

#### Motivation & Objectives

NSRC helps to establish and improve operational Internet ecosystems, both physical (network connectivity) and human (technical capacity), which are necessary for continued Internet growth and utilization to flourish. Our goal is to connect people.

#### **Key Results**

For more than thirty years, the NSRC has helped develop Internet infrastructure and network operations communities in 130+ countries, assisted thousands of universities, facilitated the deployment of dozens of Internet Exchange Points (IXPs) in all world regions, and provided technical guidance to dozens of ccTLD registries for stable, secure DNS operations in cooperation with ICANN.

In addition to technical training via network operator groups, national research and education network communities, and shared infrastructure such as Internet Exchange Points, the NSRC emphasizes Direct Engineering Assistance (DEA) to improve operational infrastructure, resulting in better and faster networks.

NSRC achieves this through targeted capacity building activities and partnerships with universities, RENs, NGOs, Internet Service Providers, industry, government and supranational agencies in Africa, Asia-Pacific, the Middle East, Latin America-Caribbean, and North America.



## What the NSRC Does

Works with numerous orgs worldwide to enhance network operations, affordable Internet access and human resource development of network engineers.

Leverages long-term built relationships with government, academia, industry, and private investments to facilitate building shared Internet infrastructure.



### **International Infra Contributions**

- NSRC played a key role in helping establish the first Internet connections and ccTLD delegations in Peru, Argentina, Brazil, South Africa, Zambia, Botswana, Namibia, Egypt, Guinea, Sri Lanka, Indonesia, Thailand, Kenya, Morocco, Liberia, Senegal, Tanzania, Cambodia, Lebanon, Saudi Arabia, Jamaica, Togo and others.
- The science-enabling activities have assisted with the formation of National Research and Education Networks (NRENs) in 50+ countries as well as 15 Regional RENs in Africa, Eurasia-Pacific, Latin America-Caribbean, and the Middle East.
- From 1992 through 2025, the NSRC facilitated the distribution and deployment of 850+ tons of network equipment and technical reference books to universities, hospitals, libraries, research facilities and Internet eXchange Points in 130 countries around the world.





# Regional and Country NOGs

All world regions and many countries now have their own Network Operator Group events and communities.

- APNOG, APRICOT, CaribNOG, LACNOG, MENOG, NANOG, PacNOG, SANOG, WALC
- Almost every European country has a NOG.
- Most economies in the Asia Pacific region have a NOG.
- Numerous African countries have a national NOG.

#### Why?

- International travel to attend a "big" NOG is not in everyone's reach.
- Country NOGs develop a local operator community to help manage operational issues, technical challenges, and create local interconnects.
- Peering and business relationships
- Technology discussions and operational best practices
- Compare experiences (suppliers, equipment purchasing discussions, etc.)
- Employment opportunities

Education Outreach and Training (EOT) Calendar for Internet Development maintained by NSRC and the community

https://nsrc.org/calendar





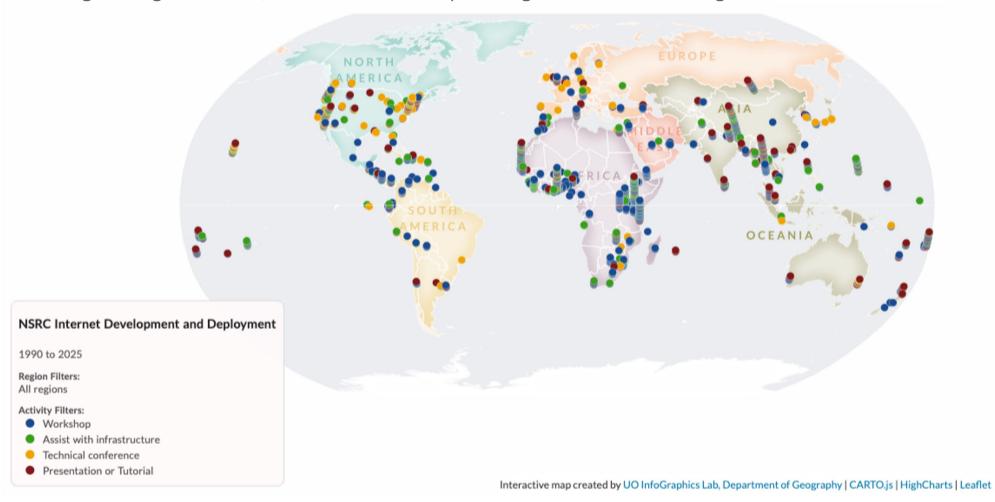
### The NSRC Model

- Technical training and human resource development activities
- Direct engineering assistance (DEA) to build operational infrastructure
- Participatory development (request-driven via international partners)
- Local hands cultivating local expertise (scaling workforce impacts)
- Catalyzes and assists networking within the least connected regions of the world



# 1215+ Field Activities & 61,000 Trained

Approximately 35% of the participants trained in NSRC educational programs, engaged in direct engineering assistance, or received fellowship funding from the NSRC during 2024-2025 were women.



# **Working with PacNOG**

PacNOG 36, December 2025, Rarotonga... and...



PacNOG 3

PacNOG 35: June 2025, Suva PacNOG 34: November 2024, Apia PacNOG 33: June 2024, Guam PacNOG 32: November 2023, Nuku'alofa PacNOG 31: June 2023, Port Vila PacNOG 30: August 2022, Suva PacNOG 29: December 2021, Online PacNOG 28: July 2021, Online PacNOG 27: December 2020, Online PacNOG 26: July 2020, Online PacNOG 25: December 2019, Suva PacNOG 24: July 2019, Apia PacNOG 23: December 2018, Majuro PacNOG 22: July 2018, Honiara PacNOG 21: December 2017, Nuku'alofa PacNOG 20: July 2017, Suva PacNOG 19: November 2016, Nadi PacNOG 18: November 2015, Guam



PacNOG 2: June 2006, Apia

PacNOG 1: June 2005, Nadi





# **Pacific Region**

Over 14,300 trained across 435 events





















## **NSRC** Work in the Pacific Islands

Between 1990 to 2025 NSRC has worked with these Pacific Island countries

American Samoa Christmas Island

Cook Islands

Fiji

French Polynesia

Guam

Kiribati

Northern Mariana Islands

Micronesia

Nauru

New Caledonia

New Zealand

Niue

Palau

Papua New Guinea

Philippines

Samoa

Solomon Islands

Timor-Leste

Tokelau

Tonga

Tuvalu

PacN

Vanuatu

#### PacNOG: <a href="https://pacnog.org/">https://pacnog.org/</a>

- First meeting June 2005 in Nadi, Fiji
- 36 PacNOG meetings since 2005. NSRC has participated in all of them.
- Primarily for technical training of network operators
- Conference for network operators to hear updates, developments, and discuss technology best practices for the Pacific Islands

NSRC is engaged by invitation with the Google Pacific Connect Initiative.







rth November - 1st December, 2023















### **NSRC Volunteers and Instructor-Trainees**

### The best way to reinforce your knowledge of a subject is to share it.

- NSRC's track record of engaging world-class experts to assist with education, outreach, and training programs as volunteers in NSRC activities provides enormous value-add benefits.
- The technical, engineering and teaching assistance provided pro bono by hundreds of colleagues from the Internet Engineering Task Force (IETF), NOGs, Internet2, Energy Sciences Network, CENIC, Regional Internet Registries (RIRs), ICANN, ISOC, Google, Amazon, Apple, Juniper and colleagues from universities and R&E networks all over the world greatly contributes to the success of the NSRC's international Internet development activities.
- Select participants from NSRC training programs volunteer to be instructor-trainees to expand their skills, take more expertise back to their home environments, and spread it further.



### **NSRC Sponsors and Supporters**



ICANN

Internet Society

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Richard A. Karp Foundation

NetworkTheWorld.org





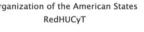
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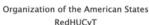
















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