Session title: User requirements odyssey: the great unknown

Keywords: research-data, user requirements, EOSC, NREN, NGI

The technological and ICT possibilities for research have greatly increased and improved over the last decades. With this trend, new challenges have appeared as well, both on the national and international levels. The European Open Science Cloud will likely create a landscape in which research infrastructures and e-infrastructures will cooperate more to address end users' needs in the modern research practise. In this session, we would like to share the experiences of both the GÉANT, NREN and NGI perspective and demonstrate some of the different approaches to learn and serve requirements from end user communities.

Presentation: "Users' fear of the future and how to ease it" by Enzo Capone, GÉANT.
Abstract: The research users worldwide are facing a whole new set of challenges, due to the technology advancement and the market trends in the ICT offerings. During a requirement gathering activity, taking 3 months, we've talked with international research communities in different scientific areas, collecting information about their future plans and the challenges they are facing, or anticipating for the next 5 years. Some common trends have emerged across the users, mostly in areas like cloud computing, storage needs and trust and identity. This talk will explain what these challenges and concerns are, and how the R&E Network community will be able to face them.

Presentation: "EOSC: From known unknown to known known" by Gergely Sipos, EGI Foundation.
Abstract: The talk will briefly introduce the EGI e-infrastructure and how its members, the NGIs, and partners are tacking the challenges of advanced computing to facilitate Open Science today, and tomorrow in EOSC. The EGI federation offers various types of storage, compute, data and application services, as well as related consultancy and training for structured research communities and individual researchers. These services are used by over 200 international communities and projects, of which more than 30 are featured on the ESFRI research infrastructure roadmap. Moreover, through recent H2020 initiatives, primarily EOSC-hub, the same services are used to establish the foundation of the European Open Science Cloud. The talk will highlight the recurring challenges that international communities face when using distributed computing and data services from EGI, as well as the technological and policy challenges and solutions that EOSC-hub brings to transition the fragmented e-infrastructure landscape to EOSC.

Presentation: "User-centric service development in the GeRDI project" by Jakob Tendel, DFN.
Abstract: The German national R&D project GeRDI aims to develop a Generic Research Data Infrastructure to facilitate cross-discipline FAIR research data workflows for research communities. The central focus of GeRDI initially is on developing a generic search engine that operates across diverse research data repositories, improving for researchers the find-ability and accessibility of siloed data. Developed as open source with the ongoing cooperation of several volunteer research communities using their real-world use cases, GeRDI is intended to become a tool also for the growing community of data stewards. This will be achieved by extending the find-ability and accessibility aspects into a research data lifecycle management environment that supports interoperability and reuse through common standard interfaces with data analysis and publishing functions. The design process is firmly user-centric, with regular rounds of testing and interviews to guide iterative development. GeRDI has a strong commitment to FAIR principles and forms one contribution by Germany to the realization of the EOSC.

Vincenzo Capone, **GÉANT**, **Head of Research Engagement and Support**
Leads the team in charge of the user support for service solutions of pan-European and international scientific groups and collaborations, and in the science and research engagement activities. With a background in computer science and networking, his previous positions included the Department of Physics of the University of Naples, where Vincenzo was the Network Architect and manager in charge of the computing resources for physics experiments, and Technical Associate to the ATLAS experiment collaboration at CERN.

Gergely Sipos works as Customer and Technical Outreach Manager for the EGI Foundation. He coordinates EGI's engagement programme and supports researcher communities and educators from academia and industry in tackling big-data and big-compute challenges using state of the art services from the EGI community. Gergely holds an MSc and a PhD in computer science and project management from the University of Miskolc, Hungary. He became involved in grid computing in 2002 and researched high-level user environments and collaborative design tools. Prior to EGI, Gergely worked in training, consultancy and user support for various Hungarian and European projects from his base in Budapest, where he promoted grid technology and distributed computing practices to scientific communities.

Jakob Tendel is the primary science liaison at DFN and the project manager responsible for coordinating the activities of DFN in national research data efforts. He coordinates with Géant on the activities of German user organizations in international big data science projects and is jointly responsible for managing DFN's cloud services portfolio. His background is in atmospheric science in Germany and the US and he holds a PhD in meteorology for the application of satellite remote sensing to aviation safety forecasts. He joined DFN in 2013.