

RENU – The Organisation

Presentation to the Education in Emergency Sector Working Group
Thursday, 5th December 2024

By
Timothy Ekaru
tekaru@renu.ac.ug

Internet Society
Foundation

eduroam



The Internet is for Everyone



The Beginning

2006, Entebbe

- VCs of Universities
- CEOs and EDs of Research Institutions



The Beginning

Initial challenge

- Reliable & affordable connectivity

BUT

- Connectivity just a means to an end

What's the end?

- Access to resources
- Improved methods
- Improved collaboration

Hence

- High quality education and research

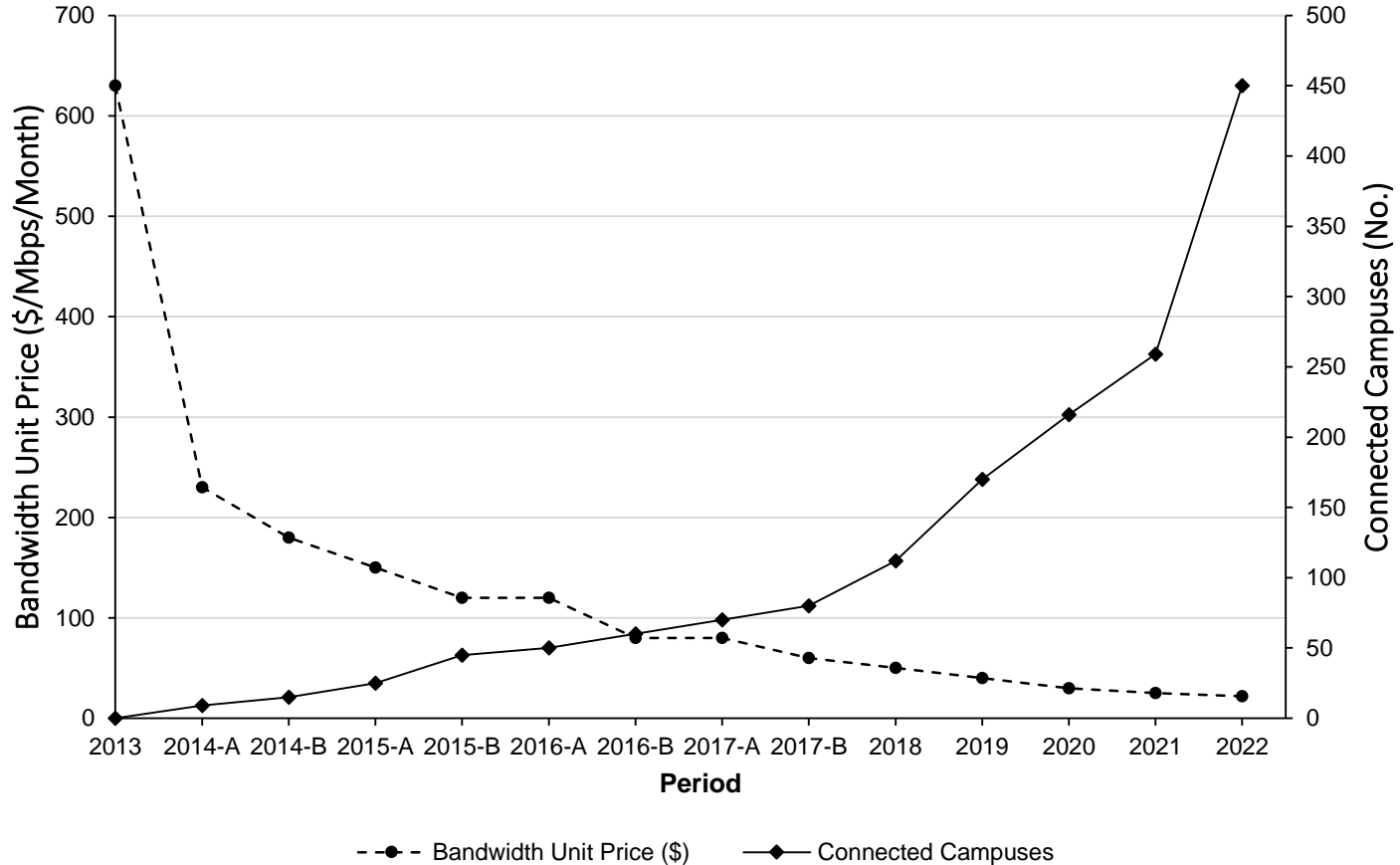


Connectivity - Membership

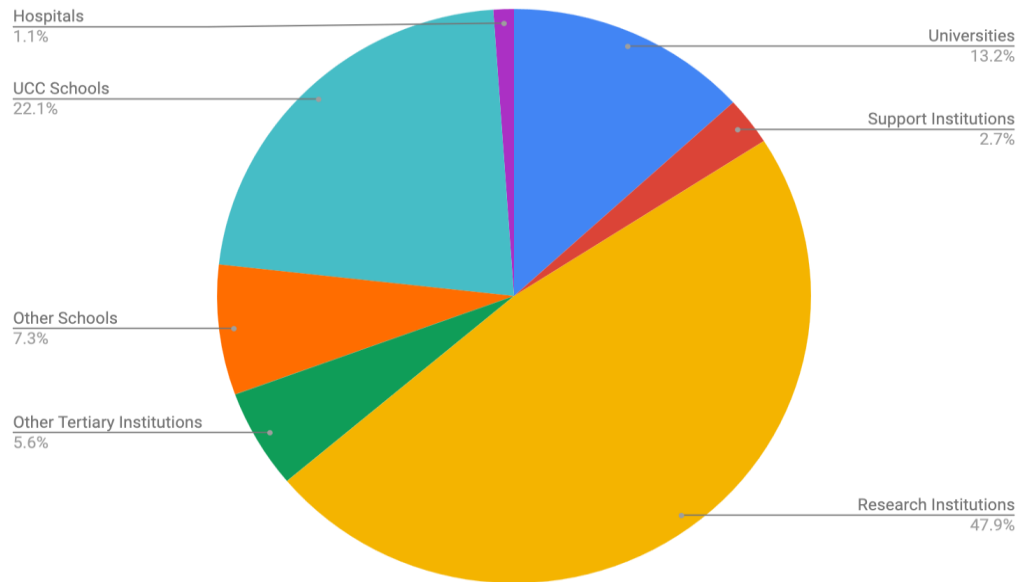


Year	2023	2022	2021	2020
Member Institutions	268	179	152	139
Connected Campuses	628	450	259	216
Universities	83	72	67	61
Research Sites	301	255	85	58
Other Tertiary Institutions	35	27	22	16
Affiliate Institutions	17	13	13	13
Schools	185	77	66	62
Hospitals	7	6	6	6

RENU Connected Campuses vs Bandwidth Unit Price



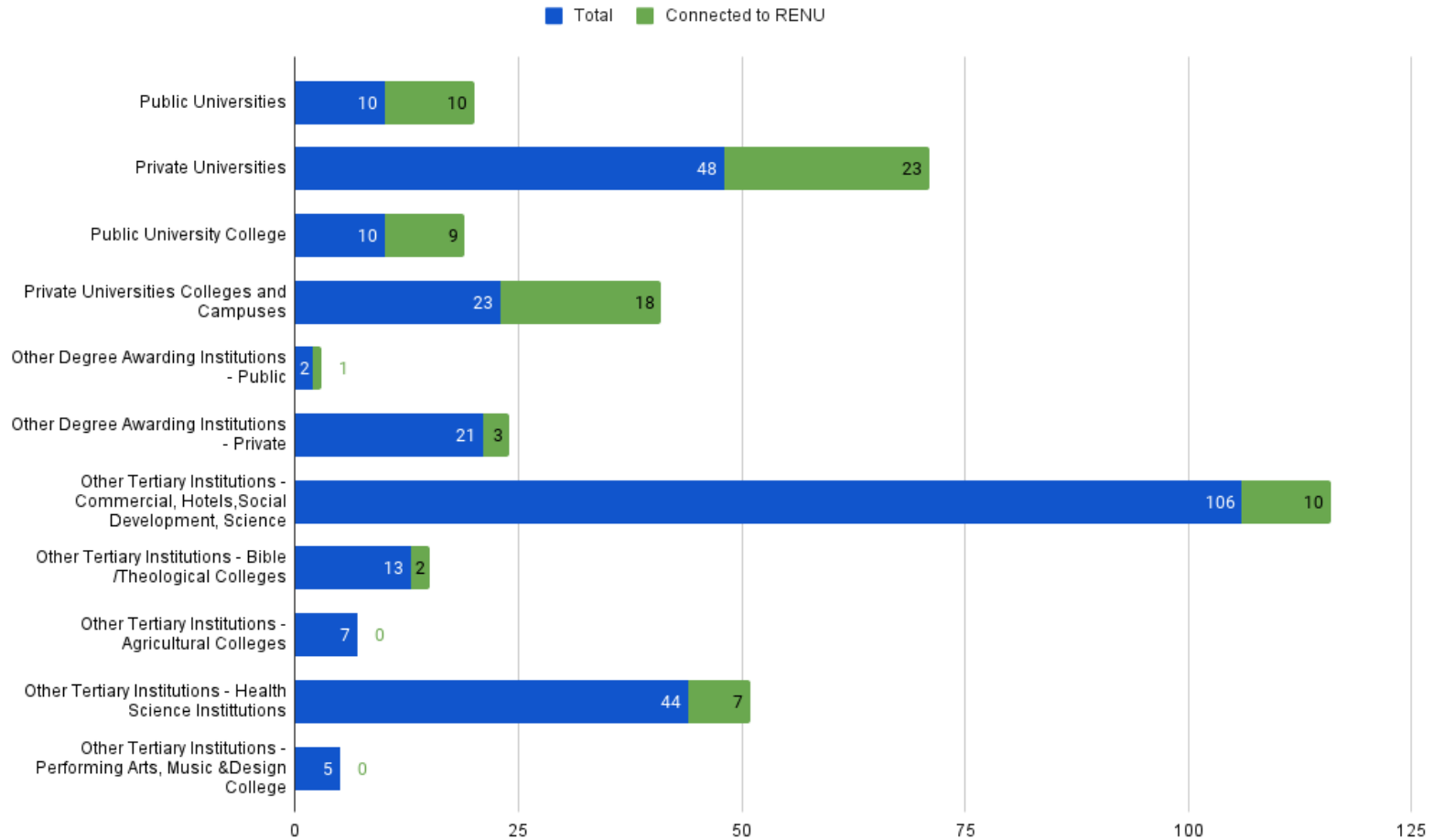
Connectivity - Membership



Number of Connected Sites	628
Number of University Campuses	83
Numbers of Research Sites	301
Number of Other Tertiary Institutions	35
Number of Support Institutions	17
Number of Hospitals	07
Number of Schools	46
Number of UCC Supported Schools	139

Gaps

NCHE Categories 2022/2023



Case of Virtual School Seminars



Zoom Meeting

Participants (77)

Find a participant

KS KAZIBA Stephen (Host)

CA CALTEC ACADEM... (Co-host)

CA CALTEC ACADEM... (Co-host)

KS Kigarama SS mit... (Co-host)

OL OUR LADY OF G... (Co-host)

PL premier lab (Co-host)

RD Ronald Ddungu (Co-host)

RD Ronald Ddungu (Co-host)

9 9133022418

A AJ

AS Alobo Sharon

AA Amon Angela

Unmute Start Video Security Participants Chat Share Screen Reactions Apps More Leave

MBale ss Kojja... Tr keneth MBALE S.S (NA... Wetaka Daniel...

MBale ss Kojja Moshe Tr keneth MBALE S.S (NANZIGF... Wetaka Daniel mbale s...

Remove Spotlight Recording...

Caltec Academy Makerere

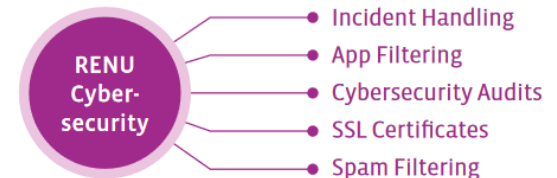
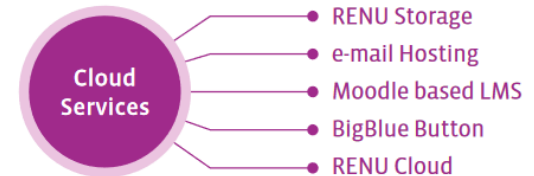
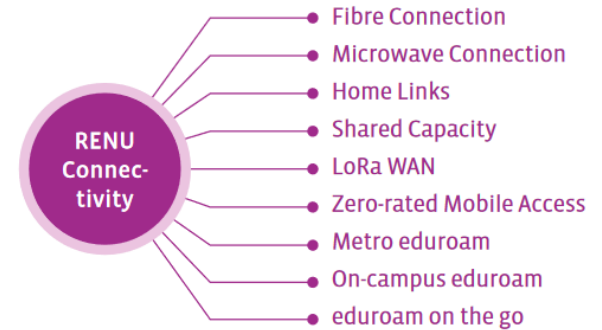
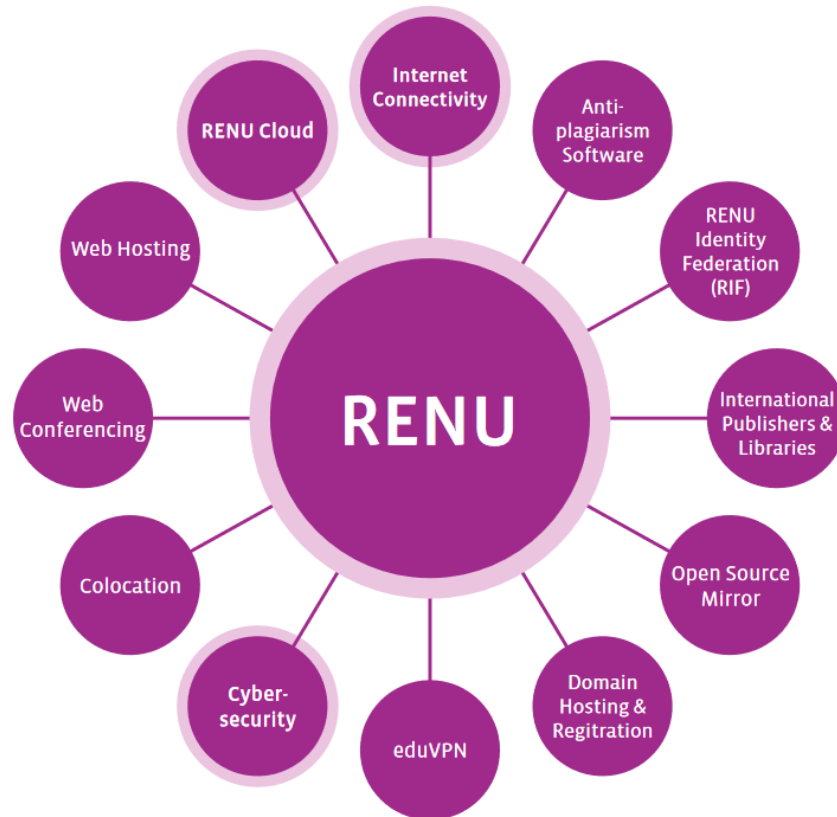
Mathematical work on a chalkboard:

$$\begin{aligned} \text{When } x=1 \\ 8-6 &= 5A + (B+C)(4) \\ 2 &= 10 + B(4) \\ -\frac{8}{4} &= \frac{4B}{4} \quad B = -2 \end{aligned}$$
$$\Rightarrow \frac{8-6x}{(x+3)(x^2+4)} = \frac{2}{(x+3)} + \frac{-2x}{x^2+4}$$
$$\therefore \frac{8-6x}{(x+3)(x^2+4)} = \frac{2}{(x+3)} - \frac{2x}{x^2+4}$$

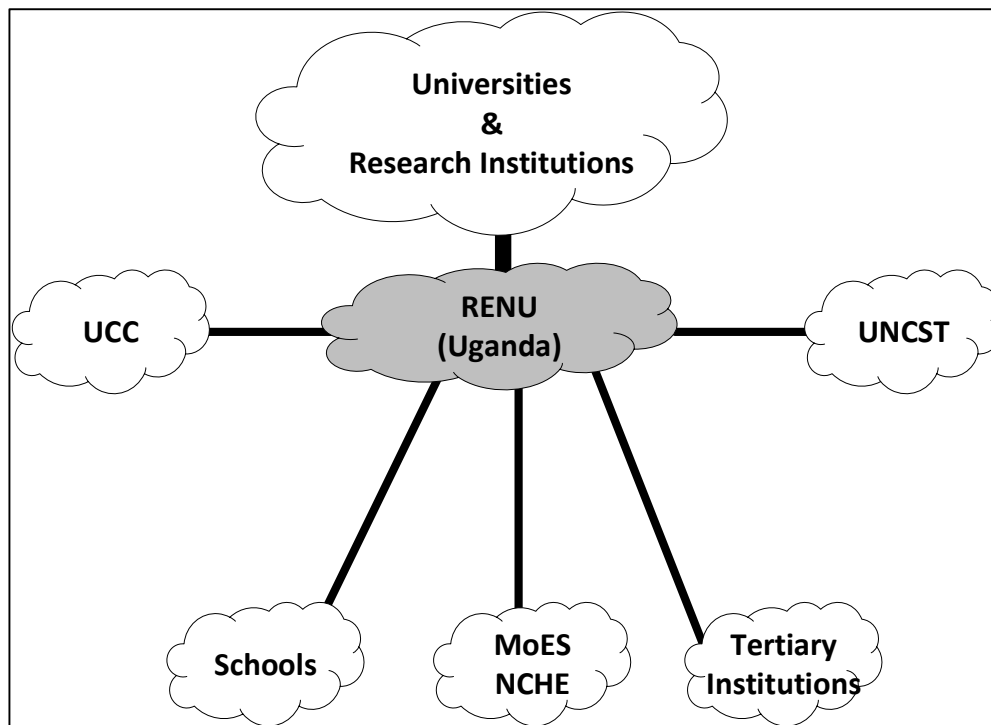
Hence,

$$\int \frac{8-6x}{(x+3)(x^2+4)} dx = \ln\left(\frac{125}{128}\right)$$
$$\Rightarrow \int \frac{8-6x}{(x+3)(x^2+4)} dx = \int \frac{2}{(x+3)} dx - \int \frac{2x}{x^2+4} dx$$

RENU SERVICES AND PRODUCTS



Governance - Stakeholders



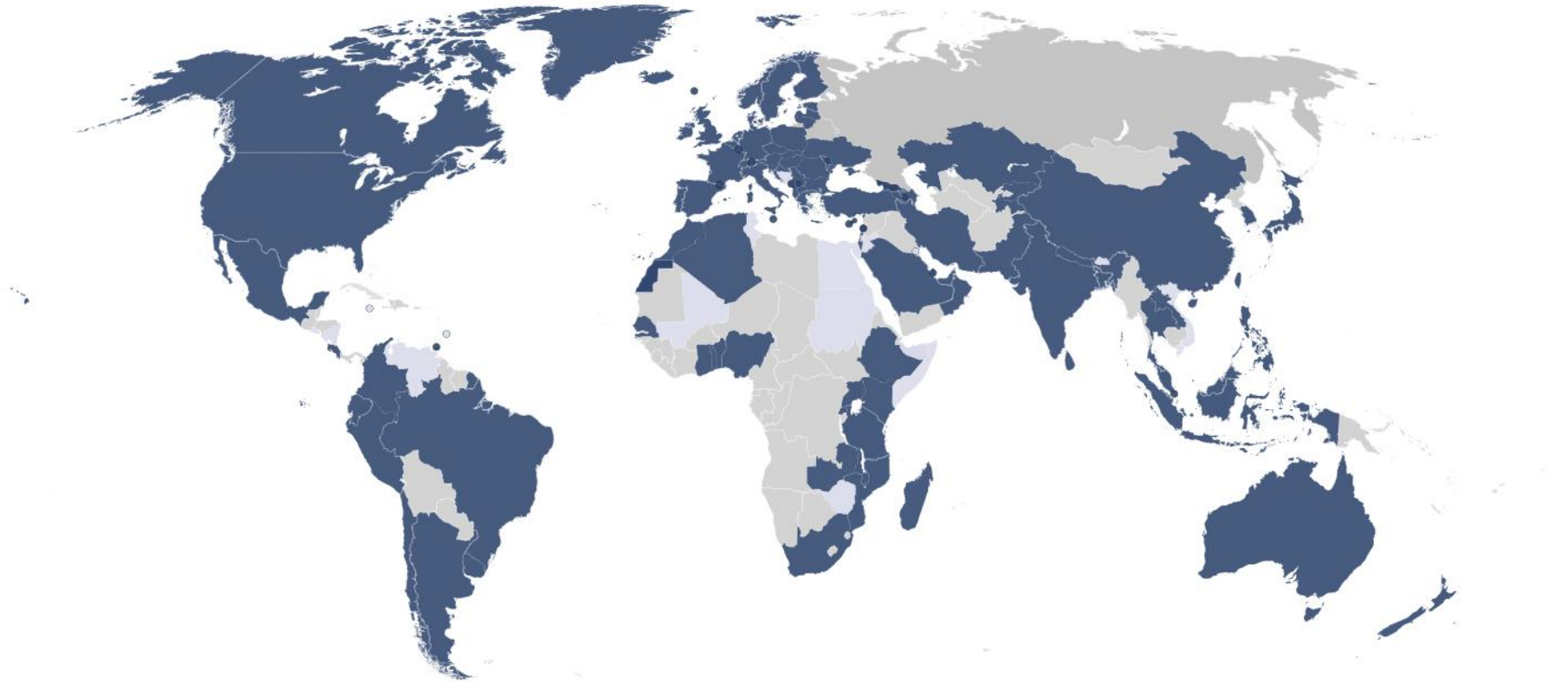


eduroam



- **eduroam (education roaming)** - roaming access service for the international R&E community.
- It allows students, researchers and staff from institutions to obtain **Internet connectivity** across campus and when visiting other institutions.





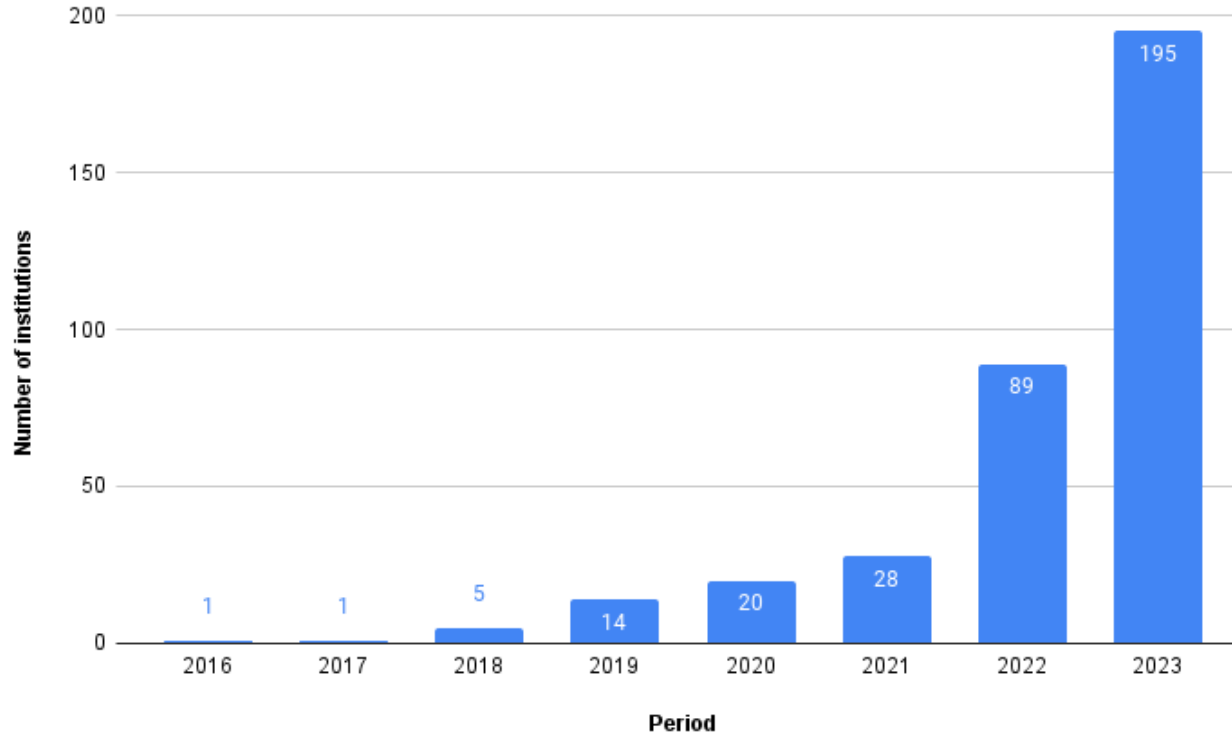
The eduroam logo, consisting of a series of concentric, wavy lines in shades of blue and purple above the word "eduroam" in a bold, blue, sans-serif font.



**I have signed up for
eduroam! Have you?**

BLOCK A

eduroam – Growth in participating Institutions

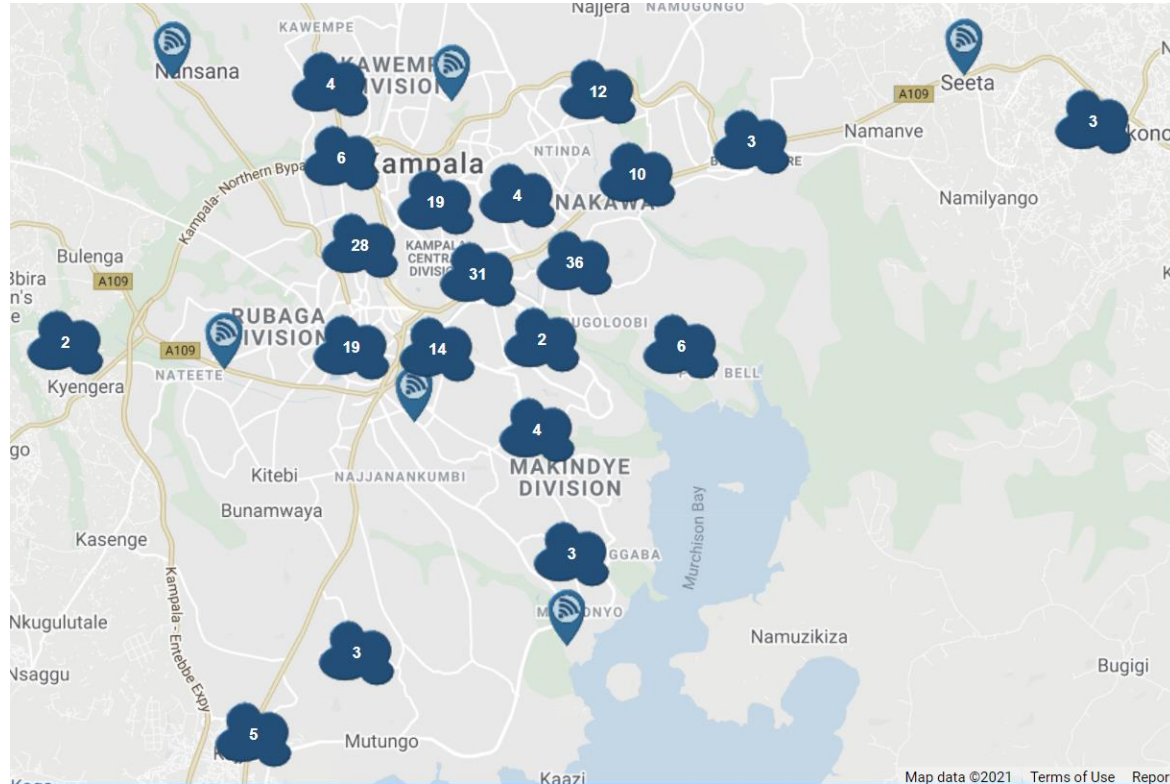


Different flavours of eduroam



- **On Campus eduroam** – Access to Internet connectivity inside an R&E Institution.
- **Metro eduroam** – Access to Internet connectivity off campus in specific hotspots.
- **eduroam on the Go** – Access to Internet connectivity using portable MiFi devices
- **Homelink eduroam** – Access to Internet connectivity at home/ place of comfort.

Metro eduroam – Coverage Map



<https://eduroam.renu.ac.ug/>



Hello, I am Professor,
and I'm here to tell you
about RENU's new product.

eduroam on the Go!

Anytime | Anywhere



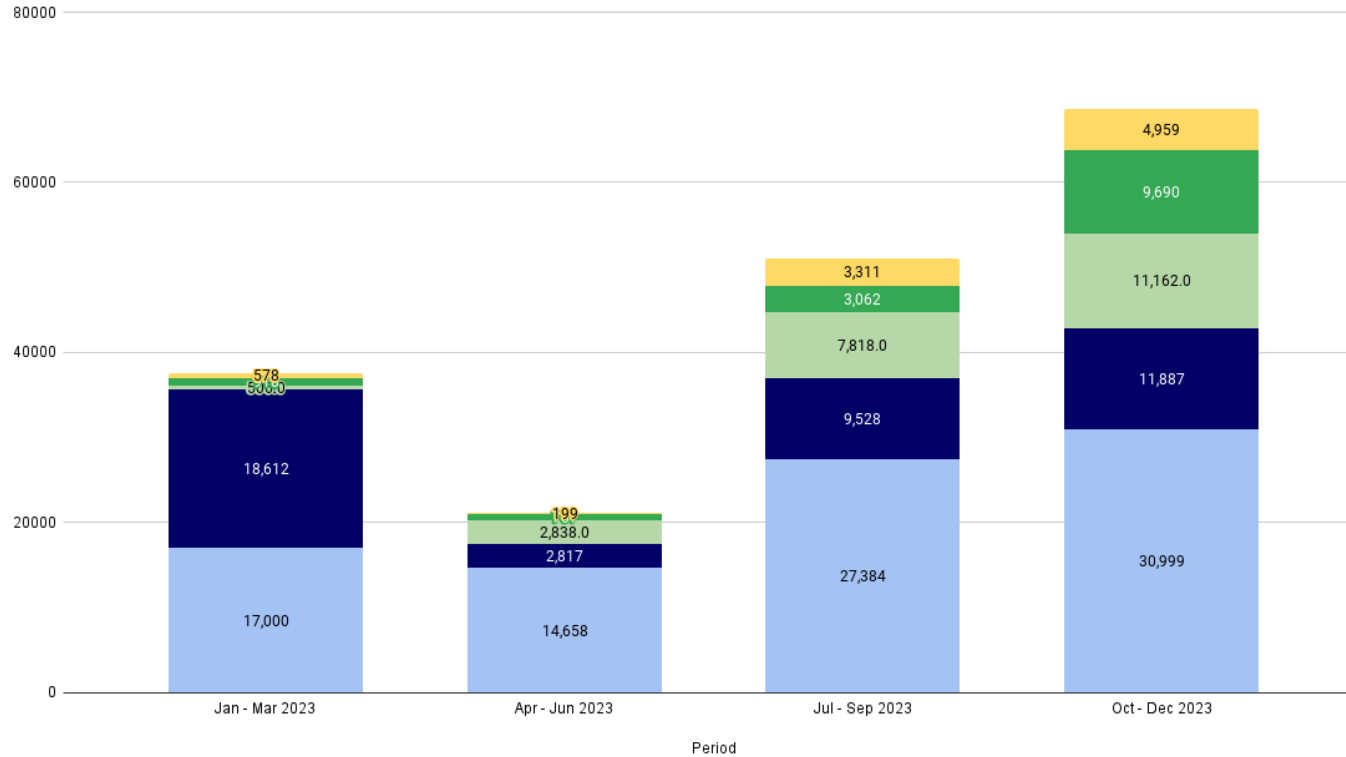
Enabling Research & Education Collaboration



eduroam – Unique Users



Homelinks eduroam OTG On Campus Campus Visitor Metro eduroam



Q1 – 37,614

Q2 – 21,219

Q3 – 51,103

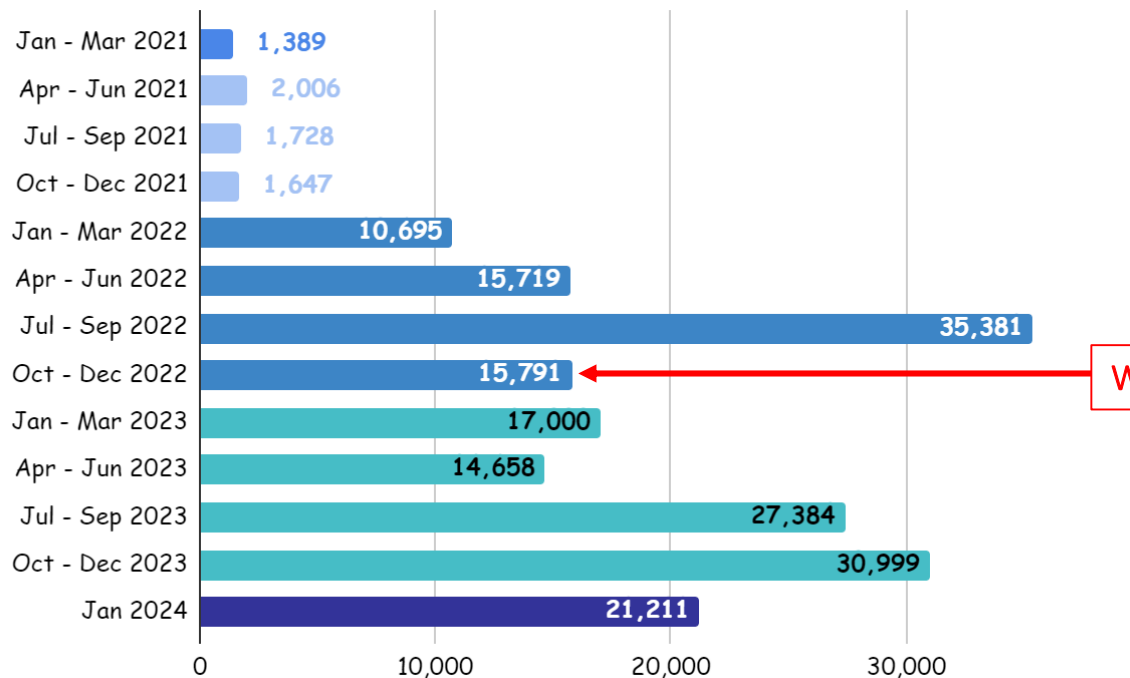
Q4 – 68,697



2023 - Metro eduroam - Successful Logins

17,620,099

Metro eduroam – Unique Users



What happened?

RENU Partners with Mesh++ to Manufacture Solar-powered Internet Routers in Uganda

- How do we scale up Metro eduroam and support institutions better.
- Sustainability?
 - Financial
 - Environment
 - Ecosystem
 - Social, political





mesh+

Wi-Fi Anywhere

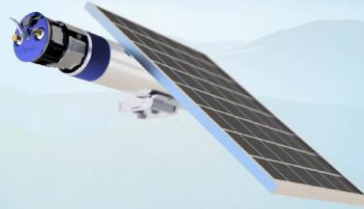


First Routers Made In Uganda



mesh+

Wi-Fi Anywhere
No Electricity? No Problem!

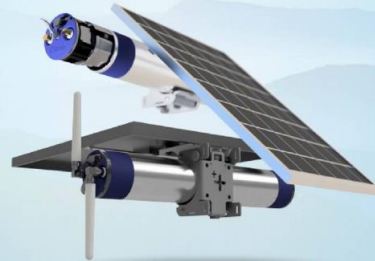


First Routers Made In Uganda



mesh+

Greening the Internet



3.7% of global greenhouse emissions is from
our gadgets and the Internet infrastructure.

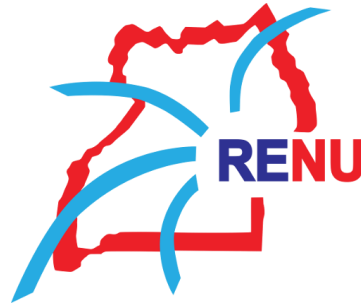
#FirstRouters
MadeInUganda



Local Manufacturing



- Job creation
- Import substitution
 - Source of forex from exports
 - Improving balance of payments
- Linking Academia and Industry
 - Research and development
 - Local intellectual property
- Backward and forward linkages
 - Sourcing local raw materials
 - Supporting local industries
- Uganda digital transformation
- Lowering cost of ICTs.
- Solving infrastructure inadequacies.



Thank You!

www.renu.ac.ug