

# e-IRG Workshop

2-3 December 2021

## Report from SEE User Forum opportunities and challenges of the NRENS

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As part of the GÉANT 2020 Framework Partnership Agreement (FPA), the project receives funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 856726 (GN4-3).

# Agenda



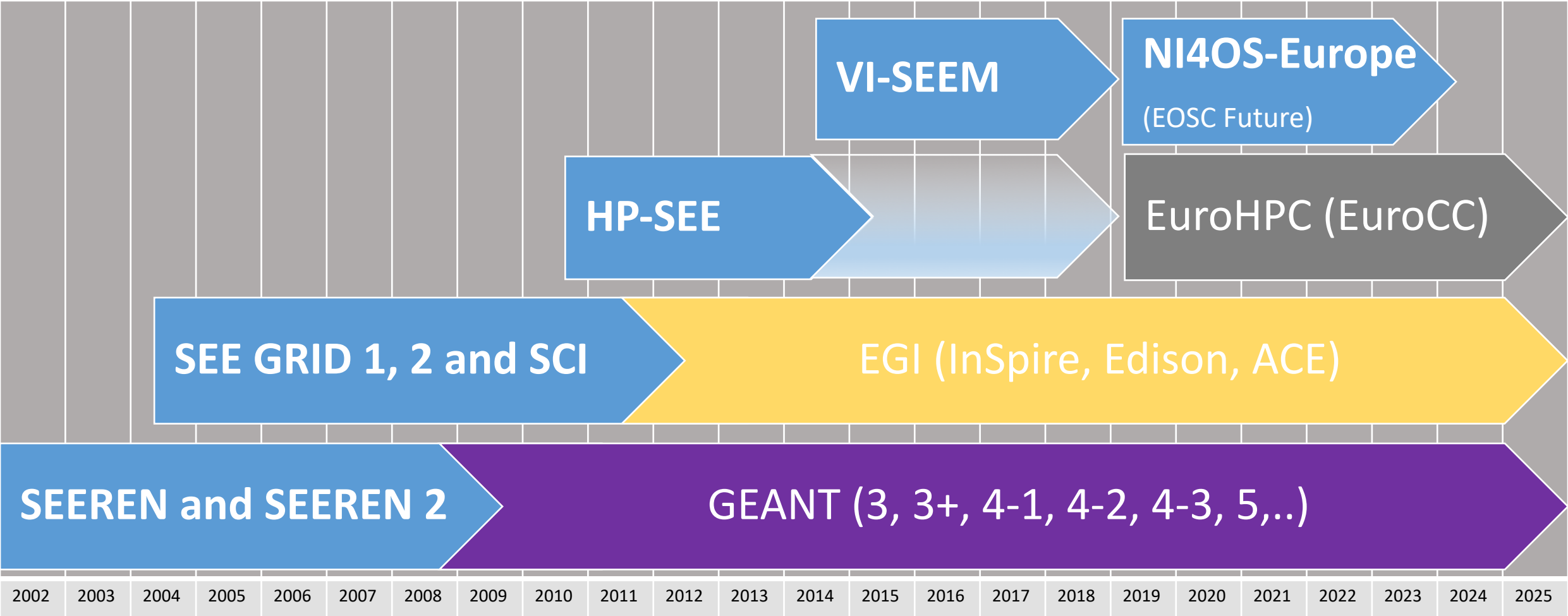
- Introduction
- e-Infrastructure development in WB (short history)
- State of play
  - GEANT and NRENs
  - NI4OS-Europe
  - EOSC Future
  - EuroHPC
- SEE Users Forum
- The future of e-Infrastructures in the region

# Introduction



- e-Infrastructures as pillars for science and research
  - data driven science relies mostly on e-Infrastructures
- EU has both political and financial support toward the development of pan-European e-Infrastructures for achieving scientific excellence
- WB region relies on the EC efforts to bridge the gaps
  - but lacks national funding and political recognition and strategy
- Historically, the regional approach has gained positive outcomes in closing the digital divide
  - especially when led by well accepted and know associations, or by experience partners from the SEE region

# Short history of regional e-Infrastructure development





## State of play



- All WB6 countries, with exception of Bosnia and Hercegovina, have established NRENs and are part of the GEANT Association
  - GEANT is working hard provide services to the B&H researchers
- Montenegro and North Macedonia are EuroHPC members
  - The membership is currently on hold, awaiting the signature of the Horizon Europe association
- North Macedonia has a member organization in EGI
- North Macedonia and Serbia have members, Bosnia and Hercegovina has observer organization of the EOSC Association

## GEANT and the NRENs



- Working toward strengthening the role of the NRENs in the SEE
- SEE Directors Forum
  - GEANT places particular focus on monitoring and proactively supporting SEE NRENs, as well as monitoring potentially at-risk NRENs who need further assistance
  - A platform for regional collaboration
- Deliverable on the developing NRENs in the SEE region (available to the NRENs)
- SEE Users Forum
  - Increasing the research engagement of the NRENs by addressing the end-users

## An on-going collaboration : SEE Directors Forum

1. Overcome network gap
2. Harmonize regional infrastructure
3. Bridge the digital divide





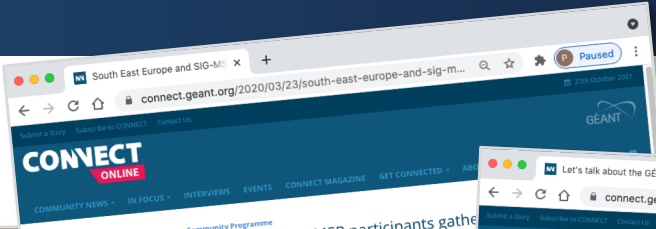
# GÉANT SEE NEWS



RASH  
RESEARCH AND SECURITY SERVICES

## GÉANT INFORMATION DAY IN ALBANIA

A successful GÉANT Information Day was held on 5th April in the capital of Albania, Tirana in partnership with the Albanian NREN RASH. More than 100 participants from the Albanian Research and Education (R&E) community attended with representatives from many universities both public and private. Additionally, we welcomed senior representatives from the region including from Bulgaria, Greece, Montenegro, Macedonia, Kosovo, Serbia and Croatia.



### South East Europe and SIG-MSP participants gather in Istanbul

© 23rd March 2020



Magda Haver



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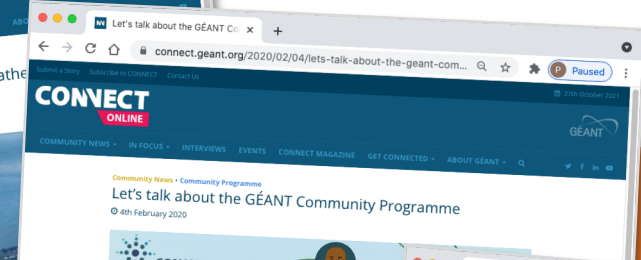
SEE Team

SEE and SIG-MSP\* met on 9 – 10 March to discuss the challenges and travel restrictions of COVID-19.

Mehmet Mirat SATOĞLU, director of SEE, welcomed the participants to the University of Marmara for hosting us in such an impressive city.

The meeting on 9 March provided NRENs across the region with experiences and best practices face to face. Directors and representatives from South East Europe to support near services uptake within the region, including from Bulgaria, Greece, Montenegro, Macedonia, Kosovo, Serbia and Croatia.

Information day\* held on the 10th June in Skopje, Macedonia, hosted by MARNET, preceding TNC18 in Trondheim.



### Let's talk about the GÉANT Community Programme

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Rosanna Norman

rosannanorman



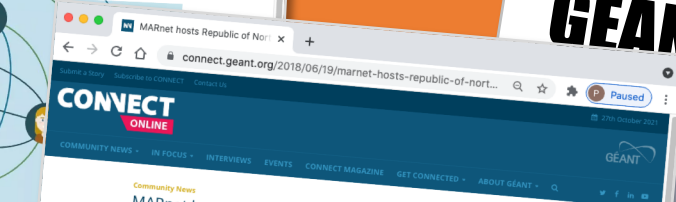
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### MARNET hosts Republic of North Macedonia's first GÉANT Information Day

© 19th June 2018



Paul Maurice



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The Republic of North Macedonia's first GÉANT Information Day was held in Skopje on Wednesday 6 June 2018, organised by MARNET in collaboration with the Faculty of Computer Science & Engineering (FCSE).

The event was opened by Mr. Ivica Dimitrović, the Vice Dean for academic affairs from FCSE, Ss. Cyril and Methodius University of Skopje, which uses GÉANT services and actively participates in the GÉANT (GN4) project. The guests were also welcomed by the Minister for Information Society and Administration and Mr. Savo Mukašević, Managing Director of MARNET (pictured above with Eva Nestorovska of MARNET).

[Read the full story here](#)

## GÉANT NEWS KREN JOINS GÉANT ASSOCIATION

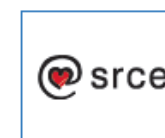




- ❑ Name: National Initiatives for Open Science in Europe
  - ❑ Acronym: NI4OS-Europe (pronounced “NIFOS”)
  - ❑ Call: INFRAEOSC-05 (b) Coordination of EOSC-relevant national initiatives across Europe and support to prospective EOSC service providers - Research and Innovation Actions
  - ❑ 22 Partners from 15 countries
  - ❑ Coordinator: GRNET
-

# Partnership

1	Ethniko Diktyo Erevnas Technologias AE	GRNET	Greece
2	ATHINA-Erevnitiko Kentro Kainotomias stis Technologies tis Pliroforias, ton Epikoinonion kai tis Gnosis	ATHENA	Greece
3	The Cyprus Institute	CYI	Cyprus
4	University of Cyprus	UCY	Cyprus
5	Institute of Information and Communication Technologies	IICT	Bulgaria
6	Sveuciliste u Zagreb - Sveucilisni Racunski Centar	SRCE	Croatia
7	Ruđer Bošković Institute	RBI	Croatia
8	Kormanyzati Informatikai Fejlesztési Ugynökség	KIFU	Hungary
9	Debreceni Egyetem	UD	Hungary
10	Institutul National de Cercetare-Dezvoltare in Informatica – ICI Bucuresti	ICI	Romania
11	Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii	UEFISCD I	Romania
12	Akadska raziskovalna mreža Slovenije	ARNES	Slovenia
13	Univerza v Mariboru, Univerzitetna knjižnica Maribor	UMUKM	Slovenia
14	Institut za fiziku	IPB	Serbia
15	Univerzitet u Beogradu	UOB	Serbia
16	Qendra Nderuniversitare e Sherbimeve Dhe Rrjetit Telematik	RASH	Albania
17	Univerzitet u Banjoj Luci	UNI BL	Bosnia-Herzegovina
18	Ss. Cyril and Methodius University in Skopje	UKIM	North Macedonia
19	Javna Ustanova Univerzitet Crne Gore Podgorica	UOM	Montenegro
20	Research and Educational Networking Association of Moldova	RENAM	Republic of Moldova
21	Institute for Informatics and Automation of the Academy of Sciences of Armenia	IIAP	Armenia
22	Georgian Research and Educational Networking Association	GRENA	Georgia





**Support** the **development and inclusion** of the national Open Science Cloud (OSC) initiatives in 15 Member States and Associated Countries in the overall scheme of EOSC governance



**Spread** the **EOSC and FAIR principles** in the community and train it



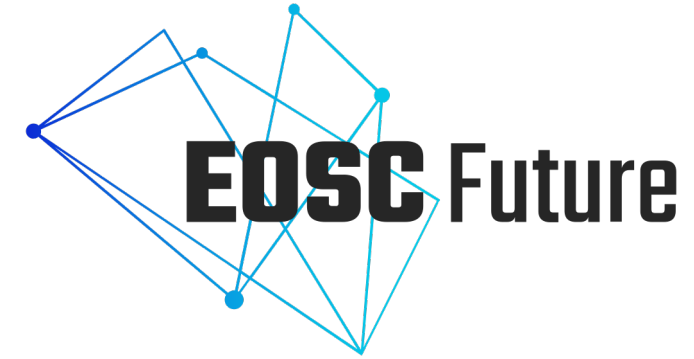
**Provide** **technical and policy support** in on-boarding of the existing and future service providers into EOSC



# EOSC Future



Project Website	<a href="https://eoscfuture.eu/">https://eoscfuture.eu/</a>
Start date	1/4/2021
Duration	30 months
Call identifier/Topic	INFRAEOSC-03-2020
Partners	35 beneficiaries representing over 85 organizations from all around Europe
WB6 Engagement	GRNET and UKIM (as LTP) in WP10



**Integrate, consolidate, and connect e-infrastructures, research communities, and initiatives in Open Science to further develop the **EOSC Portal**, **EOSC-Core** and **EOSC Exchange** of the EOSC**

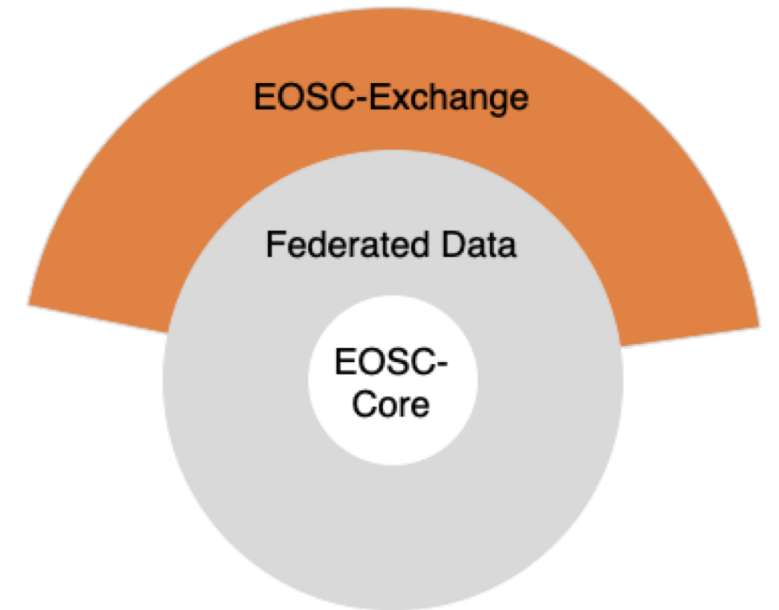






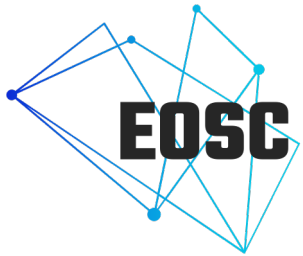
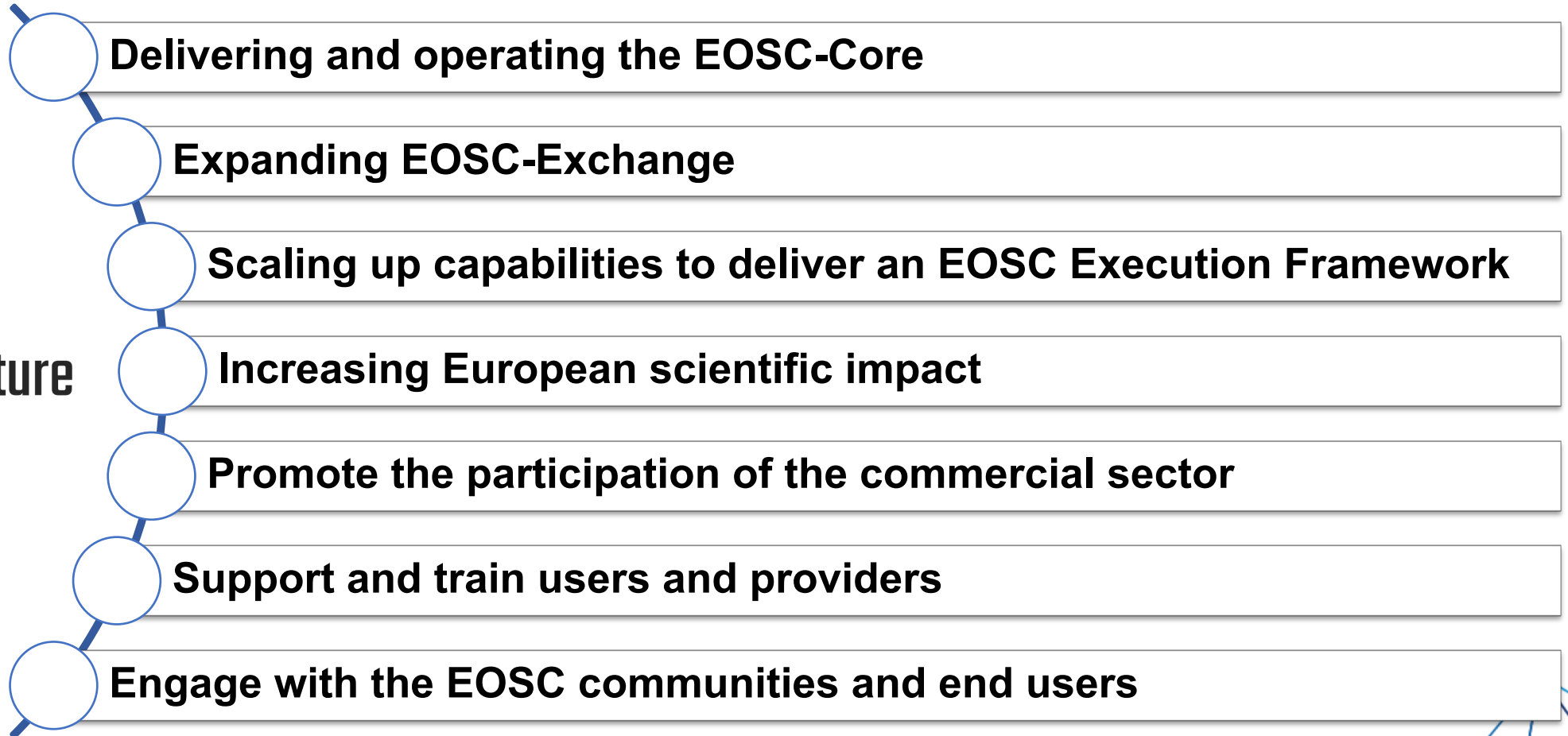
# EOSC Future's aims

- **Realization of EOSC-Core and EOSC-Exchange** with interoperable data and resources
- **Integration** of data and resources from the **science cluster** communities into the EOSC Platform
- **Direct involvement of users** in the **co-design** and implementation of the EOSC Portal





# **EOSC Future goals**



- The European High Performance Computing Joint Undertaking (EuroHPC JU) is a joint initiative between the EU, European countries and private partners to develop a World Class Supercomputing Ecosystem in Europe.
- Aims
  - develop, deploy, extend, and maintain a world-leading supercomputing and data infrastructure in Europe. The objective is to reach exascale capabilities by 2022/2024
  - support the development and uptake of innovative and competitive supercomputing technologies and applications based on a supply chain that will reduce Europe's dependency on foreign computing technology.
  - widen the use of HPC infrastructures to a large number of public and private users wherever they are located in Europe and support the development of key HPC skills, education and training for European science and industry.
- EuroCC – flagship project
  - Building National Competence Centres for HPC, HPDA and AI
- EuroHPC JU has procured seven supercomputers, located across Europe: LUMI in Finland, Leonardo in Italy, MeluXina in Luxembourg, Vega in Slovenia, Karolina in the Czech Republic, Discoverer in Bulgaria and Deucalion in Portugal.



- Co-organized event by GEANT, NI4OS-Europe and EOSC-Future
- More than 270 registered participants
  - Researchers
  - Service providers
  - NRENs
- Two-day online event
- Topics
  - Open science and supporting infrastructure
  - EOSC from the perspective of users and service providers
  - Regional EOSC services onboarded through NI4OS Europe
  - AAI and federated identities
  - Regional best practices



## SEE Users Forum takeaways



- End-users are the most important element of the Open Science ecosystem
- GEANT and NRENs enable digital excellence in the R&E community. NRENs meet users' demands to leverage economies of scale, bring down network costs nationally, and connect with the wider R&E community across the world to share expertise and best practices.
- In order to enable the wider adoption of Open Science practices we need a change of mentality among researchers, we need to reassure researchers that sharing data sets will not jeopardise or compromise their research efforts, but on the contrary it will boost their visibility, discoverability and networking/collaboration opportunities
- The research environment and the NREN domain are changing fast, identity federations and Open Science are changing the way we work. Sharing and learning are vital, we are in the middle of a fundamental transition, let's start collaborating!
- Make Open Science the right way to do science!

<https://see-userforum2021.geant.org/>

## The future of e-Infrastructure in the region

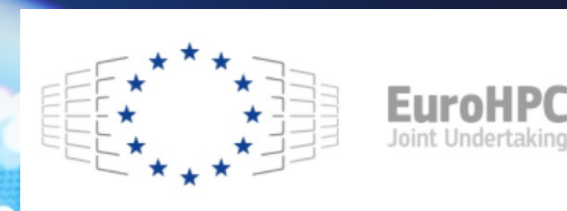


- Regional technical cooperation built a state of the art e-Infrastructure and services, used by cross-border communities
- Close cooperation with governments to secure national support for Infrastructures and buy-in for EC initiatives
- Synergy and complementarity between national, regional and EU actions and funds
- Regional dimension is important to keep it on par with EU efforts, to support countries on the path to EU accession and to prevent brain drain from the region
- Continued EC funding for the region (matching the national funding) is crucial to keep the momentum and to prevent 2-speed Europe
- Exploration of joint investments in e-Infrastructures



# Thank you

## Any questions?



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