



1st ITU Regional IPv6 and IoT Challenge for Arab States

Closing Phase

26 April- 11 June 2023

1. Background:

This **1st ITU Regional IPv6 and IoT Challenge** is organized by the ITU in collaboration and support of Telecommunications and Post Regulatory Authority of Sudan (TPRA) and part of the implementation of the activities of the ITU's regional IPv6 and IoT Expertise centre for Arab region kindly hosted by TPRA-Sudan.

The ITU's regional IPv6 and IoT Expertise center for Arab region project aims at assisting ITU Member States in the Arab region in transitioning from IPv4 (Internet Protocol version 4) to IPv6 (Internet Protocol version 6) for Internet of Things (IoT).

2. Information about the Challenge:

In the context of the ITU Arab regional outreach with its membership and bring new partners for the seek for regional development using IPv6, IoT and IPv6-IoT based networks and applications, a themed Challenge/challenge will be organized to attract both the domain users as well as solutions developers to identify topical problems, accelerate solution availability and strengthen the ecosystem, overall. Broadly, the themes are classified as below:

1. IPv6 applications
2. IoT applications
3. Smart Grids, Smart metering, Smart Farming, and Smart Transport based IoT solutions
4. IPv6 and IoT Security
5. Emerging IPv6 and IoT R & D

This IPv6 and IoT Challenge will help to accelerate solution building in areas of the Challenge with existing expertise and generate additional expertise in themes where local expertise is low/building up. In addition, the Challenge is looking for participants that are passionate about IPv6 and IoT and want to work on real-life, practical projects.

Who Should Participate?

The Challenge is targeting at university students, graduates, startups, SMEs and IPv6 and IoT developers from the industry, academia, ICTs specialists, IoT and IPv6 enthusiasts, hardware hackers and security researchers, software developers and network operators as well as open source IPv6 and IoT projects specialists.

Why Should You Participate?

This Challenge provides a great opportunity to develop new software or tools, meet others in your field, and exchange knowledge and experience with topic experts who are more specialized the Challenge topics.

Below are the main stages of the IPv6 and IoT Challenge organization, IPv6 and IoT apps developers' eligibilities and requirements to register in the challenge, winners' selection criteria and prizes distribution.

2.1 Challenge Closing Phase format:

This phase 2 of the 1st ITU Regional IPv6 and IoT Challenge for Arab States is multi events. The first phase organized last year with many of events, and this is the closing phase which aims to refresh the applicants and continue with Challenge closing. The phase will begin by final outreach camping's for one week followed by virtual hackathon event. The virtual event sessions are:

Day	Time		Activity	Type	Description
	From	To			
1st Day - Half Day	15:00	15:30 PM	Registration	Session	
	15:30	16:30	Onboarding Session	Session	Explain the flow of the hackathon, sessions to be delivered, timeline, expected deliverables and important deadlines and explaining platforms
	16:30	18:30	Business Model Canvas	Session	
2nd Day - Full Day	9:00	11:00	Market Research Session	Session	
	11:00	15:00 PM	Discussion/team work	Team Work	About findings of their market research
	0.625	0.71	Mentorship Session	Session/Team Work	30 minutes for each team with a mentor
	7:00	8:00	Entrepreneur/Expert Talks Session	session	1 hour interview with a filed successful entrepreneur or exper
3rd Day - Full Day	9:00	11:00	MVP and Validation	Session	How to renovate and how to use the market research inputs to change the business model ca
	11:00	13:00	Discussion/team work	Team Work	how to do MVP and how to validate the efficiency of your idea/solution
	13:00	16:00	Final Presentations Preparation	Team Work	Team work
	16:00	18:00	Pitch Deck Session	session	how to present your Ideas
4th Day			Final Presentations	session	

The event begins with an introduction to the themes and an experts talk on the themes by a domain expert. This would set the tone for the Challenge as well as serve to highlight areas where the gaps are. Following this, a business model canvas ideation, market research session of the Challenge themes on problem statements by various technical and business experts will be delivered. These sessions will be followed by a final presentation to allow more participants to pitch their ideas or prototype. Shortlisted participants will be supported through coach sessions to allow teams to work on their ideas and prototypes proposals and under mentorship and final session of the Challenge for making a pitch to commercialize the solution for a given problem will be organized. The Challenge panel judges the commercial pitches and awards prizes.

2.2 Challenge Prizes

Prizes for the 3 top winners will receive the following prizes.

1. First place owner: Will receive laptop
2. 2nd place owner: Will receive tablet and
3. 3rd place owner: Will receive mobile phone.

In addition, following support will be provided to winners:

- Certificate of appreciation
- Training opportunities on IPv6 and IoT
- Exemption from license fee if applicable
- Space opportunity to host winners' prototype/products in the center

2.3 Challenge Events: **Important Dates and Deadlines**

- ✓ 31 April 2023: [Deadline for application for the Challenge](#)
- ✓ 02 May 2023: [Selection of applicants \(shortlisted applicants\)](#)
- ✓ 4-5 May: 2nd Virtual Event: [Virtual Regional IPv6 and IoT Challenge](#)
- ✓ 7 May 2023: 2nd Virtual Event: [Pitching ideas and prototypes session](#)
- ✓ 07 May 2023: Final presentation + Winners selection ([Announcement of winners](#))
- ✓ 11 June 2023: Winners received their prizes during opening ceremony of the [ITU Expertise centre on IPv6 and IoT for Arab Region](#)

2.4 Post- Challenge:

End of activity report about the Challenge experiences will be developed and shared with the Challenge/ Challenge stakeholders and partners. The idea, apps and prototype created/developed and problem solved will be documented and posted into the main homepage of the ITU's regional IPv6 and IoT Expertise Centre for Arab region. The apps developed and problem solved could be used by the project sponsors.

A problem/s that come from the event will also be recorded as possible challenge for next run of the Challenge.

As Challenge is a wonderful opportunity to build community around new ideas, the ITU-Industry panel will work for the preparation of next Challenge considering challenges encountered.

2.5 Partnerships and Sponsorships

To achieve the Challenge goals, three tiers of partnerships are sought:

- Outreach Partners
- Technology Partner
- Strategic Partners (Potential Users of Innovation – For the sustainability of the graduates)
- Sponsors (Financial support towards the program / Significant in-kind contribution)

List of Potential Partners and their Status

Partner	Contact information	Partnership Mode	Status
TRPA	Eng Ahmed Atyya ahmed.atyya@tpra.gov.sd	Strategic Partner and Sponsor	Onboard
Sudani	Mrs Hiba Ali hiba.ali@sudatel.sd	Technology Partner	Onboard
249Startups-Sudan	Mr Ahmed El Murtda, ahmed@249startups.com	Outreach Partner and Challenge organizer	Onboard
IEEE- Sudan Chapter	Ms Fay Majid faymagid4@gmail.com	Research Partner	Onboard
Google Developer Student Clubs - University of Khartoum	Mr Abdulmajid Ali tiotech1998@gmail.com	Research Partner	Onboard
Internet Society Sudan Chapter	Mutwakel Yassen Abd Alrahman Yousif mu@isoc.sd mutitex@gmail.com	Outreach Partner	Onboard
Sudanese Network Operators Group (sdnog)	Sara Alamin Mohamed Hassan sara.alamin@protonmail.com	Outreach Partner	Onboard

3 Challenge Coordination:

ITU Coordinator: Eng. Mustafa Al Mahdi Programme Officer ITU Arab Regional Office Email: mustafa.almahdi@itu.int	Host Coordinator: Eng Ahmed Atyya Director Numbering and Licensing TPRA-Sudan Email: ahmed.atyya@tpra.gov.sd	Challenge Organizer Coordinator: Mutaz Mohamednour Hassan Managing Director 249Startups E-mail: mutaz@249startups.com Khansa@249startups.com
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