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EaPConnect – making the future possible

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EU4Digital Steering Committee meeting (online) 15 November 2023

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EaPConnect
eapconnect.eu

Budget:	<p>Budget 1st Phase – €13M 2nd Phase - €10.5M (95% EU funding from DG NEAR)</p>
Duration:	<p>60 months (2nd phase) 1st phase: July 2015 until February 2021 2nd phase: started in July 2020 for 5 years</p>
Website:	<p>https://eapconnect.eu/</p>
Coordinating Partner:	<p>GÉANT</p>
Beneficiaries:	<ul style="list-style-type: none"> • GRENA (Georgia) • ASNET-AM (Armenia) • RENAM (Moldova) • URAN (Ukraine) • AzScienceNet (Azerbaijan)
European Associate Partners	<ul style="list-style-type: none"> • GARR (Italy), GRNET (Greece), DFN (Germany, PSNC (Poland), LITNET (Lithuania)

Connect

Integrate

Strengthen

SO1: Extend network infrastructure (digital highways) to scale-up scientific exchange across borders

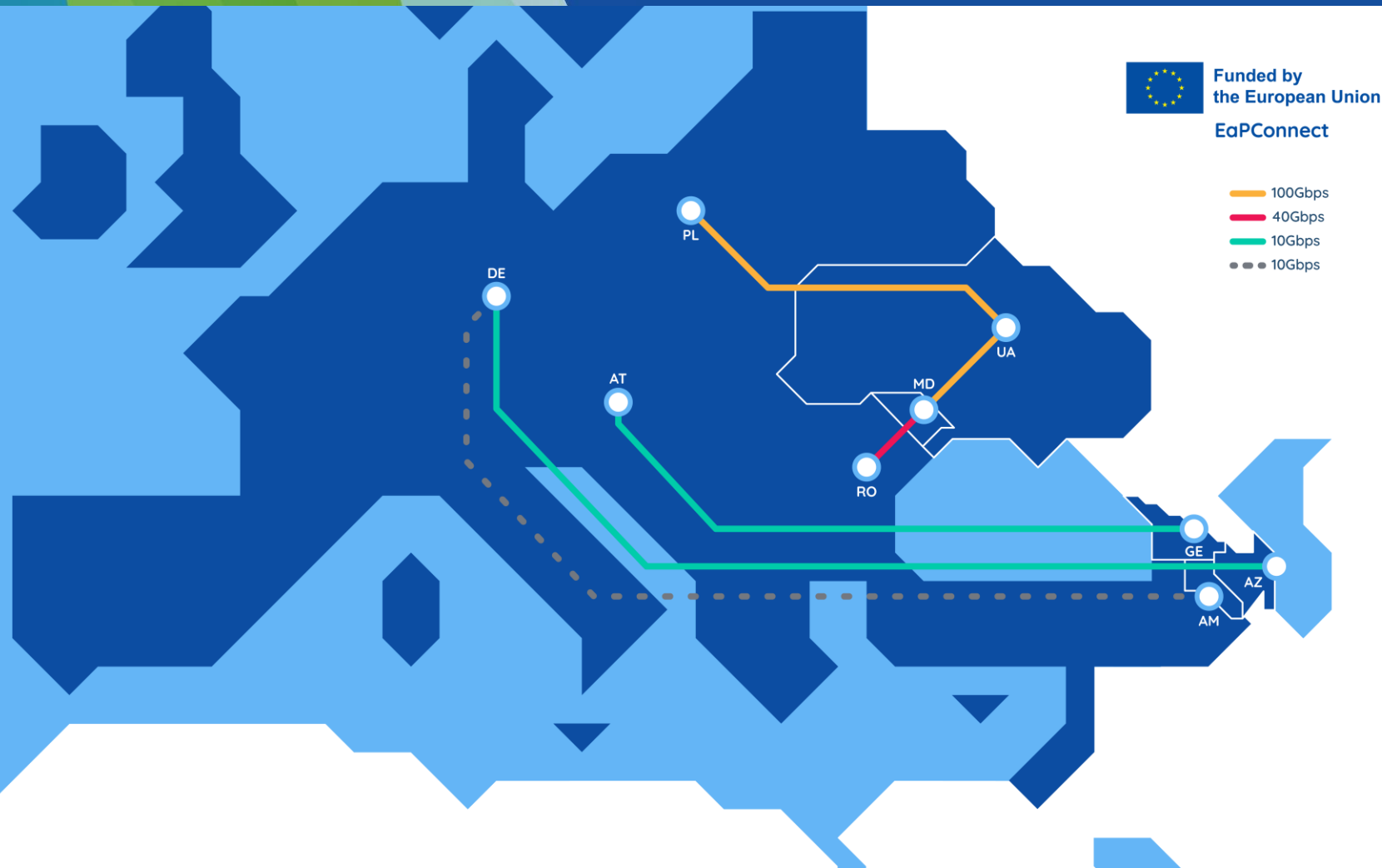
SO2: Increase the use of services implemented under EaPConnect and offer new services to enhance international cooperation in R&E.

SO3: Strengthen EaP NRENs' position in the national R&E ecosystems

About EaP NRENs



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EaPConnect

- 100Gbps
- 40Gbps
- 10Gbps
- 10Gbps

- RENAM (Moldova) *
- GRENA(Georgia)**
- URAN (Ukraine)*
- ASNET-AM (Armenia)
- AzScienceNet (Azerbaijan)

EU accession status:
* Candidate status
** Applicant status



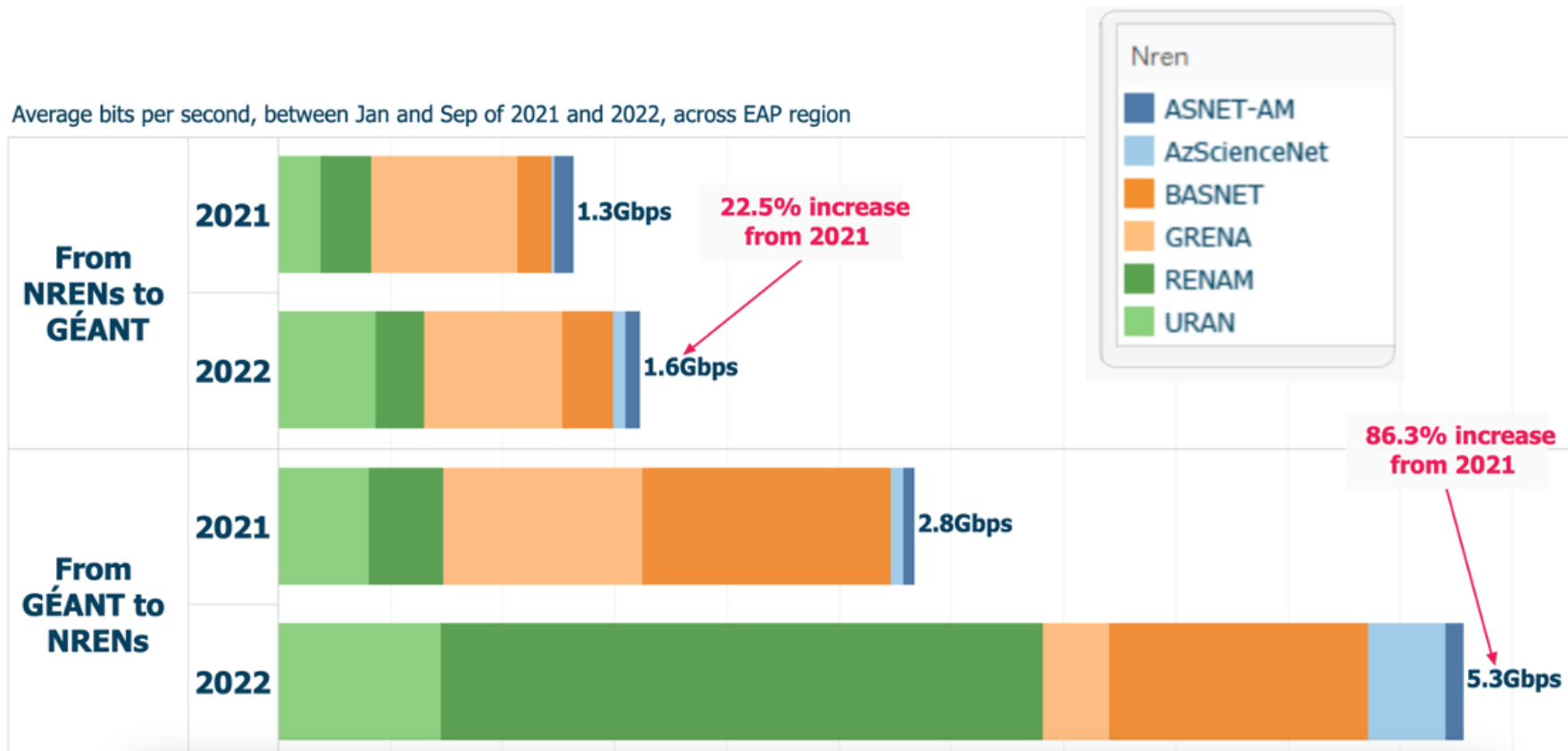
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EaPConnect – data traffic – it is getting busy!



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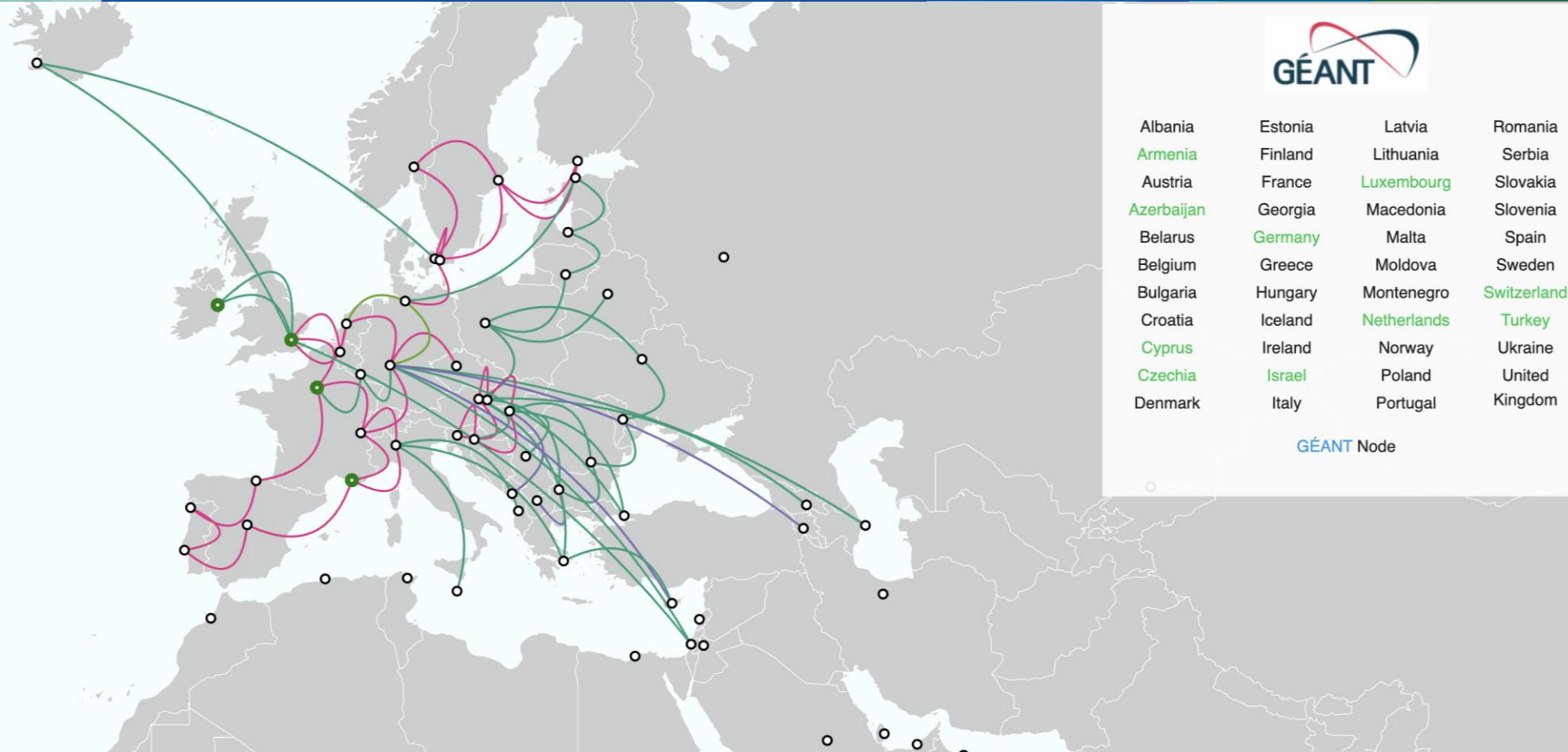
Being part of GÉANT community



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European research and education network GÉANT interconnects 42 National Research and Education Networks (NRENs)

- It serves 50 million users at 10,000 institutions across Europe and EaP countries, supporting all scientific disciplines
- 7 Petabytes of data carried per day
- Over 30% average annual increase in network traffic over last five years

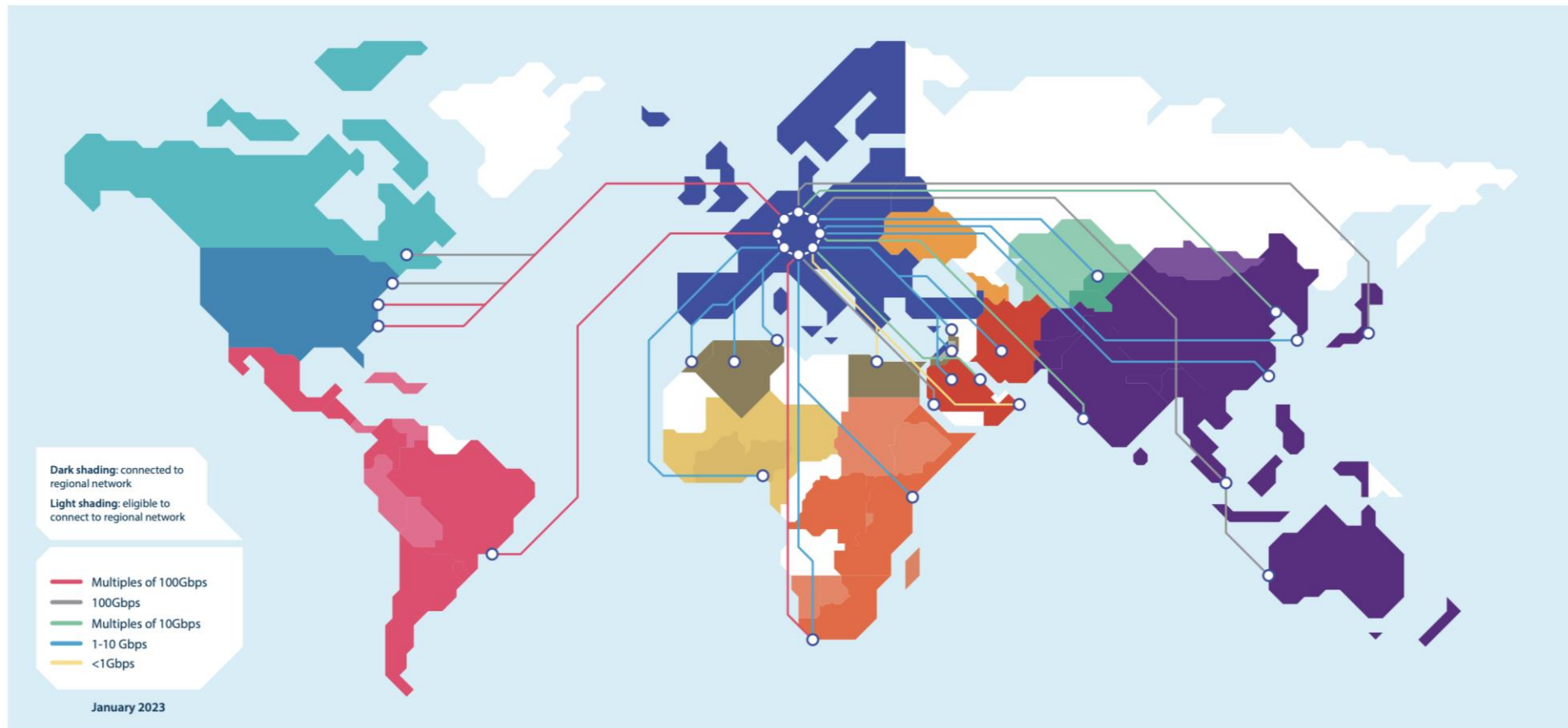


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<https://map.geant.org/>



AT THE HEART OF GLOBAL RESEARCH AND EDUCATION NETWORKING





	Armenia ASNET-AM	Azerbaijan AzScienceNet	Georgia GRENA	Moldova RENAM	Ukraine URAN
Number of connected institutions	52	65	62	29*	100**
Number of users	47000	85000	88000	77000	434000 (pre-war)

*The drop in the number of connected institutions in RENAM is the result of ongoing restructure of Research and Education sector in Moldova.

**The total number of connected institutions in URAN includes 70 R&E institutions and 30 commercial entities.

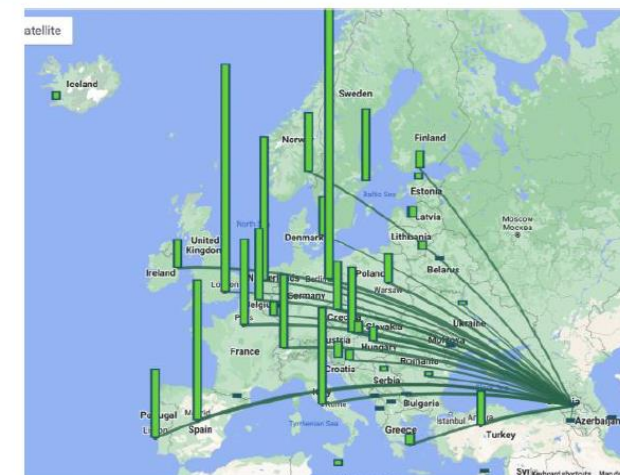
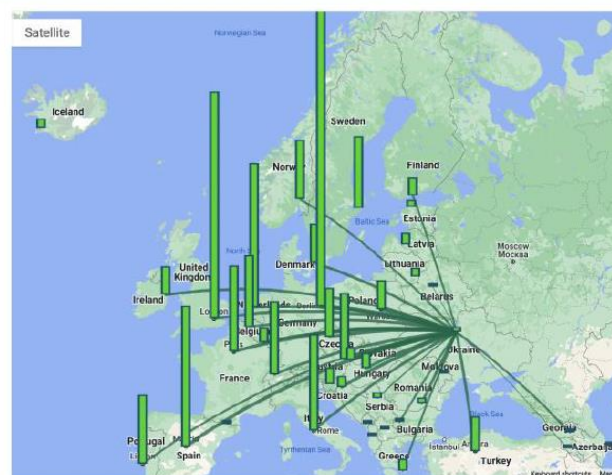


	Armenia ASNET-AM	Azerbaijan AzScienceNet	Georgia GRENA	Moldova RENAM	Ukraine URAN
eduroam	v	v	v	v	v
eduGAIN	v	v	v	v	v
Cloud	v	v	v	v	v
Web hosting	v	v	v	v	v
Email hosting	v	v	v	v	v
FileSender	v			v	v
Virtual private network	v	v	v	v	v
Digitisation of cultural heritage	v				v
LoLa	v	v		v	
CERT / Cyber security	v	v	v	v	v
Software licenses		v	v	v	
Videoconferencing	v	v	v	v	v
European Open Science Cloud EOSC	v		v	v	
IT Education	v	v	v	v	v
Country top-level domain registration			v		



	Armenia ASNET-AM	Azerbaijan AzScienceNet	Georgia GRENA	Moldova RENAM	Ukraine URAN
Number of Cloud user organisations	30	6	81	7	7
Number of eduroam service locations	38	28	38	24	151
Number of eduGAN IdP/SP	1/3	1/1	2/3	2/4	3/6

EU locations where EaP eduroam users have accessed their accounts





- Provides High Performance Computing
- Hydromet service can make high-resolution numerical weather prediction models
- 'Nowcasting' predicts small features such as individual storms with reasonable accuracy



Armenian State Hydrometeorological and
Monitoring Service

- Study of earthquakes kinematic and dynamic parameters of seismicity on territory of Azerbaijan
- Search of geophysical and geochemical seismic abnormal effects in structures and properties
- Estimating big cities seismic risks
- Collecting and analyzing information from 84 seismic and 24 GPS stations



Republican Seismic Survey Center



- MoU between GRENA and National Science Foundation of Georgia supporting two projects devoted to the investigation of climate change impact on the territory of Georgia using set of high-resolution climate models.
- MoU between GRENA and National Environmental Agency to support daily weather forecast and climate change studies.



DICOM Network – solution for large medical datasets collection, processing, secure distribution and visualization

Challenges: i) flexible architecture for collecting large datasets of medical data from various types of equipment; ii) to integrate with the existing patients' data in the HIS.

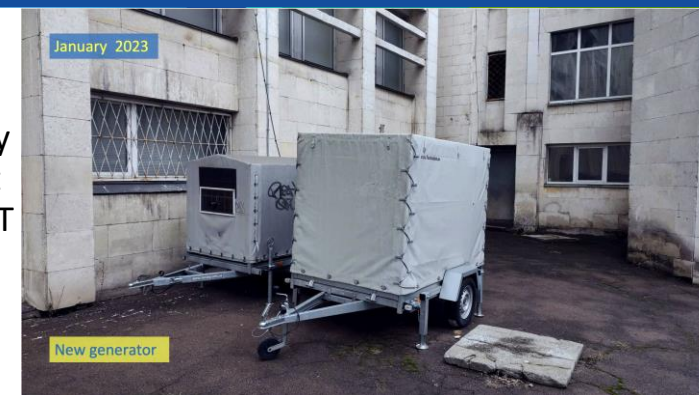
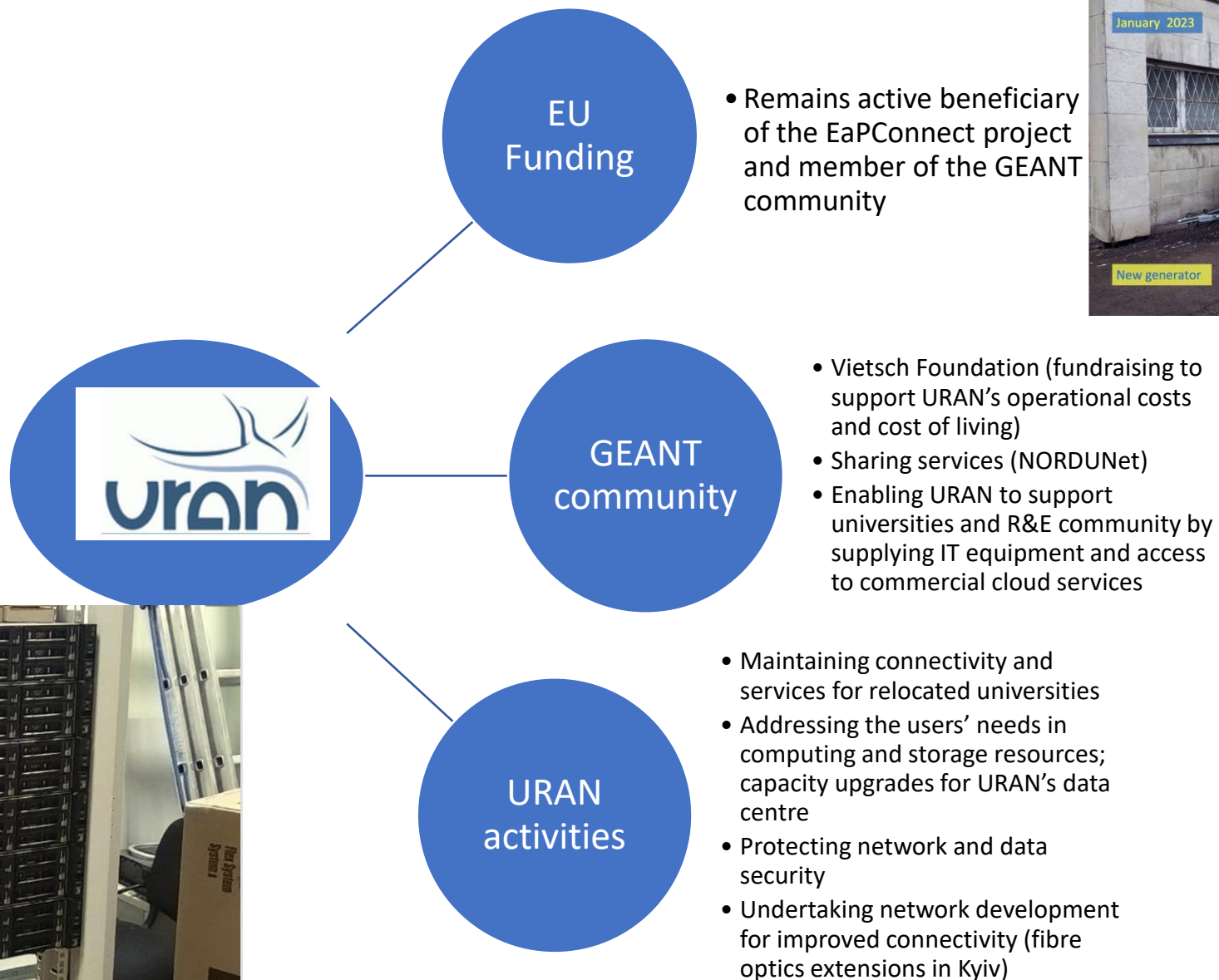
- 400 patients/day
- 600 doctors have online access
- 6 DICOM servers & 2 DICOM portals
- 24/7 technical & consultancy support



URAN: NREN under fire – support and resilience



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URAN: NREN under fire – human dimension

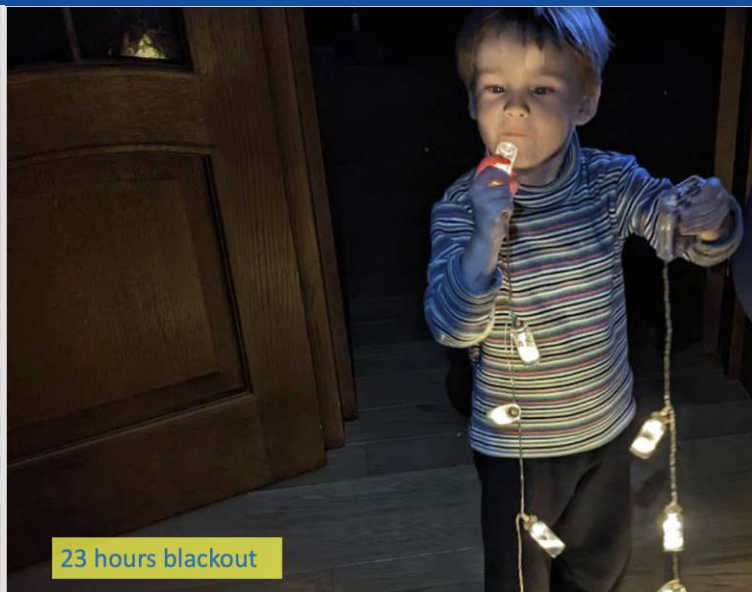


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March 2022

Leaving Kyiv



23 hours blackout



January 2023

Parcel from GÉANT

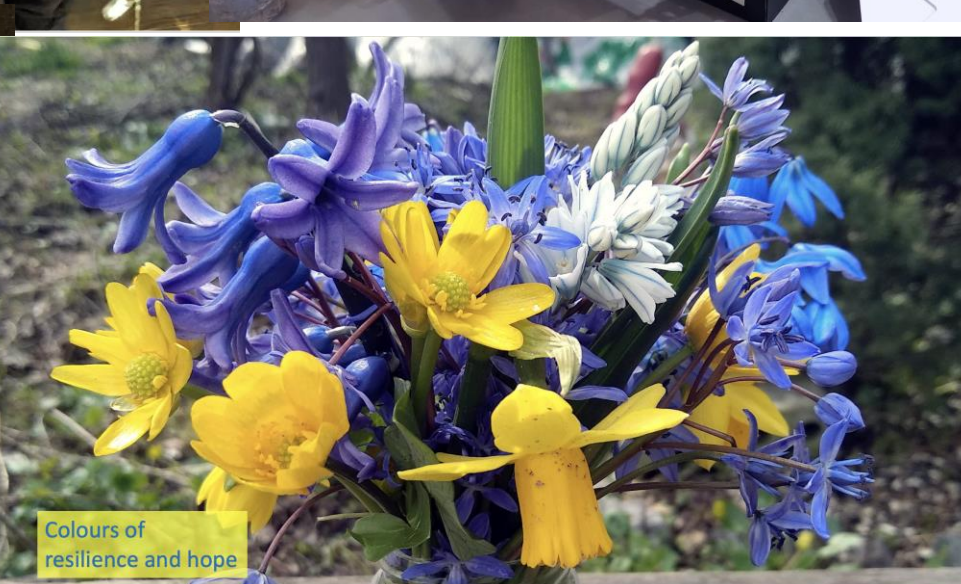


January 2023

A moment of peace



Blackout



Colours of resilience and hope

Libraries as enablers of scientific research – Tbilisi 2023



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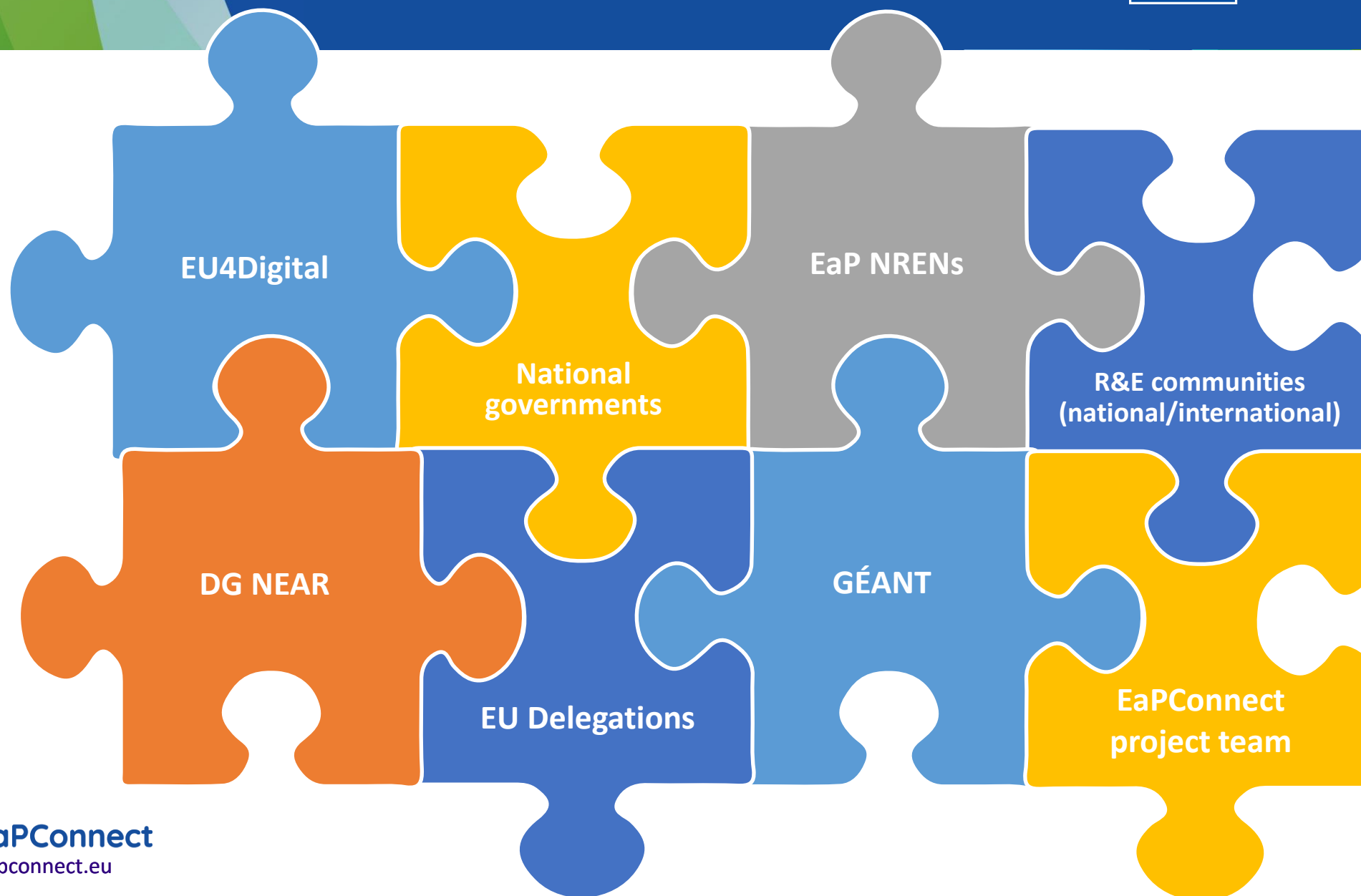


National Science Library of Georgia welcomed 52 participants from 13 countries to share ideas and seek opportunities for collaboration in supporting R&E communities.

The transition from books depository to online platform to support scientific exchange has been made possible by GRENA that provided connectivity and core services to enable the library evolution.



- Sustainability of NRENs is a complex subject and collective intelligence is required to shine a light on such topics as:
- Key drivers for change at the national level;
- Wider EU strategies
- The impact of Open Science on R&E communities and the capability/capacity of NRENs to support these changes





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Thank you!
Any questions?

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