Grid Forming Technology and System Flexibility: Technical Challenges and Regulatory and Policy Solutions

Berlin, Germany | 06 OCTOBER 2025

WELCOME & INTRODUCTION

Supported by: ESIG

Organized by: energynautics solutions for sustainable development

energynautics
solutions for sustainable development

- **German-based research and consulting company in the field of renewable generation and power systems.**

Thomas Ackermann
CEO of Energynautics

- Diplom Wirtschaftsingenieur (MSc in ME and MBA) - Berlin, Germany
- M.Sc. in Physics New Zealand
- Ph.D. Electrical Engineering (Power System Deregulation and Distributed Generation) Stockholm, Sweden
- Worked as a consultant in the Energy and Renewable Energy Industry for the past 25 years

Year of foundation: **2000**

International Experience in **64 Countries**

370+ Projects worldwide

35 Employees

10 Spoken languages

Energynautics Non-Discrimination / Anti-Harassment Policy

At Energynautics, we promote equality and respect for all individuals involved in our activities. We do not tolerate discrimination or harassment based on race, color, religion, gender identity, age, disability, sexual orientation, or any other characteristic.

Harassment, whether sexual or non-sexual, is strictly prohibited. We strive to maintain a welcoming environment where all interactions are respectful and inclusive.

Workshop Guidelines

- Please set your **phone on silent mode**
- **Chatham House Rules** apply:
  - Information is Shareable – Participants are free to use the information they receive during the meeting.
  - Identities are Not Revealable.
- The workshop is audio recorded to produce a summary. For questions or comments, please use the microphones, if possible.

Please wear your conference badge at all times:

- It serves as your ticket and proof of admission.
- Access to conference rooms and lunch area is granted only to persons who present valid conference badges to our staff.

Important Information

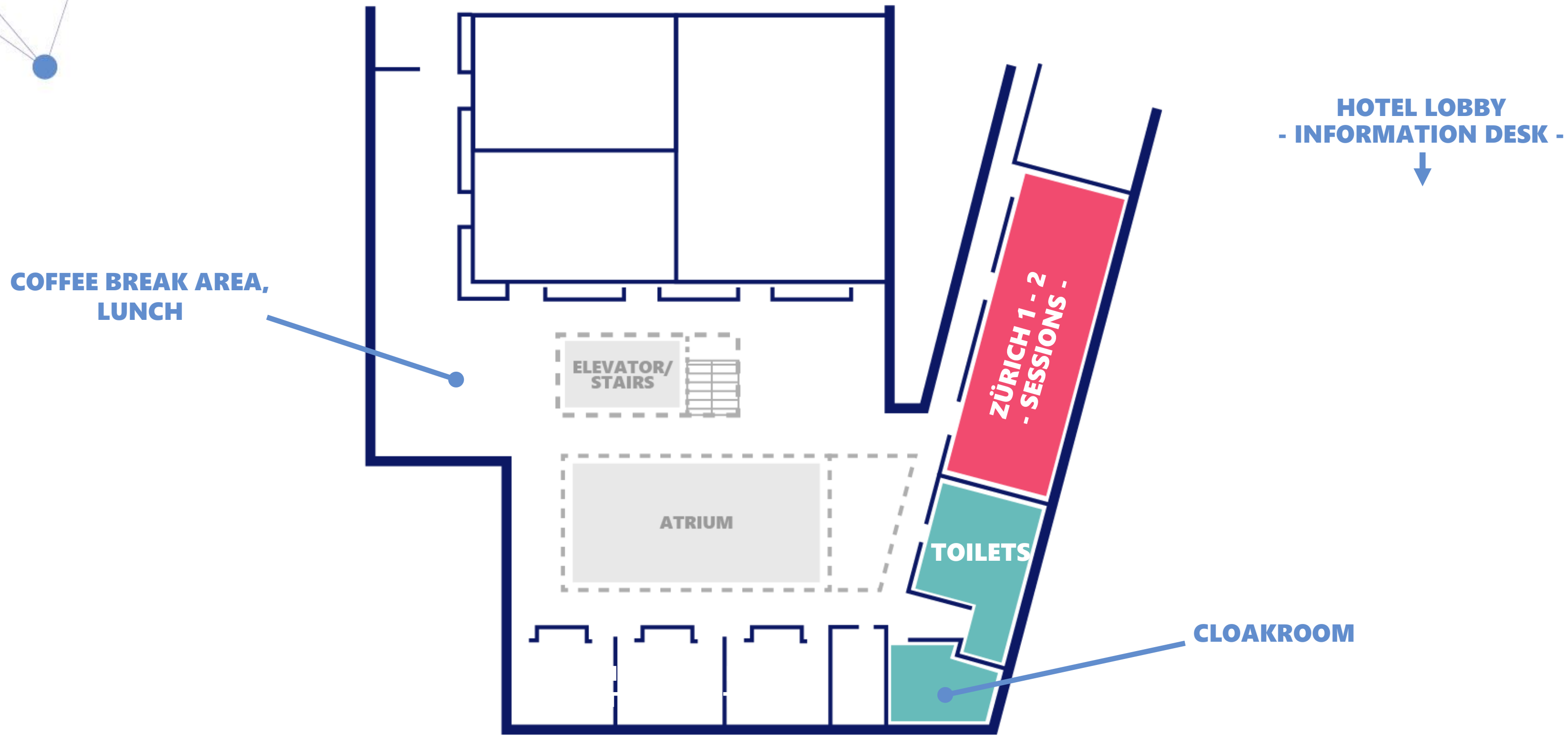
Help us protect the environment!

- This event not only deals with the topic of sustainability in terms of content, but is also based on a sustainable planning approach.
- Two main goals are pursued: **Reduction of emissions caused by the event & Saving resources and promoting reuse.**
- Please return your conference badge upon your departure at the check-in counter.

- WiFi:
  Marriott Bonvoy_Conference
  Password:
  BERLIN2025

- **No video** recording during sessions.
- If requested by the speaker, **photos** (using phone, tablet, photo camera, etc.) are also **forbidden**

Map of Conference Area



Agenda: 06 October | Morning

11:00 – 11:15

Opening | **WELCOME AND INTRODUCTION**
Thomas Ackermann, Energynautics, Germany
J. Charles Smith, ESIG, United States

11:15 – 11:35

KEYNOTE COMMENTS
Sonya Twohig, ENTSO-E, Europe

11:35 – 12:45

TECHNICAL SESSION – 5-MINUTE EXPERT STATEMENTS
Julia Matevosyan, ESIG, USA
Tobias dos Santos, Federal Network Agency/BNEtzA, Germany
Xiaoyao Zhou, NESO, United Kingdom
Cornelius Heck, 50Hertz, Germany
German Kuhn, Siemens Energy, Germany
Daniel Duckwitz, SMA, Germany

12:45

DISCUSSION

13:30

Lunch Break

Agenda: 06 October | Afternoon

14:30 – 15:30

REGULATORY SESSION – 5-MINUTE EXPERT STATEMENTS

Andreas Jahn, RAP, Germany
Karin Kritzinger, Agora Energiewende, Germany
Georgios Antonopoulos, ACER, Europe
Vilislava Ivanova, E3G, Belgium
Alexander Folz, BMWE - Ministry of Economic Affairs and Energy of Germany, Germany

15:30

DISCUSSION

16:30

Coffee Break

17:00 – 18:00

ROUNDTABLE

Tobias dos Santos, BNEtzA, Germany
Xiaoyao Zhou, NESO, United Kingdom
Alexander Folz, BMWE, Germany
Georgios Antonopoulos, ACER, Europe
Karin Kritzinger, Agora Energiewende, Germany
German Kuhn Siemens Energy, Germany

18:00 – 18:15

CONCLUDING COMMENTS

Simon Müller, Energy Transition Catalytics, Germany

18:30

Workshop Reception

We are more than just an Organizer

We are Power System Consultants

Our Services

- Grid Studies
- Grid Interconnection Studies
- Smart Grid Consulting
- Electromobility Grid Integration
- Power Generating Unit Modelling
- Grid Code Development
- Power System Optimization and Planning
- Measurement Campaigns
- Customized Energy Management Systems
- Capacity Building
- Conference Planning

Selected Energynautics Clients & Partners

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

KFW Bank aus Verantwortung

IDB Inter-American Development Bank

USAID FROM THE AMERICAN PEOPLE

UNDP Empowered lives. Resilient nations.

IRENA International Renewable Energy Agency

McKinsey&Company

WOODWARD

VDMA

ENERGINET.DK

swissgrid

AEMO AUSTRALIAN ENERGY MARKET OPERATOR

APG AUSTRIAN POWER GRID

E-CONTROL

TenneT

amprion

Agora Energiewende

ewr netze sicher · intelligent · innovativ

PUC

GRUPO ICE

Sterlite Power

BSES

THE BARBADOS LIGHT & POWER COMPANY LIMITED

prognos

mtu onsite energy

PV ERA NET

minae

GREENPEACE

WWF ÖSTERREICH

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Federal Ministry for Economic Affairs and Energy

RheinlandPfalz MINISTRY FOR ECONOMIC AFFAIRS, CLIMATE PROTECTION, ENERGY AND REGIONAL PLANNING

GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

GOVERNMENT OF INDIA MINISTRY OF POWER

REPUBLIC OF ESTONIA MINISTRY OF ECONOMIC AFFAIRS AND COMMUNICATIONS

Ministry of the Environment and Conservation, Agriculture and Consumer Protection of the State of North Rhine-Westphalia

MINISTRY OF ENERGY INFRASTRUCTURES AND NATURAL RESOURCES OF THE REPUBLIC OF ARMENIA

PUBLIC SERVICES REGULATORY COMMISSION OF THE REPUBLIC OF ARMENIA

WELCOME TO

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11:15 – 11:35

KEYNOTE COMMENTS

Grid-Forming Technology and System Flexibility: ENTSO-E's Perspective

Sonya Twohig
ENTSO-E, Europe

Session Chair

Julia Matevosyan
ESIG, USA

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11:35 – 12:45

TECHNICAL SESSION – 5-MINUTE EXPERT STATEMENTS

Session Chair

Julia Matevosyan
ESIG, USA

Introduction & Lessons learned from Grid Forming

Julia Matevosyan
ESIG, USA

Needs for Ancillary Services / Features Enhancing System Stability

Tobias dos Santos
Federal Network Agency/BNEtzA, Germany

Overview on UK situation, Grid forming and Oscillations

Xiaoyao Zhou
NESO, United Kingdom

11:35 – 12:45

TECHNICAL SESSION – 5-MINUTE EXPERT STATEMENTS

Session Chair

Julia Matevosyan
ESIG, USA

System Operation and Impact on GF

Cornelius Heck
50Hertz, Germany

The OEM perspective: Grid Forming and e-STATCOM

German Kuhn
Siemens Energy, Germany

The OEM perspective: GFM BESS solutions

Daniel Duckwitz
SMA, Germany

14:30 – 15:30

REGULATORY SESSION – 5-MINUTE EXPERT STATEMENTS

Session Chair

Andreas Jahn
RAP, Germany

Regulatory Framework, Market Access, Renumeration of Flexibility Assets

Andreas Jahn
RAP, Germany

GFM Regulatory Framework

Karin Kritzinger
Agora Energiewende, Germany

A Regulator's Perspective and Update on GFM Adoption

Georgios Antonopoulos
ACER, Europe

14:30 – 15:30

REGULATORY SESSION – 5-MINUTE EXPERT STATEMENTS

Session Chair

Andreas Jahn
RAP, Germany

[Policy Innovation and Opening Markets for Flexibility Assets]

Vilislava Ivanova
E3G, Belgium

[Grid Forming Implementation Considerations at a Country Level]

Alexander Folz
BMWE - Ministry of Economic Affairs and Energy of Germany, Germany

Roundtable

17:00 – 18:00

REGULATORY AND POLITICAL APPROACHES TO SOLVE TECHNICAL CHALLENGES

Facilitator

Hannah Köning
ENERTRAG, Germany

Tobias dos Santos
BNEtzA, Germany

Xiaoyao Zhou
NESO, United Kingdom

Alexander Folz
BMWE, Germany

Georgios Antonopoulos
ACER, Europe

Karin Kritzinger
Agora Energiewende, Germany

German Kuhn
Siemens Energy, Germany