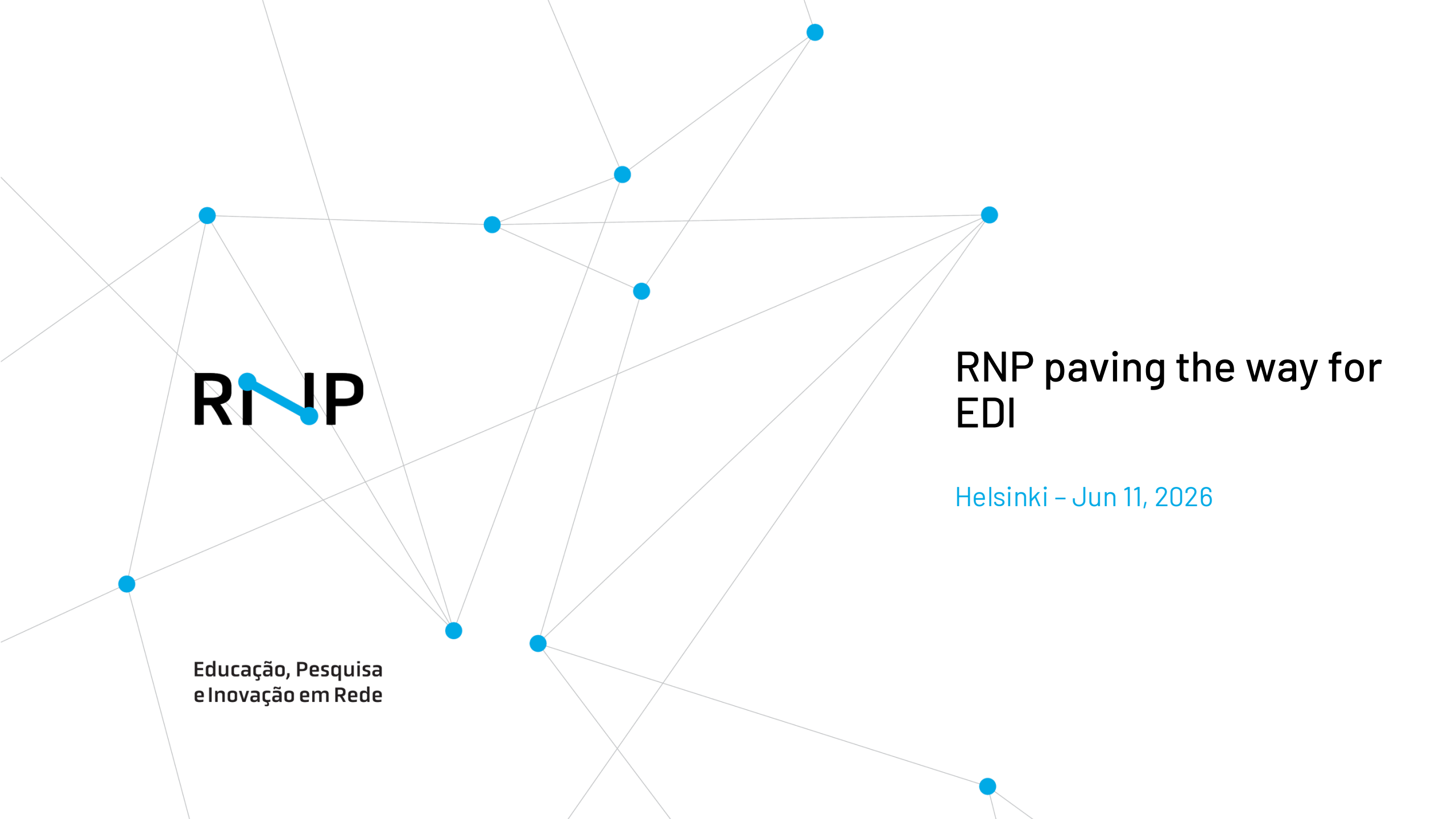




RiNP

**Educação, Pesquisa
e Inovação em Rede**

**RNP paving the way for
EDI**

Helsinki – Jun 11, 2026



Brazil and its challenges for growth

Brazil

A continental country: **8.5 million km²** (Brazilian Institute of Geography and Statistics - IBGE)

Population: **213 million people** (Brazil Communication Company - EBC)

GID: **US\$ 2.3 trillion** (2025): 11th largest economy (CNN Brasil)

Per capita income: **US\$ 2,000–4,800** per year (Trading Economics)



Education

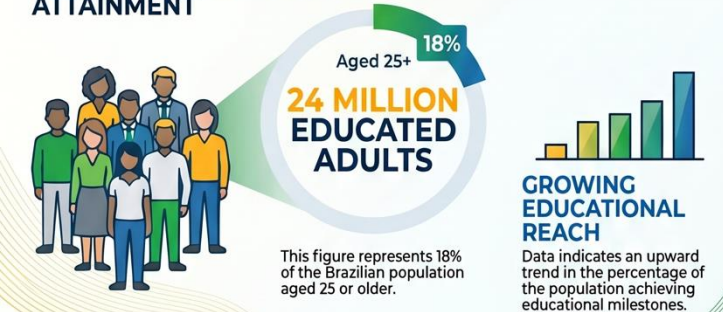
Graduates: 24 million people. 18% (↑) of the population aged 25 or older has completed higher education (CNN Brasil)

Higher education institutions: 2,600; public institutions generally perform better but are fewer in number (Ministry of Foreign Affairs of Brazil - MRE)

Basic education schools: 137,000; private schools generally perform better but are fewer in number (National Institute for Educational Studies and Research Anísio Teixeira - INEP)

THE BRAZILIAN EDUCATIONAL LANDSCAPE: ATTAINMENT AND INSTITUTIONS

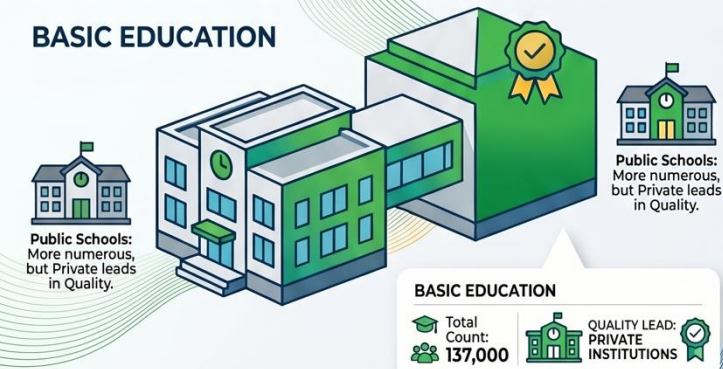
NATIONAL EDUCATIONAL ATTAINMENT



HIGHER EDUCATION



BASIC EDUCATION



Education for all

Reducing inequalities:
affirmative action policies
(MRE)

Prioritizing basic education:
Open University of Brazil
(Coordination for the
Improvement of Higher
Education Personnel -
CAPES)

Use of 5G in schools for
underserved populations
(National
Telecommunications
Agency - ANATEL)



— Healthcare

Public Unified Health System (SUS)

Teaching healthcare facilities: More than 4T out of 44T Health Basic Units

More Physicians and Specialists using telehealth and expanding 23T Physicians

Brazilian Telehealth Network in small towns

5,7 M Telehealth Services in 2025

52,6% out of 5570 municipalities receiving Telehealth Services





The importance of information technologies



Importance of ICTs for Brazil

- Equity -> Equal opportunities for all individuals
- Diversity -> Rights of minority groups
- Inclusion -> Access for everyone

The Three Pillars of Social Justice: Equity, Diversity, and Inclusion





RNP's contributions

Sistema RNP 2025

Educação, Pesquisa e Inovação em Rede

Support for higher education institutions and healthcare facilities: +1,800 connected units collaboration between themselves.

Classes de organizações usuárias

- Instituições de educação superior e pesquisa
- Estabelecimentos de saúde com ensino e pesquisa
- Ambientes promotores de inovação (parques e polos tecnológicos)
- Agências de fomento à pesquisa
- Museus e instituições culturais
- Empresas inovadoras

Abrangência

- 800 organizações atendidas
- 140 unidades de saúde integradas à RUTE
- 27 Pontos de Presença Estaduais
- 1,8 mil pontos conectados

PoPs	Estado	Informação	Estado	Informação	Estado	Informação
AC	UFAC	MA	UFMA	RJ	CBPF	
AL	FAPEAL	MG	UFMG	MG	UFRR	
AM	UFAM	MS	UFMS	RO	UNIR	
AP	UNIFAP	MT	UFMT	RR	UFRR	
BA	UFBA	PA	UFPA	RS	UFRGS	
CE	UFC	PB	UFPB	SC	UFSC	
DF	RNP	PE	ITEP	SE	UFS	
ES	UFES	PI	FAPEPI	SP	USP	
GO	UFG	PR	UFPR	TO	UFT	

Rede e-ciência

11 instituições usando a rede

Centro Nacional de Dados do Sistema RNP

3 CNDs implementados

Global Research and Education Network (GREN)



- Asia-Pacific Europe Ring (AER)
- Americas Light (Amlight)
- Advanced North Atlantic (ANA) consortium
- Asia Pacific Oceania network (APOnet)
- Atlantic Pacific Research and Education Exchange (AP-REX)
- Sydney, Perth e Singapura (Indigo)
- Japão, Guatemala e Austrália (JGA)
- South African rbe network (SANReN/TENET)
- Building the Europe Link with Latin America (BELLA)

VELOCIDADES DAS CONEXÕES

- Capacidade para expansão 4 Tb/s
- 300 Gb/s
- 200 Gb/s
- 100 Gb/s
- 3 CNDs implementados

Interiorização

- 19 infovias estaduais
- Rotas das infovias estaduais
- Rotas da infovia nacional

REDECOMEP

- 183 cidades com redes comunitárias

Nota: A evolução da infraestrutura nacional de alto desempenho é financiada pelo Programa Ciência, Tecnologia e Inovação (CTI), com recursos do Fundo Nacional de Desenvolvimento Científico e Tecnológico (PRONEX).



ACESSE O QR CODE PARA INFORMAÇÕES SOBRE A NOSSA REDE E ABRANGÊNCIA NACIONAL

RNP

MINISTÉRIO DA CULTURA

MINISTÉRIO DA DEFESA

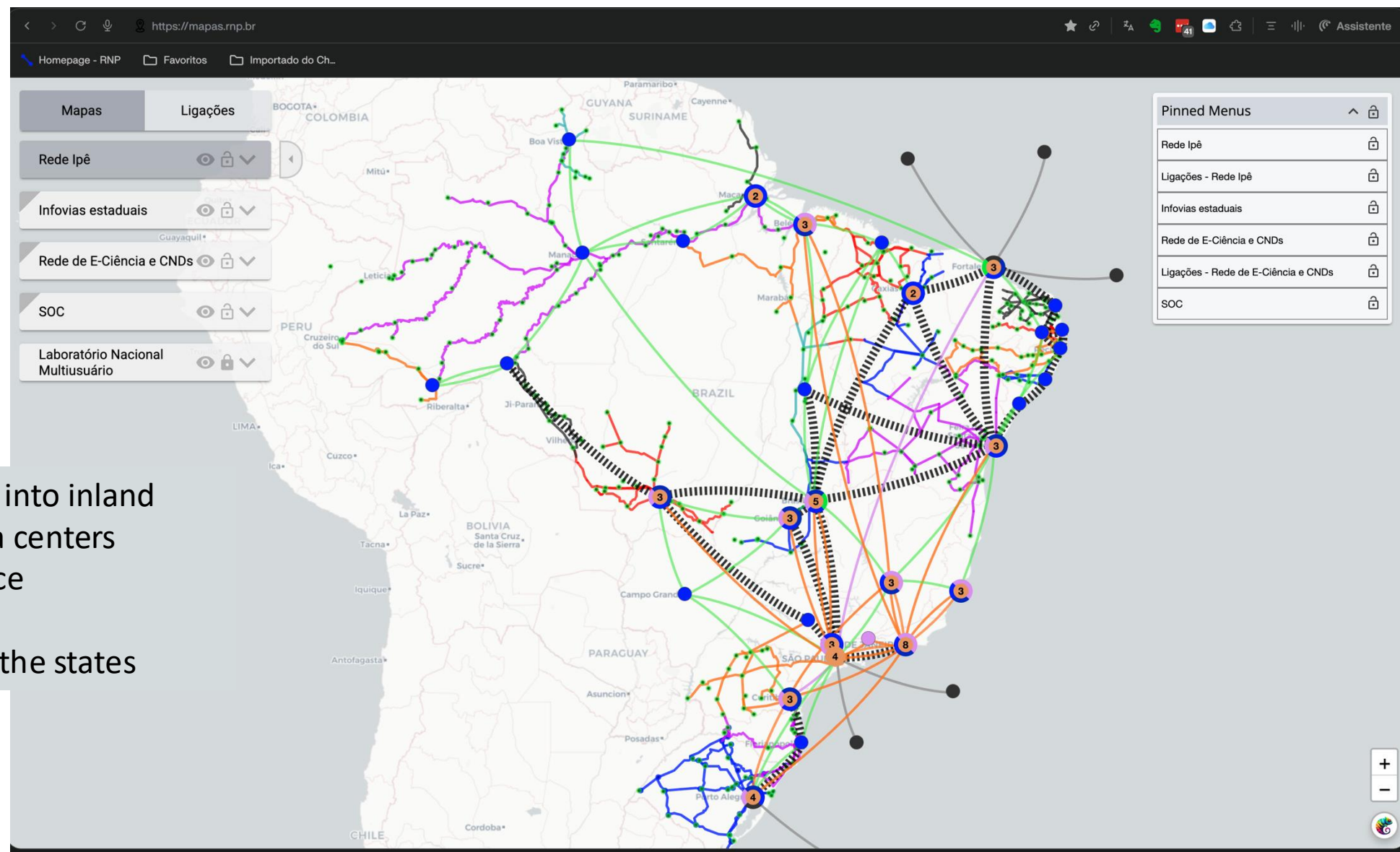
MINISTÉRIO DA SAÚDE

MINISTÉRIO DAS COMUNICAÇÕES

MINISTÉRIO DA EDUCAÇÃO

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INOVAÇÃO

GOVERNO FEDERAL
BRASIL
UNIÃO E RECONSTRUÇÃO

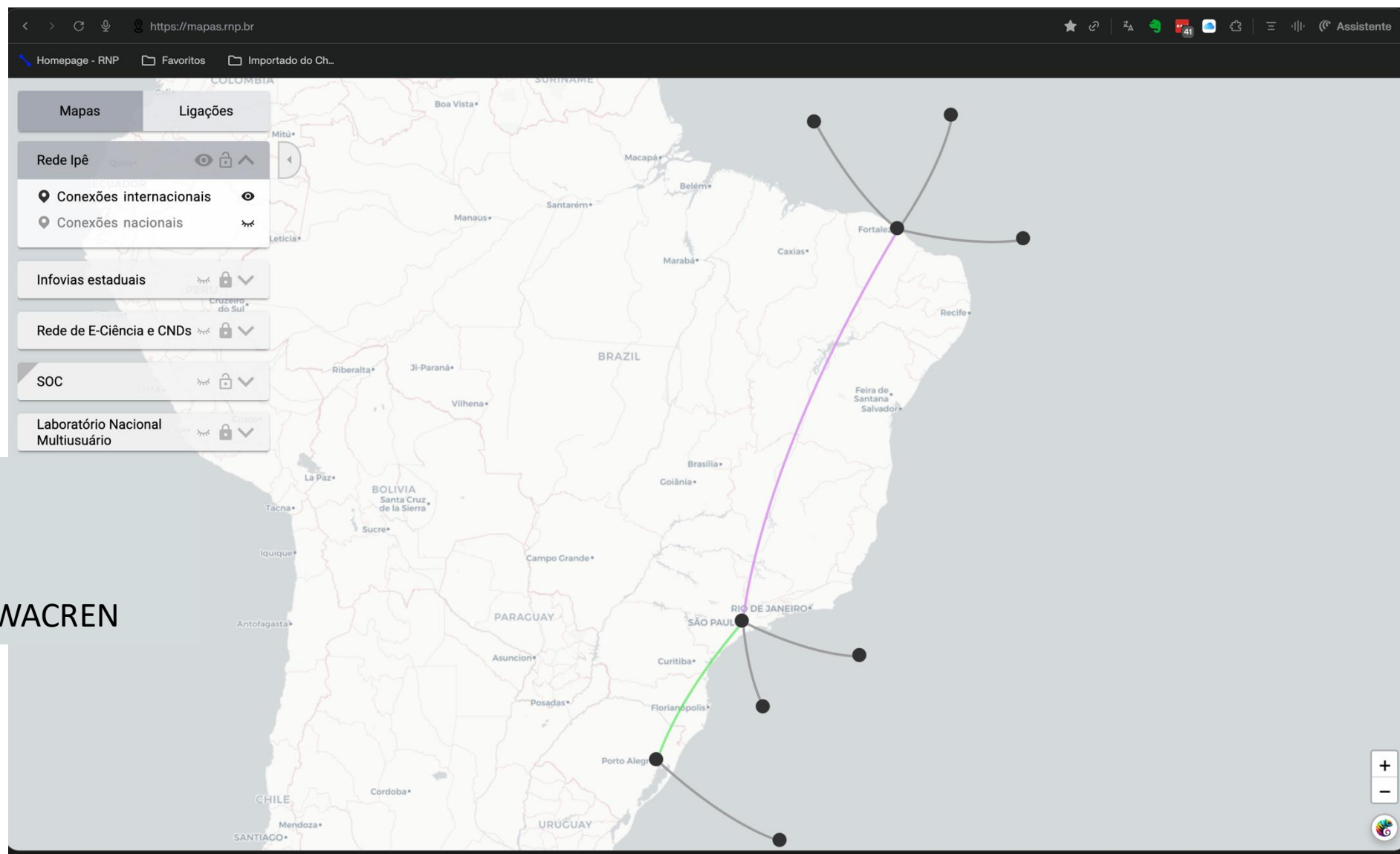


Expansion of the network into inland regions with security, data centers partnerships, and e-Science

42,000 km of fiber across the states

Internationals collaborations

<https://mapas.rnp.br/>



Partnership with

- RNP <-> Internet 2
- RedCLARA <-> Géant
- RedCLARA <-> AngoREN/WACREN



Telemedicine University Network

142 units

31 SIGs (daily scientific sessions)

Brazilian Telehealth Network

More than 60 units, 40 also RUTE units serving the public Unified HealthCare System SUS

The Brazilian telehealth network

is primarily anchored by the **National Telehealth Network Program** (*Telessaúde Brasil Redes*) and the **Telemedicine University Network** (RUTE), integrating digital health across the public Unified Health System (SUS) and universities.

Regional and NRENs International Colaboration

RUTE-ALC Latin America and Caribien: RedCLARA, RNP, REUNA, RENATA, CEDIA, CUDI, RedCONARE

Community of Portuguese Speaking Countries CPLP

WG CPLP Telehealth

Health Ministries and NRENs from Brazil, Mozambik, Guiné Bissau and Angola (RNP, MoRENet, RNEP AngoRen)

Others RNP Initiatives



Subfluvial information highways

- 13,200 km of subfluvial fiber in the Amazon
- Hackers do Bem (Ethical Hackers Program)
- 130,000 students in cybersecurity



Internet Brasil

- eSIM for students in public schools



Escolas Conectadas (Connected Schools)

- Pilot project to connect school networks with university-grade connectivity



SBRC+ (new)

- Legacy of a national event: WRNP and SBRC



Connecting people. Empowering education. Strengthening Brazil.





Where Are We Going?

EDUCATION
TODAY.
FUTURE
TOMORROW.

*We intend to promote science and
education for all*

Thank you!
Gorgonio Araújo
gorgonio.araujo@rnp.br



MINISTÉRIO DA
CULTURA

MINISTÉRIO DA
DEFESA

MINISTÉRIO DA
SAÚDE

MINISTÉRIO DAS
COMUNICAÇÕES

MINISTÉRIO DA
EDUCAÇÃO

MINISTÉRIO DA
CIÊNCIA, TECNOLOGIA
E INOVAÇÃO

