

# e-IRG Workshop during Czech EU Presidency - Session 2

## Zoom link:

<https://cesnet.zoom.us/j/91629168367?pwd=VTRMbk9XeVpXMjVZZ0tNUkh1T3FRdz09>

Meeting ID: 91629168367

Passcode: 210104

[Moderator](#)

[Speakers](#)

[Statement](#)

[Questions](#)

## 2nd Session

### Topic: Energy crisis and e-Infrastructures

#### Description of the session:

The current energy crisis as a result of the war in Ukraine has an impact on all areas of life and thus also on the Research Infrastructures and e-Infrastructures. RIs and e-Infrastructures are recognised as critical infrastructures, because Research and Innovation (R&I) ecosystems are more and more linked with societal challenges, local economies and the citizens, and are also enablers for development and economic growth. The increasing costs for operations (high energy prices and inflation) and also maintenance (including rising costs for equipment) need to be better understood and addressed. Projections are difficult and the initial approach of RIs and e-Infrastructures is to reduce their operation time, which has a direct negative impact on R&I. Smaller players such as computing and data centres of universities, research centres and libraries may be in a more difficult situation as their budgets are in many cases limited and their operations are less cost effective than specialised centralised, national or European centres. Also the topic of Green IT and energy efficient data centres is becoming even more relevant. The speakers of this session will reflect on the above topics, while some relevant questions discussed at the e-IRG Cafe (among e-IRG delegates) are the following:

- What is / are the main risks from the energy crises and corresponding cases for e-Infrastructures?
- How can the awareness about the risk case be raised? (and at what level?)
- Which entity is deciding about the financial flows towards the e-Infrastructures?
- What is the logic behind such decisions?
- About the role of the Funders: what is more important for their decisions:
  - the possible lack of energy
  - the inflation
  - the fragmentation of the many e-Infrastructures servers?
- Is “securing operations” the priority number 1 issue or are there priorities?
- What can we learn from commercial providers of e-Infrastructures (and related services)? Do we need a dialogue with them? (lessons learned dialogue)

- What could be the recommendations about efficiency?
- How strong is the impact of the “Energy crisis and its impact on e-Infrastructures” on the research processes?
- How much energy do the e-Infrastructures consume?

**Moderator:** Stefan Hanslik, e-IRG Chair elect

<b>16:00 - 18:00</b>	<b>presentation</b>	<b>speakers (all to be invited)</b>
16:00 - 16:05	Introduction to the topic	Stefan Hanslik (e-IRG Chair elect)
16:05 - 16:20	Cost of e-Infrastructures <ul style="list-style-type: none"> <li>- rising energy costs (OPEX)</li> <li>- impact of inflation</li> </ul>	Sandra Cohen, Athens University of Economics and Business (AUEB) (confirmed)
lightning talks or statements		
16:20 - 17:00 (each 7-10 min)	Energy crisis impact on the data centres of Universities and Research Centres (20')	Martin Střelec (University Pilsen West Bohemia) (confirmed)  Ülar Allas (University of Tartu) (confirmed)  Slaven Mihaljević (SRCE, HR e-IRG delegate) (confirmed)
	Energy crisis impact on major national or European e-Infrastructure providers (20')	Jan Růžička (CESNET) (confirmed) János Mohácsi (KIFÜ, HU e-IRG delegate)(confirmed) mohacsi.janos@kifu.gov.hu  Mirjam van Daalen, League of European (confirmed) Accelerator-based Photon Sources (LEAPS) (confirmed)
17:00 - 17:15 (15min)	Report from EOSC Task Force Financial Sustainability	Jan Meijer (Sikt, NO e-IRG delegate)(confirmed)
17:15 - 17:30 (15 min)	Energy crisis impact on Research & Innovation	Anna Carlmark Malkoch (SE e-IRG delegate) (confirmed)(remote)
17:30 - 18:00 (30 min)	Panel discussion moderated by Stefan Hanslik	

## Moderator

### **Stefan Hanslik**



Stefan Hanslik is the Head of Unit Technical Science at the Federal Ministry of Education, Science and Research in Austria. He is Austrian delegate to the Euratom Programme Committee ('Fission' configuration), the OECD-Working Party on Biotechnology, the Council of ESRF (European Synchrotron Radiation Facility), High Level Group of EU Member States and Associated Countries on Nanosciences, Nanotechnologies and Advanced Materials and the e-IRG. Stefan Hanslik is member of the PC-Research Infrastructures and the ERC-FET-MSCA Programme Committee. Stefan Hanslik acts as JRC National Contact Point.

## Speakers

### **Sandra Cohen**



Sandra Cohen is a Professor of Accounting in the Department of Business Administration at Athens University of Economics and Business with a specialization on Management Accounting and Public Sector Accounting. She has participated in several consulting projects for both the private sector and the public sector. She has been a member of the research team in several EC funded projects and she has worked as an expert for projects for the Council of Europe, Expertise France and the World Bank. Her research work has been published in several ranked journals and has been presented in several international conferences.

### **Martin Střelec**



Martin Střelec is senior researcher in the Laboratory for Advanced Power Systems at the University of West Bohemia, Plzen, Czechia. His professional activities focus on research and development of novel tools and technologies for power systems and demand-side energy management domain, where he has been strongly cooperating with industrial partners and public sector in the technology transfer from academic domain to real-world one.

### **Ülar Allas**



Ülar Allas works at the Institute of Computer Science and the High Performance Computing Center of the University of Tartu. Ülar Allas has PhD in molecular biology and is working as consultant in the High Performance Computing Centre of the University of Tartu. He is an active publicist, published books and numerous travels related and scientific articles. Thanks to several awards for popularization of Estonian science he has the right to use the badge “Nationally Recognized Science Populizer”, which is a mark of quality and trust for people acting in this field.

### **Slaven Mihaljević**



Slaven Mihaljević is the head of the Cooperation and Communication Department at the University of Zagreb University Computing Centre – SRCE. He coordinates and leads the community building, promotional, and communication activities at SRCE, and is responsible for the overall presentation and promotion of SRCE in the community. He is the editor-in-chief of the quarterly SRCE magazine SRCE Novosti and is the head of the Programme Committee of SRCE’s annual conference SRCE Days of e-infrastructure DEI. He is the national representative of the e-Infrastructure Reflection Group (E-IRG). He holds a PhD in organizational sciences and MSc in Comparative Literature from the University of Zagreb.

### **Jan Růžička**



Jan Růžička is the deputy head for e-Infrastructure at the Czech NREN CESNET. He is responsible for the coordination of the infrastructure departments of CESNET including network, storages, computing, AAI and security.

### **János Mohácsi**



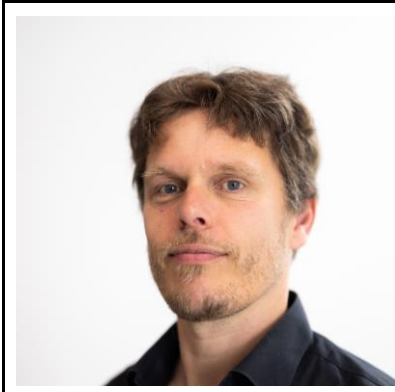
János Mohácsi is the International R&D Officer at the Hungarian Governmental Information-Technology Development Agency (KIFÜ). He is responsible at KIFÜ for the coordination of international e-infrastructure and Trust and Identity service developments. He is a member of the Planning Committee of International Research Networks (GPPC) of GEANT, GEANT board member, e-IRG member, the KIFÜ representative European Open Scientific Cloud (EOSC) and member of EOSC AAI Task Force.

### **Mirjam van Daalen**



Mirjam van Daalen is currently director of communications at the Paul Scherrer Institut. From 2018-2022 Mirjam was Swiss Delegate in the European Strategy Forum on Research Infrastructures (ESFRI) mandated by State Secretariat for Education, Research and Innovation (SERI). Mirjam van Daalen was Swiss delegate for the working group on EOSC sustainability of the EOSC secretariat and was chairing the ESFRI taskforce on EOSC until March 2022. She is member of the Scientific Advisory Board of the Helmholtz Federated IT Services Project HIFIS and chair of the Beamline for Tomography at SESAME (BEATS) steering committee. She was strongly involved in the new League of European Accelerator Based Photon Sources (LEAPS), and was vice-chair of its coordination board until 2020.

### **Jan Meijer**



Jan Meijer is senior advisor on international strategy at the Norwegian Agency for Shared Services in Education and Research. He is working at the Division for Data & Infrastructure. Jan Meijer is Norwegian e-IRG delegate and is co-chair of the EOSC Association task force for financial sustainability and chair of the FileSender board.

### **Anna Carlmark Malkoch**



Dr Anna Carlmark Malkoch has a PhD in Polymer Technology and worked as an Associate Professor in Materials Chemistry at the Royal Institute of Technology for 10 years. In 2017 she left her academic career to pursue other parts of science, first as a director for the nanocellulose research team at RISE AB (Research Institute of Sweden) and three years ago she join the Swedish Research Council as the director of the infrastructure support unit. The unit handles the funding of both national research infrastructures as well as the Swedish part of international research infrastructures.

## Statement

about your presentation or statement (1-2 sentences)

### **The cost of energy in e-infrastructures (Sandra Cohen)**

The presentation analyses the effects of increased energy cost and inflation on the OPEX and the CAPEX of e-Infrastructures and discusses possible ways to deal with these challenges.

### **Impact of the energy crisis on e-INFRA CZ (Jan Růžička)**

Presentation gives a short overview of the situation in Czech e-Infrastructure and outlines interesting challenges and opportunities for the infrastructure provider.

### **Energy crisis impact on Research & Innovation (Anna Carlmark Malkoch)**

Moving on from the pandemic, the RIs find themselves in a difficult situation, facing delays from the pandemic, increased inflation and energy prices at extreme levels. It is unlikely that governments in the short term will be able to compensate the large increase in costs. This causes the RIs to once again adapt to a new situation, which can be tackled in different ways and in which the solution is not a simple one but a complex combination of savings, projects put on hold and even complete shut-downs. However, the energy crisis also pushes a strive towards more energy sufficient approaches for the facilities, and the circumstances could potentially lead to a big leap in technology advancement and result in a more sustainable situation for research infrastructures in the future.

## Questions

for the panel discussion (what would you like to be asked?)

Because there will be no back to normal as we knew it from 1 year ago, before the war in Ukraine started, what is your vision for the future of energy generation/distribution/parsimony and how to take the current energy crisis as an opportunity to shape the future?