

56<sup>th</sup> ESReDA Seminar On  
**Critical Services continuity, Resilience and Security**

May 23<sup>rd</sup> – 24<sup>th</sup>, 2019, Johannes Kepler University, Linz, Austria



## Announcement and Call for Papers

### Scope of the seminar

Vital services continuity is a major societal security issue in modern society. The supply of the vital services is guaranteed thanks to a large variety of Critical Infrastructures (CIs). Some CIs' disruptions may endanger the security of the citizen, the safety of the strategic assets and even the governance stability.

The CIs are more and more connected thanks to the information technology (IT) and supply services in every aspect in man's daily-life. The continuous progress in the IT fields pushes modern systems and infrastructures to be more and more: intelligent, distributed and proactive. That increases not only the operational complexity of the CI's but also their vulnerability. The more complex a system is, the more vulnerable it will be and the more numerous are the threats that can impact on it. The loss of operability of critical infrastructures may, thus, lead to severe global crises.

Engineers, designers, operators and legislators should enhance the system preparedness and resilience facing different threats. That requires continuous efforts and resources of all kinds in a variety of fields. One of them is "Modelling, Simulation & Analysis (SM&A)" of the CI in order to enhance the CIs' preparedness & resilience.

The European Safety, Reliability and Data Association (ESReDA) as one of the most active EU networks in the field has initiated a project group (CI-PR/MS&A-Data) on the "Critical Infrastructure/Modelling, Simulation and Analysis – Data". The main focus of the project group is to report on the state of progress in MS&A of the CIs preparedness & resilience with a specific focus on the corresponding data availability and relevance.

In order to report on the most recent developments in the field of the CIs preparedness & resilience MS&A and the availability of the relevant data, ESReDA will hold its 56<sup>th</sup> Seminar on the following thematic: "*Critical Services continuity, Resilience and Security*".

The 56<sup>th</sup> ESReDA seminar will be held on May 23-24, 2019, hosted by Johannes Kepler University, Linz, Austria.

### Topics

- Threats identifications & specifications
- CIs disruptions MS&A
- CI's vulnerability MS&A
- CIs' dependencies and interdependency MS&A
- Data and Databases
- Emergency and crises management models & tools
- IT inferences on CIs preparedness & resilience
- Standards & Ontology in the domain of CI protection (CIP)

### Domains

#### Critical Infrastructures Sectors

- Air-transport & airports
- Electrical power generation & supply
- Gas & Oil production, storage & transport
- ICT networks
- Massive data storage & servers
- Maritime transport & ports
- Medical & health care
- Process industry
- Railway transportation
- Supply chain process
- Water supply and water works

#### Threats

- Extreme weather conditions
- Natural threats
  - Climatic changes
  - Earthquake
  - Flood
  - Forest fire
  - Landslide
  - Torrential rain
  - Tsunami
  - Volcanic eruptions
- Industrial & technological accidents
- Financial & stock market perturbation
- Industrial wastes disposal & destruction

### Chairman of the Seminar

- ESReDA President Dr. Luis Andrade Ferreira,
- LCM Chief Scientific Officer Dr. Johann Hoffelner

### Technical Programme Committee (TPC)

Andrews John	UK	Kortner Henrik	NO
Bukowski Lech	PL	Lannoy André	FR
Cepin Marko	SI	Marle Leila	FR
Charmpis Dimos	CY	Merad Myriam	FR
Chateauneuf Alaa	FR	Messias Ricardo	PT
D'agostino Gregorio	IT	Nowakowski Tomasz	PL
Demichela Micaela	IT	Pestana Maria	PT
Efrosinin Dmitry	AT	Pietrucha Katarzyna	PL
Eid Mohamed	FR	Rykov Vladimir	RU
El-Hami Abdel Khalik	FR	Simola Kaisa	FI
Ferreira Luís	PT	Sola Antonio	SP
Kolowrocki Krzysztof	PL	Tchórzewska-Cieślak Barbara	PL
Kopustinskas Vytis	IT	Zutautaitė Inga	LT

### Local Organization Committee (LOC)

For practical local information relative to the venue, please, contact: Dmitry Efrosinin ([dmitry.efrosinin@jku.at](mailto:dmitry.efrosinin@jku.at)), Cornelia Brandt-Springsits ([cornelia.brandt-springsits@jku.at](mailto:cornelia.brandt-springsits@jku.at)), with Inga Žutautaitė ([inga.zutautaitė@lei.lt](mailto:inga.zutautaitė@lei.lt)) and Mohamed Eid ([mohamed.eid@cea.fr](mailto:mohamed.eid@cea.fr)) in Cc.

## Relevant dates

- Draft of paper: **February 1<sup>st</sup>, 2019**
- Authors notification: February 15<sup>th</sup>, 2019
- Camera-ready papers: March 29<sup>th</sup>, 2019
- Date of seminar: May 23<sup>rd</sup> – 24<sup>th</sup>, 2019
- ESReDA project group's meetings: May 22<sup>nd</sup>, 2019
- ESReDA Board of Directors meetings: May 22<sup>nd</sup>, 2019
- ESReDA General Assembly: May 23<sup>rd</sup>, 2019
- ESReDA Gala dinner: May 23<sup>rd</sup>, 2019

## Instructions to Authors

The seminar language is UK English. Proposals of contributions (draft-papers) should be no longer than 12 pages in Microsoft Word format following the instructions to authors that are available on ESReDA site: <http://www.esreda.org/event/56th-esreda-seminar/>

A draft paper is not an abstract and should clearly contain:

- The title,
- The name of the principal author,
- The objectives of the paper,
- The used methodology / model,
- The partial findings ( or results hopefully expected),
- A representative part of the used bibliography.

Proposals should be sent to Mohamed Eid ([mohamed.eid@cea.fr](mailto:mohamed.eid@cea.fr)) and Inga Žutautaitė ([inga.zutautaitė@lei.lt](mailto:inga.zutautaitė@lei.lt)).

## Registration and Seminar Fee

A registration form and the practical information package will be made available on the ESReDA website. Fees, according to ESReDA's rules, are:

- Speakers : one speaker per accepted paper is exempted.
- ESReDA members : 3 participants/member are taken in charge by the Seminar.
- Others : 300€/participant
- Accompanied persons for Gala dinner: 40€/acc. person.

To be paid by bank transfer to ESReDA account:

Holder : ESReDA  
Bank : BNP Paribas Fortis Bank, Boulevard Jamar 1 D, 1060 Brussels, Belgium  
IBAN : BE69 0012 3728 1678  
BIC : GEBABEBB  
Subject : Registration in the 56<sup>th</sup> ESReDA Seminar

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## **Johannes Kepler University Linz – JKU**

Johannes Kepler University in Linz (JKU) is the largest research and educational institute in Upper Austria. As a young university (inaugurated in 1966) and the largest scientific institution in Upper Austria, JKU has evolved into a hub of science, industry and business in a short space of time. 60 study programmes for over 19,000 students guarantee a modern and practical education with excellent job prospects. The research activities of the faculties and institute are recognised worldwide. ([www.jku.at](http://www.jku.at))

### **Institute for Stochastics JKU**

The lecture courses at the Institute for Stochastics provide an overview of relevant topics in probability theory and statistics. Further there are regularly particular courses based on the research areas of the members of the Institute for Stochastics: e.g., Time Series Analysis, Queuing Theory, Reliability Theory, Stochastic Numerics, Martingale and Brownian Motion, Markov Chains. Research areas of the members of the Institute for Stochastics comprise stochastic analysis, stochastic numerics, statistics and their applications in other disciplines. ([www.jku.at/stochastik](http://www.jku.at/stochastik))

### **Linz Center of Mechatronics – LCM**

Mechatronics – an intelligent fusion of informatics, mechanics and electronics. The Linz Center of Mechatronics is a reliable partner for research and development for national and international customers since more than 15 years. The LCM supports the customers from idea generation, research and development to the introduction of series production. Our infrastructure allows for the production of prototypes and small lot sizes as well as the verification of developed systems and components. The specific knowledge that the employees of LCM possess forms the basis for collaborations in research and development and the foundations to design new, intelligent, networked or autonomous systems for the manufacturing industry. The JKU belongs to the ownership list. ([www.lcm.at](http://www.lcm.at))

### **ESReDA**

ESReDA membership is open to organisations, privates or governmental institutes, industry researchers and consultants, who are active in the field of Safety and Reliability.

Membership fees are currently 1000 EURO for organisations and 500 EURO for universities and individual members. Special sponsoring or associate membership is also available.

For more information on ESReDA, contact:

ESReDA General Secretary: Inga Žutautaitė ([inga.zutautaitė@lei.lt](mailto:inga.zutautaitė@lei.lt))

ESReDA address: European Safety, Reliability & Data Association, an International Non-Profit Scientific Association under the Belgium law (June 27, 1921, Title III). Headquarter: ESReDA, rue Gachard 88 Bte 14, B-1050 Bruxelles, Belgium, Siret:E00005802.

Any interested party is welcome to contribute to ESReDA project groups. (<http://www.esreda.org>)

### **ESReDA Project Group on CI-P&R**

The project group “CI-PR/MS&A-Data” is working on a comprehensive technical document on the existing Data and models that have been developed and are used in the fields of the CIP. Establishing a comprehensive state-of-the-art may hopefully lead to identifying lacks and measures to complete lacking data or lacking organisation to acquire data. These data are a critical input to all Modelling, Simulation and Analysis activities.

The technical document will be published with a EUR Tech-Doc reference number, by the end of 2018.

It will be published with the names of all the co-authors. The contribution to the technical document is open to all Experts in CIP with no restriction of being an ESReDA member.

The technical document will be available on ESReDA site for free download.

### **Seminars Proceedings**

The final proceedings of the 56<sup>th</sup> Seminar will be edited in the form of an EU Technical Report and e-published with public access. Some elected papers of the 56<sup>th</sup> ESReDA seminar will be published in referenced journals indexed in EBSCO, INSPEC, Index Copernicus and/or SCOPUS.

**BoD & Project Group Meetings (22 May, 2019)** Johannes Kepler University Linz (tbc).

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## Venue

Johannes Kepler University Linz (Altenbergerstraße 69, Linz, Austria)  
Loft B, C (Uni-Center) – see the [campus map](#).

## How to get to Linz?

### By plane

- from Linz airport to Linz (direct Bus 601 to Linz Central Railway Station; 16km, time table at [www.oebb.at](http://www.oebb.at))
- from Vienna airport to Linz (direct train to Linz Central Railway Station: time table at [www.oebb.at](http://www.oebb.at))

### How to get JKU from Linz Central Railway Station?

- By tram line 1 or 2 to the end station “Universität”
- By taxi (price about 15€)

## Accommodation

Here are some recommended facilities.

### List of hotels in Linz

Austria Classic Hotel Wolfinger\*\*\* (in Linz center, recommended)  
Hauptplatz 19, 4020 Linz  
Site: <http://www.hotelwolfinger.at>  
Prices: From 83€ per night

Arcotel Nike Linz\*\*\*\* (near Linz center, recommended)  
Untere Donaulände 9, 4020 Linz  
Site: [http://www.arcotelhotels.com/en/nike\\_hotel\\_linz/](http://www.arcotelhotels.com/en/nike_hotel_linz/)  
Prices: From 87€ per night

Star Inn Hotel\*\*\* (near Linz center)  
Steingasse 6, 4020 Linz  
Site: <https://starinnhotels.com/star-inn-hotel-linz-promenadengalerien-by-comfort/>  
Prices: From 85€ per night

Austria Trend Hotel Schillerpark Linz\*\*\*\* (near Linz center)  
Schillerplatz, 4020 Linz, Österreich  
Site: <https://www.austria-trend.at/en/hotels/schillerpark>  
Prices: From 93€ per night

Sommerhaus Hotel Linz\*\*\* (near venue at JKU, recommended)  
Julius-Raab-Straße 10, 4040 Linz  
Site: <http://www.sommerhaus-hotel.at/>  
Prices: From 61€ per night