

# Feedback from NREN user

NOVEMBER  
2020

UbuntuNet | 2020  
**CONNECT**

**Virtual Event**

**18- 20 November 2020**



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# Agenda



## **1. KEY FIGURES: SORBONNE UNIVERSITY**

## **2. LANDSCAPE OF NETWORKS**

RENATER – French NREN and access networks  
Géant – Pan-European data network

## **3. FIRST LOCKDOWN IN MARCH**

## **4. SECOND LOCKDOWN IN NOVEMBER**

# 1

SORBONNE UNIVERSITY

# Sorbonne University



- 55 000 students
- 10 000 staff members including 6400 teachers and researchers
- 450 000 alumni
- Top 50 in international ranking
- Involved in partnerships
  - » Europe (Germany, Denmark, Italy, Czech Republic, Poland, Ireland,...),
  - » Latin and North America,
  - » Africa, Asia, and Australia

→ Sorbonne University needs flawless communication networks to exchange with its staff, students and partners.

# 2

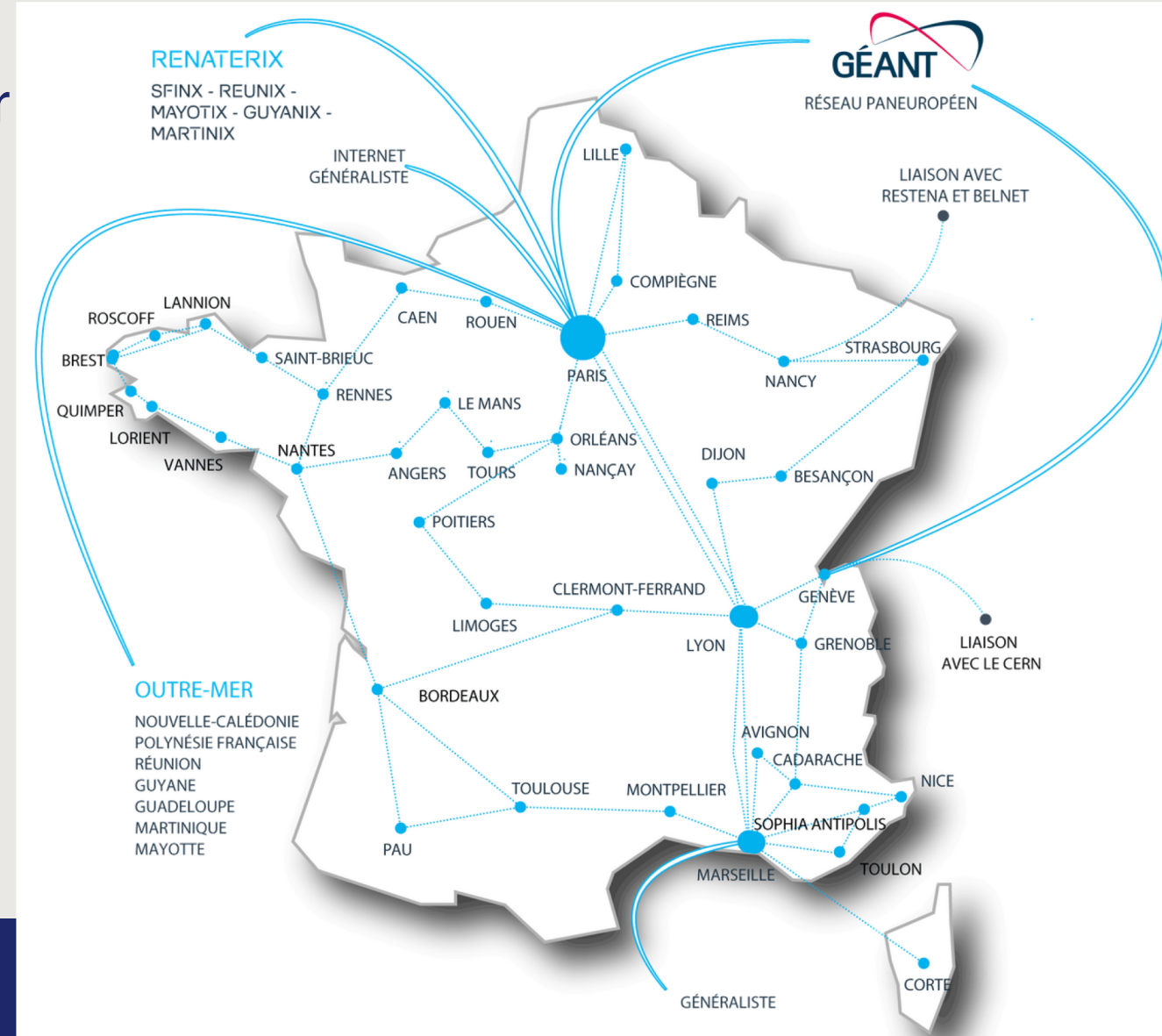
## EUROPEAN RESEARCH AND EDUCATION NETWORKS

# French NREN - RENATER

- Reliable and secure national fiber infrastructure dedicated to R&E  
+1300 sites connected
- RENATER owns its infrastructure
  - Transports the national interministerial backbone
  - Transports specific research signals (Time frequency, LHC data, quantum keys...)



- Interconnects national HPC centers, datacenters, large research instruments



# RENATER Portfolio

## Connectivity :



SERVICES VPN  
par RENATER



SERVICES IP  
par RENATER



PARTENAIRE RIE  
par RENATER



EON  
par RENATER

## Identity :



IDENTITAS  
par RENATER



FÉDÉRATION  
par RENATER



NOMS DE DOMAINE  
par RENATER

## Security :



ANTI SPAM  
par RENATER



TCS  
par RENATER



SCAN'ER  
par RENATER

## Communication :



RENAVISIO  
par RENATER

## Collaboration :



PARTAGE  
ENVIRONNEMENT D'OUTILS COLLABORATIFS  
par RENATER



RENDEZ-VOUS  
par RENATER



FILESENDER  
par RENATER



EVENTO  
par RENATER



UNIVERSALISTES  
par RENATER



SOURCESUP  
par RENATER

## Mobility :



# GÉANT Pan-European Networks

ASSOCIATION



Géant is a pan-European data network

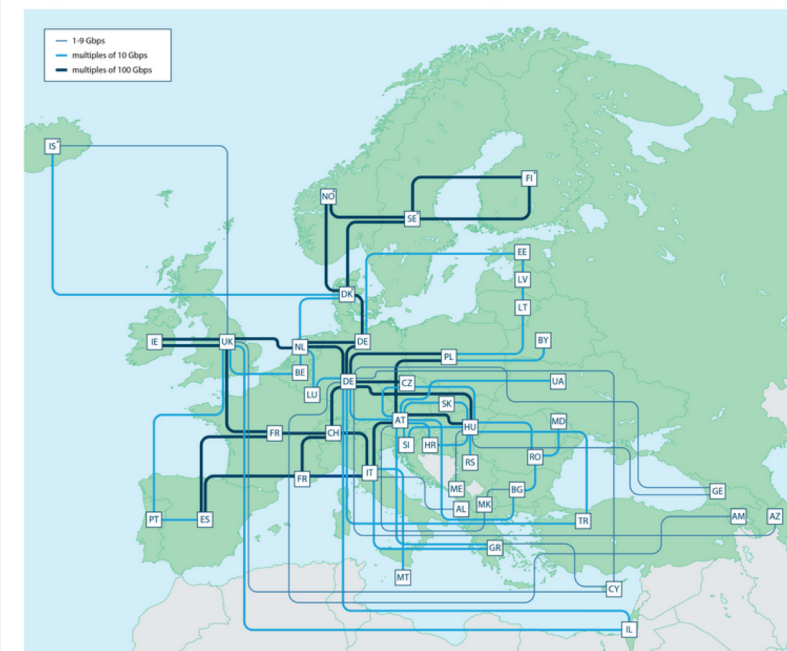
- Interconnects NREN inside Europe
- Interconnects Europe with a Global Research and Education network

For

- Connectivity
- Mobility
- Services authentication



GÉANT's pan-European **research and education network** interconnects Europe's National Research and Education Networks (NRENs). Together we connect over **50 million users** at 10,000 institutions across Europe.



GÉANT's pan-European network is funded by the GÉANT Project (GN4-2), which received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 731122. Connectivity to the Eastern Partnership countries (AM, AZ, BY, GE, MD, UA) is provided through the EaPConnect project, with 95% funding from the European Commission DG NEAR under grant agreement 2015-356353. The map shows topology as at December 2018. The GN4-2 and EaPConnect partners are listed below.



\*Connections between these countries are part of NORDUnet (the Nordic regional network)

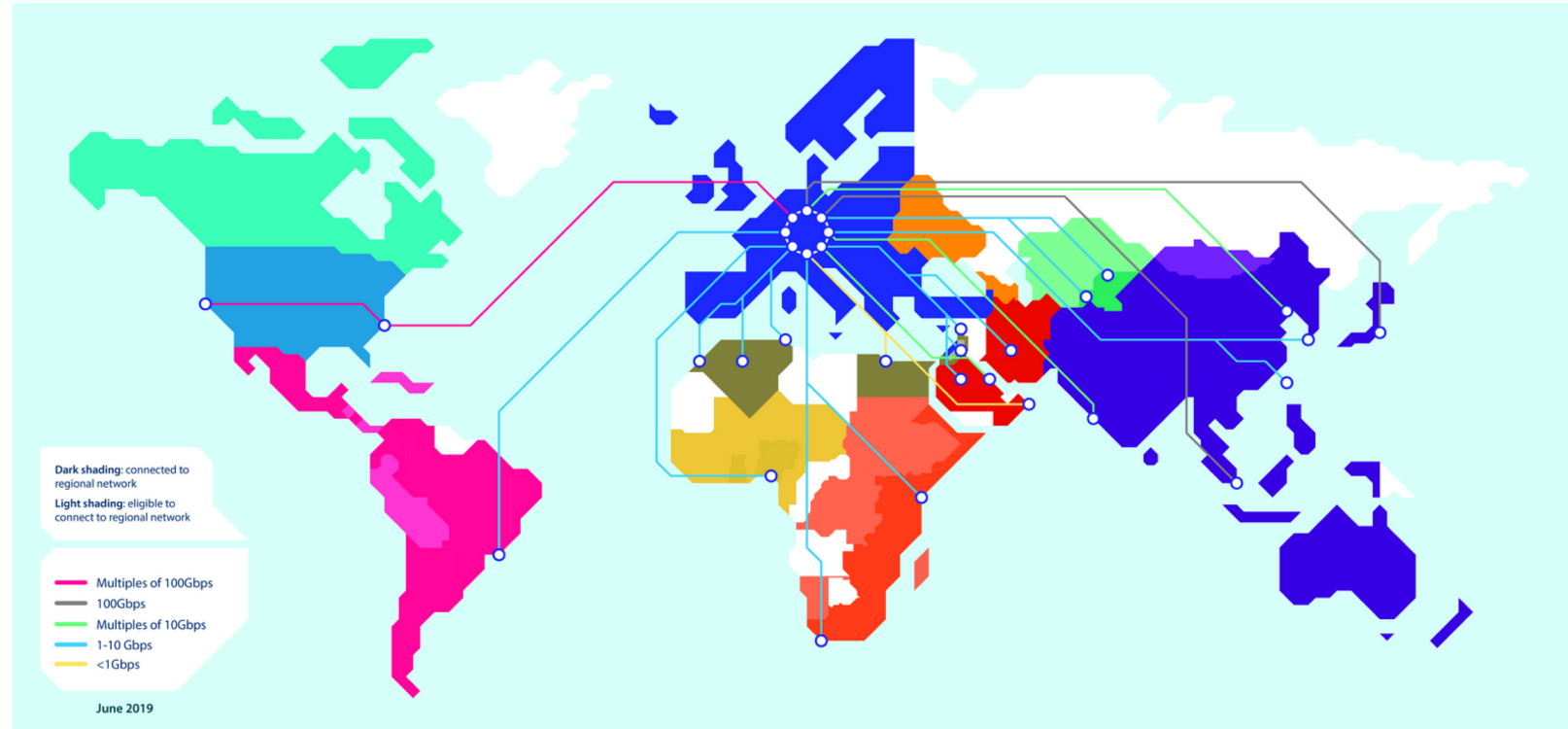


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# AT THE HEART OF GLOBAL RESEARCH AND EDUCATION NETWORKING



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# 3

LOCKDOWN IN MARCH 2020

# Lockdown – March 2020



## Sobonne University IT

- A never encountered experience
- Remote access has never experienced such an outstandingly high demand
- Generating user anxiety and IT staff discomfort

## NREN support

- First and foremost, connectivity
- Then availability and capacity

→ NRENs have in real time increased peering and exchange points with public operators to enable remote work.

→ They gave us time to find and provide commercial or non-commercial solutions for our users

# 4

CURRENT LOCKDOWN

# Lockdown – March 2020



We have learned from the previous one

- Don't ask too much to your NRENs, their first job is network connectivity
- Your infrastructures are more powerful than you thought, but stay alert and provide better solutions
  - » A webinar cluster in the cloud (80 servers, 8000 BBB sessions) to enable distance learning
  - » A cluster in the cloud to increase “on demand” capabilities

Our users

- Confident and ask for improvement
- IT infrastructure is not the only point, staff and students - especially scholarship recipients - need laptops

MERCI

THANK YOU FOR YOUR ATTENTION !

