- When AI applications are entered in the Grand Challenge as open source software, they will be evaluated and then made available to developing nations free of charge, via a dedicated catalog/website.
- Support the objectives of the Technology Mechanism and capacity-building for developing nations.



### III. Evaluation Criteria

- AI/ML applications that have the highest potential for mitigation, or enabling potential for mitigation solutions.
- AI applications that could best aid developing nations in adapting to the effects of climate change, either now or in the future.
- As a guideline, the proposals should assist the Technology Mechanism Joint Work Programme and the climate responses and mitigation options identified in the IPCC AR6.
- Solutions that could be implemented in various contexts and regions, particularly for SIDs and LDCs.
- Female leadership is considered a positive element in the evaluations.
- An open source (free) distribution model is not required, but considered a positive element.

### IV. Schedule of work

- Logistics and Planning Sessions - Build logistics spreadsheets with objectives and timelines, monthly calls for planning and preparation, moving to weekly calls as the event draws near.
- Includes initial timeline creation (6-8 months total) and milestones - Planning phase, launch event, sequence of promotions, securing prizes, initial submission deadlines and parameters (250 words), semi-final submissions (500 words), followed by finals event and finalist selection.
- Promotion - A series of press releases and a publicity campaign, both online and via media outlets.
- Event for the announcement - Technology Mechanism AI event, COP 28, etc.
- Dedicated website established for submissions (Ideascale, etc.).
- Voting Duties - The voting process will be determined with the UNFCCC Technology Mechanism, and can be a multi-stage vote to determine a group of semi-finalists, followed by finalists.
- Dedicated catalog for AI Application submissions, for downloading by developing nations free of charge. Each application includes model provenance ID and training / development history.
- Awards Venue - Determined in partnership with the UNFCCC Secretariat, based on the timeline of the award cycle (6 months, 1 year, etc.) and related event where finalists and winner can be announced.



### V. Expected results

- Identification, development and promotion of new innovations in climate technology.
- Support for solutions that venture capital wouldn't normally fund, but provide a clear benefit to developing nations.
- Create a new generation of AI applications for enhanced early warning, adaptation and agricultural resilience.
- Drive global awareness of the benefits of AI applications for climate change challenges, and generate interest among students in this approach.
- Winners, finalists and semifinalists can add their AI applications to a catalog of open source AI climate applications, freely accessed by developing nations. Maintenance of AI applications provided by solution developers, and catalog provided by Enterprise Neurosystem.

*Thank you!*

