

# The Role of NRENs in education

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*TF-EDU virtual mini conference*

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[www.geant.org](http://www.geant.org)



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**To provide an open, innovative and trusted information infrastructure for the European knowledge economy and to the benefit of society worldwide**



**A membership association for Europe's National Research & Education Networks (NRENs)**  
GÉANT Association



**Coordinates and participates in EC-funded projects**

Under Horizon 2020 the financial instrument for implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness



**Operates a pan-European e-infrastructure with connections to all regions of the world**

GÉANT network



**Manages a portfolio of services for research & education**

EduX



**Organises and runs community events & working groups**

TNC, task forces & special interest groups



## GÉANT Association supports and represents over 40 NRENs across Europe

Together they support over 10,000 institutions and 50 million academic users  
Including 20 million students for higher education





# A network of networks

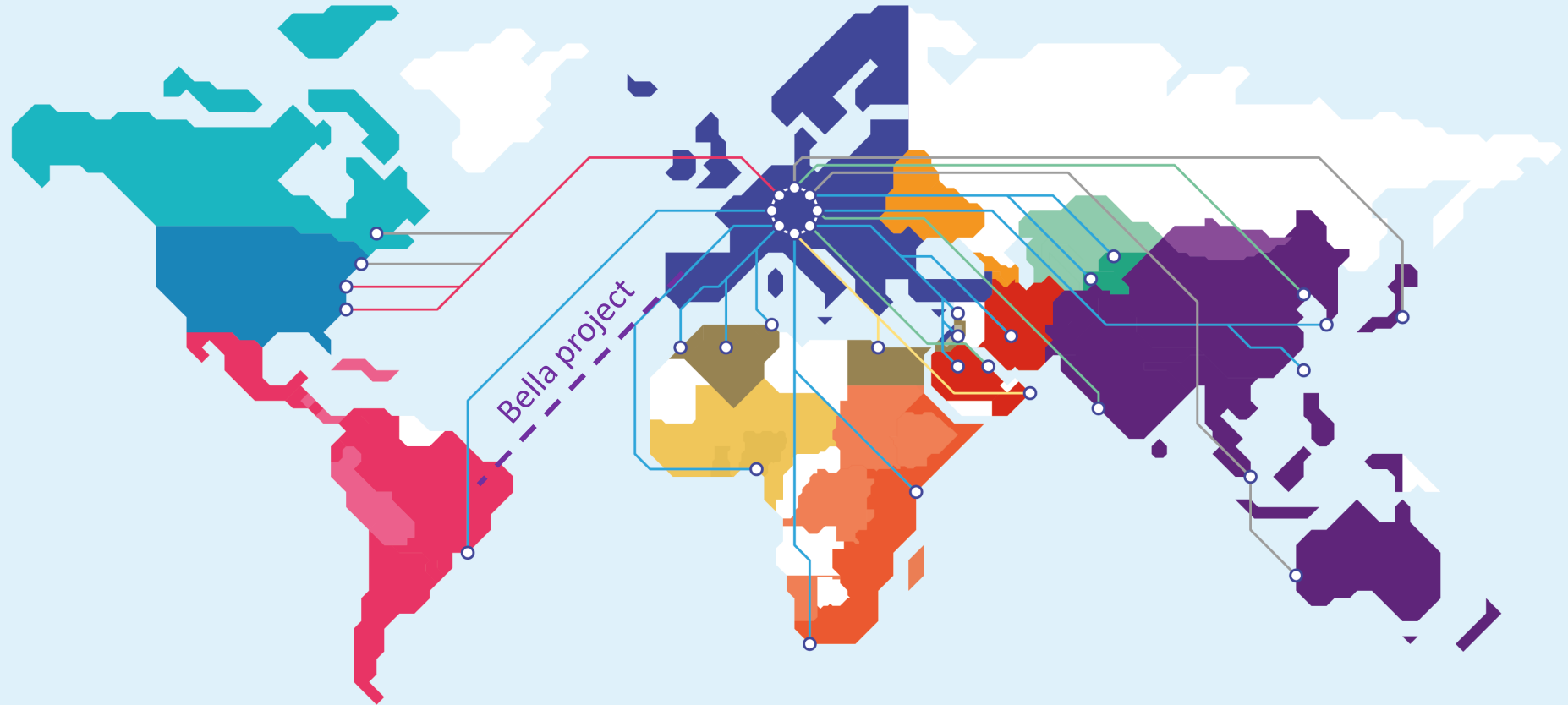
130

NRENs with speeds  
of up to multiples of  
100Gbps

over

100M

Students in higher  
education





# Advanced service portfolio

## Supporting users and enabling secure access to services



**eduroam** - secure global roaming access service *250+ million authentications per month* in 101 territories. This is a federated service



**eduGAIN** - interconnects identity federations around the world, simplifying access to content, services and resources ~ 3500 identity providers accessing services



**InAcademia** - Lightweight student validation service protecting student privacy



**eduTEAMS** - Making managing virtual teams easy



**EduVPN** – Secure Virtual Private Networking to create a safe environment for researchers and students who are using public WiFi access points



# Advanced service portfolio

## Cloud and Community services



### Cloud:

1. Community Cloud services provided by NRENs, Universities
2. Joint procurement offerings to R&E, IaaS, OCRE (Open Clouds for Research Environments)

**40 countries signed up in Europe and coordinating efforts across the world**

## GCP

**GÉANT Community Programme**, with knowledge transfer, skill development from NRENs, schools, topic experts, commercial companies share knowledge, experience and challenges during open task force meetings and workshops.

**TF-EDU**

**SIG-Marcomms**

**SIG-MSP**

**SIG-ISM**



# GÉANT community COVID-19 response to support online education

EU funded Up2University project (2017-2020) deployed within 2 weeks a cloud based NGDLE special platform openUp2U for all levels of education starting in Europe.

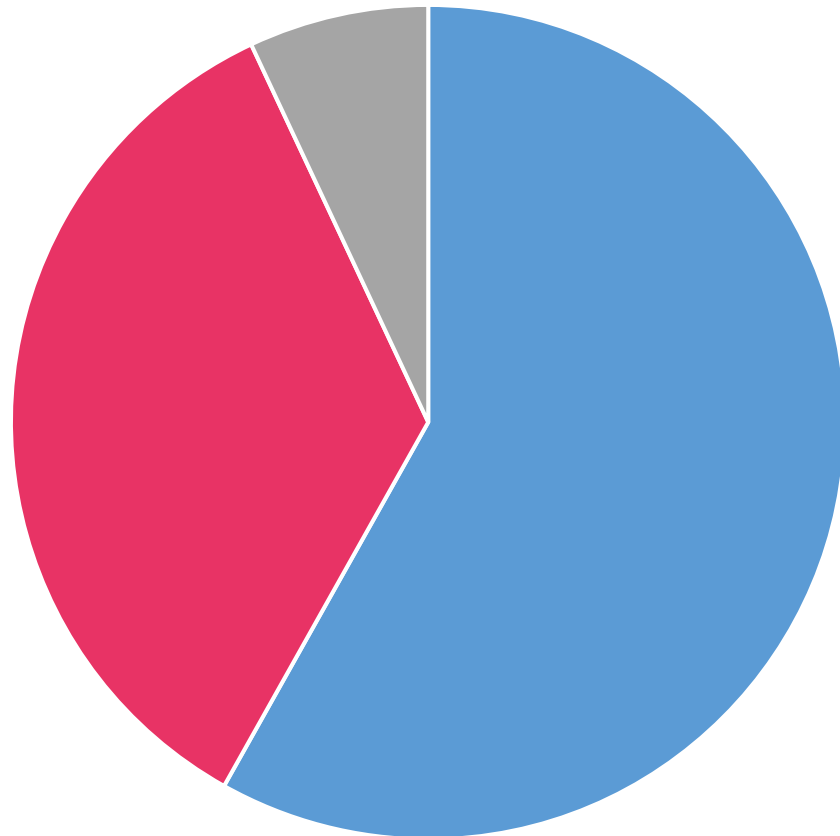


**openUp2U:** open-source, interoperable, GDPR compliant, modular, highly customizable. It includes 4 key tools: **Moodle** (Learning Management System), **eduMEET** (webRTC based Video Conferencing), **SWAN** (turn-key digital notebooks), **CERNbox** (SYNC and Share storage)

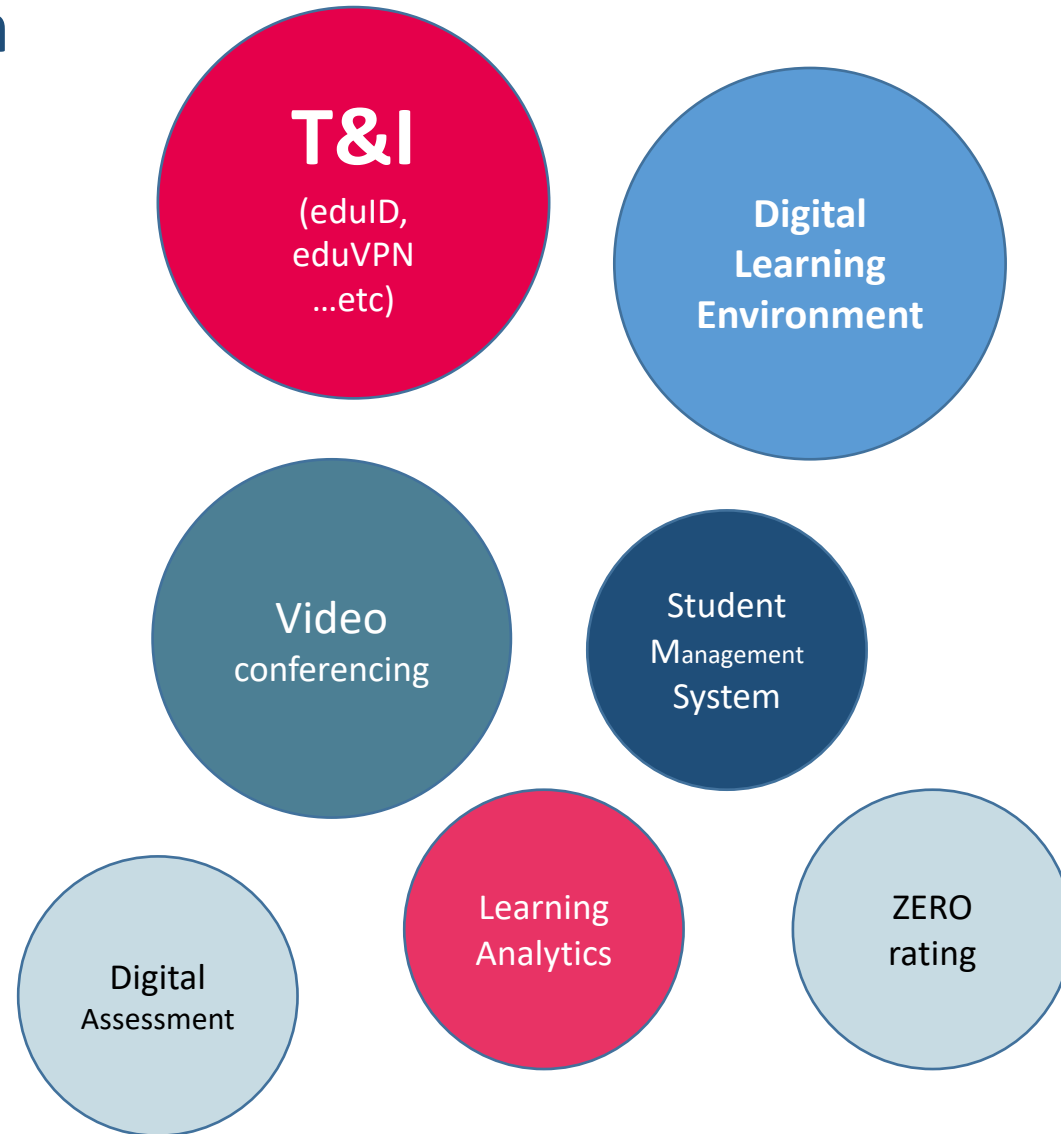


**eduMEET:** research and education community developed, open source software, **Secure** communication, **Trust** - on level of similar organizations, Trustworthy - Keeping the AV traffic inside our network (GÉANT + NRENs) as long as possible, **Low cost** compared with commercial solutions, WebRTC standards based and easy to use, No need for installation of custom applications or plug-ins which complicates using VC.

# Role of NRENs in education



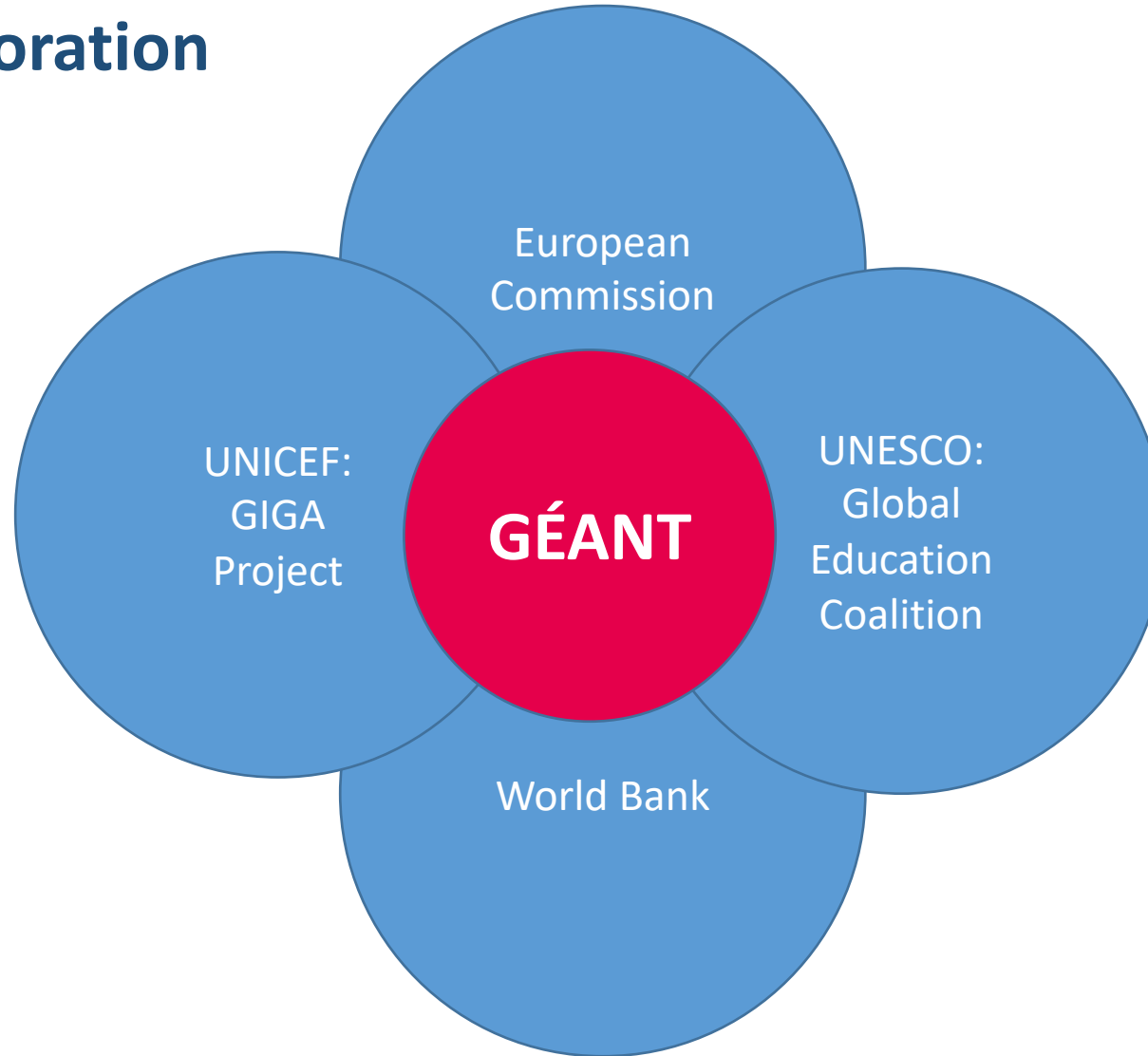
■ Provide education ■ Not in remit ■ N/a



More information:



# Collaboration





# Thank you

## Any questions?

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