CIGRE NGN Forum

31st August 2022
Room 352B, 11:00 – 14:00

Host
Aditie Garg (US)

Speakers
Stefie Cray (DE)
Siva Kaviya, Trichy Siva Raman (UK)
Li Yang (BE)
Bogdan Leu (RO)
Harish Krishnappa (NE)
Ana Lovrenčič (SL)
Mike Heyeck
Arshad Mansoor
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>Introduction to NGN Forum</td>
<td>Aditie (US)</td>
</tr>
<tr>
<td>11:15 – 11:20</td>
<td>NGN Overview</td>
<td>Stefie, NGN IEC Chair (DE)</td>
</tr>
<tr>
<td>11:20 – 12:00</td>
<td>NGN Presentation (5 min. each) + 15 min. Q&amp;A</td>
<td>NGN UK&lt;br&gt;NGN Belgium&lt;br&gt;NGN Romania&lt;br&gt;NGN Netherlands&lt;br&gt;NGN Slovenia</td>
</tr>
<tr>
<td></td>
<td>5 min. extra time</td>
<td></td>
</tr>
<tr>
<td>12:05 – 12:25</td>
<td>Talk/Q&amp;A Session with CIGRE Steering Committee Member</td>
<td>Mike Heyeck (CIGRE VP Finance)</td>
</tr>
<tr>
<td></td>
<td>5 min. extra time</td>
<td></td>
</tr>
<tr>
<td>12:30 – 1:00</td>
<td>Invited Speaker 15-20 min. speech 10 min. Q&amp;A</td>
<td>Arshad Mansoor (CEO, EPRI)</td>
</tr>
<tr>
<td></td>
<td>10 min. extra time</td>
<td></td>
</tr>
<tr>
<td>1:10 – 1:40</td>
<td>NGN Speed Networking Breakout Session</td>
<td>NGN Volunteers</td>
</tr>
</tbody>
</table>
Sparkup Code
Access to the NGN online Q&A system

Direct link to group Q&A pages
https://cigregroups.org/x/uQs3Cg

• Existing KMS Group Users
  – Login as normal
  – Set the eye-icon <<Watch all content for this Space>>

• Guest Users
  – Username: ngn
  – Password: hertz
  – Access will be revoked by 2022-Oct-01

Forgot your Username/Password
UMS: https://admin.cigregroups.org/

About our KMS:
https://cigre.tiny.us/ycktd9w3

Space name: Spontaneous Contribution

Use your Laptop or Tablet with a standard HTML5 browser such as Chrome/Firefox/Safari/Edge. Internet Explorer may cause difficulties. Select “desktop view mode” if using a Smartphone.
Cigre’s Next Generation Network (NGN)
A professional network for engineers studying or in the early stages of their career in the power industry

What is the NGN?
“the gateway for young professionals and students into Cigre”

- Facilitate involvement of young members in Cigre
- Personal and professional development for members
- Support the local National Committees and Regular Members

What is the NGN International Executive Committee (IEC)?
Official organisational body to coordinate and lead all international NGN activities throughout Cigre

- Official contact between organizational bodies of Cigre and the national NGN groups.
- Support National Committees in set up of new NGN groups
- Chair has seat on Cigre Steering committee

CHAIR: Stefie CRAY (DE)
VICE-CHAIR: Stan EROSHENKO (RU)
SECRETARY: Anthony GIACOMONI (US)

Paris 2021
Paris 2018
Current NGN Groups:

1. Australia
2. Austria
3. Belgium
4. Bosnia & Herzegovina
5. Brazil
6. Canada
7. China
8. Colombia
9. Croatia*
10. Denmark
11. Finland
12. France
13. Germany
14. Greece
15. Hungary*
16. Iran*
17. Ireland
18. Italy
19. Japan
20. Netherlands
21. New Zealand
22. Norway
23. Romania
24. Russia
25. Slovenia
26. South Africa
27. Sweden
28. Switzerland
29. Turkey
30. United Kingdom
31. United States

*In Development
NGN IEC Lead Positions for activities and initiatives

**Organisation:**
- Chair: Stefie Cray
- Vice Chair: Stanislav Eroshenko
- Secretary: Anthony Giacomoni

### Lead*
- Main point of contact and responsible for deliverables

**Support**
- Active support in activity. Multiple groups can volunteer to support each activity

**Technical & Organisational**
- NGN Showcase
- Study Committee Collaboration
- Task Force: "How can we speed up the Energy Transition?"
- NGN Group Constitution (template for new groups)

**Paris Session**
- International Task Force for Paris Co-ordination

**Marketing & Comms (MarCom)**
- Overall MarCom Lead
- Website
- Webinar Programme
- Social Media (Linked In, Instagram)
- Women’s Network Rep

<table>
<thead>
<tr>
<th>Lead*</th>
<th>Support*</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>CN</td>
</tr>
<tr>
<td>DE</td>
<td>SE</td>
</tr>
<tr>
<td>IE</td>
<td>RU</td>
</tr>
<tr>
<td>FR</td>
<td>UK</td>
</tr>
<tr>
<td>AU</td>
<td>IR</td>
</tr>
<tr>
<td>IT</td>
<td>JP</td>
</tr>
</tbody>
</table>

*Lead and Support roles currently allocated per country and refer to the two official representatives of this country’s NGN group, as listed on the KMS.*
Congratulations to Phil and Anthony for being elected into the positions of Chair and Vice Chair! We wish you all the best in your new roles 😊
We are looking for a new Secretary for the NGN IEC!

Could this be you??
We are looking for a new Secretary for the NGN IEC!

SECRETARY

Role & Responsibilities

- Critical support to the NGN Chair and Vice Chair
- Organisation of bi-monthly NGN IEC meetings (virtual) including preparation of agenda together with Chair
- Support in Paris preparations and other events as required
- Key contact point between NGN IEC and Central Office
- Point of contact for NGN Chairs from the international groups
- Time commitment varies, typically a few hours per week for calls / organisation

Why take on the role?

- Build your international network & gain strong visibility amongst senior levels within Cigre
- Develop your organisational and leadership skills
- Work with a great team
- Gain a deep understanding of the inner workings of Cigre
- Make a difference to the future of Cigre and the NGN!

Prerequisites?

- We are looking for a motivated young professional to bring enthusiasm and new ideas to the team
- No prior experience needed, you are also here to learn!

Could this be you??
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>NGN IEC Meeting: Prior to Opening Ceremony. Meeting is open to all NGN Members to observe in person.</td>
</tr>
<tr>
<td>14:00</td>
<td>NGN IEC Meeting</td>
</tr>
<tr>
<td>Room 252A- 14:00 – 15:45</td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td>Career Speaker #1</td>
</tr>
<tr>
<td>NGN Booth - 16:00 – 17:00</td>
<td></td>
</tr>
<tr>
<td>Stewart BELL, Executive General Manager, Powerlink Queensland</td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td>Career Speaker #3</td>
</tr>
<tr>
<td>NGN Booth - 16:00 – 17:00</td>
<td></td>
</tr>
<tr>
<td>Olivier GRABETTE, Senior Executive Vice President,</td>
<td></td>
</tr>
<tr>
<td>08:00</td>
<td>NGN Activities Briefing</td>
</tr>
<tr>
<td>NGN Booth 8:00 – 8:30</td>
<td></td>
</tr>
<tr>
<td>Information about all activities during the week</td>
<td></td>
</tr>
<tr>
<td>08:00</td>
<td>NGN Showcase</td>
</tr>
<tr>
<td>Room 352B: 8-11 &amp; 14-15</td>
<td></td>
</tr>
<tr>
<td>10 minutes presentations followed by Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>NGN Forum</td>
</tr>
<tr>
<td>Room 352B 11:00 – 14:00</td>
<td></td>
</tr>
<tr>
<td>Meet with NGN members from around the world</td>
<td></td>
</tr>
<tr>
<td>14:00</td>
<td>NGN Technical Tour</td>
</tr>
<tr>
<td>Nanterre - 10:00 – 12:00</td>
<td></td>
</tr>
<tr>
<td>Visit RTE Voltage Facility</td>
<td></td>
</tr>
<tr>
<td>Meet 8:30 in Palais des Congrès</td>
<td></td>
</tr>
<tr>
<td>Only for registered persons</td>
<td></td>
</tr>
<tr>
<td>14:00</td>
<td>NGN Poster Session</td>
</tr>
<tr>
<td>NGN Booth - 14:00 – 16:00</td>
<td></td>
</tr>
<tr>
<td>Poster authors available during this time with opportunity for Q&amp;A.</td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td>Career Speaker #2</td>
</tr>
<tr>
<td>NGN Booth - 16:00 – 17:00</td>
<td></td>
</tr>
<tr>
<td>Pascal DALEIDEN, Country Managing Director, Hitachi Energy Germany AG.</td>
<td></td>
</tr>
<tr>
<td>18:30</td>
<td>Drinks at the Freedom Pub</td>
</tr>
<tr>
<td>20:00</td>
<td>Dinner at Ziti’s Italian</td>
</tr>
<tr>
<td>Dinner for registered persons only, drinks open for all</td>
<td></td>
</tr>
</tbody>
</table>

**Wednesday Social Event**
Biography – Siva Kaviya, Trichy Siva Raman

- Currently: Junior Software Engineer, IPSA, TNEI, Manchester, UK (July 2021 – Present)


Expertise:
- Developing software tools in the realms of power system in the domains of data integration, energy integration, analysis modules and scripting
- Other areas of expertise include smart grids, IOT based communication for power systems, demand side congestion management
Introduction – The Team

- Jingyi Wan
- Asimina Frosinou
- Anita Aliu
- Qiteng Hong
- Stefan Borozan
- Siva Kaviya, Trichy Siva Raman
- Ying Xue
- Victor Timmers
- Maria-Irina Oancea
Overview of CIGRE UK NGN

UK NGN started – 2007
NGN UK Members:
• Active Student Participation (112)
• Individual Participation (78)
• Total NGN Members until June 2022 – 190

CIGRE UK NGN 2022 YM Showcase 24th Jan 2022
• 3 Winners nominated for NGN Paris Showcase
  Nominees - Dr Angeliki Loukatou, Dr Ying Li and Mr. Christian Pößniker
1. 21st July 2022, The Changing Electricity Market: UK & AU perspectives in collaboration with CIGRE AUS NGN
2. 1st July 2022, Innovation and Creativity Event
3. 05th May 2022, Clean Technologies & Energy Storage, CIGRE UK NGN in collaboration with CIGRE Romania NGN
4. 01st February 2022, Offshore Wind Development towards a Net Zero World, CIGRE UK NGN in collaboration with CIGRE France NGN
5. 27th January 2022, Cutting Edge Technology towards Net Zero World, CIGRE UK NGN in collaboration with CIGRE AUS NGN.
6. 3rd December 2021, Grid Forming Technologies for the Net Zero Power Network, CIGRE UK NGN in collaboration with CIGRE B4 Study Committee
7. 26th October 2021, Women In Energy, Diversity Inclusion Event, CIGRE UK NGN in collaboration with Italy
8. 12th October 2021, Opportunities and Challenges for HVDC and Power Electronics in the UK, in collaboration with CIGRE B4 Study Committee
9. 9th June 2021, Net Zero in the UK and China – Challenges and Opportunities, in collaboration with CIGRE NGN China
10. 29th March 2021, Impact of COVID on Electrical Power Systems, in collaboration with CIGRE NGN Netherlands
Mentoring Scheme

- 7 Mentors & 14 Mentees – started in 2021
- Reiterate the scheme again to find more mentors and mentees in September

Upcoming Events

- Manchester HV Lab Site Visit (19th September)
- Collaborative Event with CIGRE B4 (under planning)
Social Media

• LinkedIn page - https://www.linkedin.com/company/cigre-uk/

• Twitter - https://twitter.com/cigreukngn

• Newsletter subscription - https://cigre.org.uk/ngn/
The Belgian NGN at a Glance

Launched end March 2022!

SteerCo – interim-4 members

Events 2022-3+

Membership 65

Students – 39
Cigré YM – 26
Highlights from First Event-Presentation Competition
Progress and Outlook

- **Q1 2022**
  - Administrative preliminaries to initial set up
  - First events to gather interests
  - Set up of interim ex. committee and draft constitution

- **Q2 2022**
  - Recruitment drive for first members
  - Proposals for initial event calendar
  - Registration of members
  - First events

- **Q3 2022**
  - Recruitment drive for first members
  - Proposals for initial event calendar
  - Registration of members
  - First events

- **Q4 2022**
  - More events to foster collaboration
  - Industrial visits
  - Proposals for participation in elected committee
  - Voting

- **Q1 2023**
  - First year with elected ex. committee
CIGRE NGN Presentations

CIGRE Romania NGN

Bogdan Leu
Romania
NGN Romania has been founded in 2015 at the initiative of our former Chair, Mihai Marcolț after attending the CIGRE Paris NGN Booth.

NGN Romania has 25 members, where:

- 25-30 age group: 40% of members
- 30-35 age group: 35% of members
- 35-40 age group: 25% of members

Gender balance:
- Female (F) members: 60%
- Male (M) members: 40%
New Steering Committee starting with May 2022

Chairman:
**Bogdan Leu**
Power systems expert
CNTEE Transelectrica SA
bogan.leu@transelectrica.ro

Vice-Chairman:
**Teodor Diaconu**
Cabinet Adviser for Secretary of State
Ministry of Energy, Romania
diaconuteodor@gmail.com

Secretary:
**Anamaria Iamandi**
Principal Engineer
CNTEE Transelectrica SA
anamaria.iamandi@transelectrica.ro
EVENT 1:
CMDM 2021 – CIGRE Romania Conference on Condition Monitoring, Diagnosis and Maintenance (6th edition)
NGN Romania’s members shared their vision regarding power systems challenges in the context of energy transition.

EVENT 2:
Clean Technologies and Energy Storage
Joint webinar organized by CIGRE NGN UK and Ro
Speakers from UK and Ro presented the contribution of clean technologies and energy storage on modern power networks.

EVENT 3:
Workshop – “CIGRE, the first 100 years and the role of young professionals in the energy transition”

UPCOMING EVENTS:
RSEEC 2022 (6th edition) where NGN Romania will organize:
- The 3rd edition of the Next Generation Network Contest - Scientific paper contest for Bachelor, Master and PHD Students;
- NGN workshop on “S-E European Power Systems Challenges in the Green Energy Transition Context”.
What is next?

Our goal is:

• To extend our international collaboration with other NGNs;
• To increase the diversity of members;
• To support early-career professionals by organizing technical and social activities;
• To develop partnerships with other energy organizations.

bogdan.leu@transelectrica.ro
Overview

Founded
2014

Our mission
The Next Generation Network (Young CIGRE) supports young professionals in career development and introduction to CIGRE, regardless of their current job in the energy sector.

Our objectives

- To encourage active membership of CIGRE NGN both for the benefit of NGN members and the NGN group. → NGN presentations (TUs)
- To support/promote activities, such as technical visits, tutorials, and meetings for the CIGRE NGN. → Teamday events
- To organize appropriate CIGRE NGN networking events → Matchmaking
- To improve communication between CIGRE and NGN members → NGN IEC + DB meeting
Overview

- 9 Board members (7 young professionals + 2 student ambassadors)
- 119 NGN subscribers (49 Individual CIGRE members)
- As of January 2022, no more collective membership for NGN members.
- 23 companies NL

Companies NL:
- Alliander
- Bilfinger Tebodi
- Deme Offshore
- DNV
- Freelance Consultant
- General Electric
- Guidehouse
- HAN Hogeschool Rotterdam
- Krado
- Orbis
- Phase to Phase B.V.
- ProRail B.V.
- Qirion
- Rotterdam University of Applied Sciences
- Siemens Nederland N.V.
- Stedin
- TenneT TSO
- TU Eindhoven
- TU Delft
- Utrecht University
- Volker Energy Solutions
- Allandar
- Billinge Tebodi Netherlands
- DNV
- Freelance Consultant
- General Electric
- Guidehouse
- HAN Hogeschool Rotterdam
- Krado
- Orbis
- Phase to Phase B.V.
- ProRail B.V.
- Qirion
- Rotterdam University of Applied Sciences
- Siemens Nederland N.V.
- Stedin
- TenneT TSO
- TU Eindhoven
- TU Delft
- Utrecht University
- Volker Energy Solutions
- Allandar
- Billinge Tebodi Netherlands
Main activities

Teamday event (Dive into the wind saga)
Borselle beta platform visit

Presentations at Universities
Networking event

Joint webinar event (Webinar series)
Discussion about developments and investments driven and motivated by the global pandemic.

CIGRE Session events (bi-annual event)
Free-ticket presentations & NGN showcase

Teamday event (Dive into the wind saga)
Offshore wind Symposium

Matchmaking event (Signature annual event)
Networking event
CIGRE NGN Presentations

CIGRE Slovenia NGN

Ana Lovrenčič
Slovenia
NGN Slovenia

- Established in October 2014
- 35 young members
- Students and young engineers up to 33 years old
- Aim: to provide the ability to network with experts and possible employers, gain new experience and practical knowledge.
Benefits for young members:

- Participation on the national and international CIGRE conferences (participation, presenting a paper, voluntary work)
- Access to archive of papers, publications and brochures of NC Slovenia,
- Participation on workshops and technical visits organized by NC Slovenia and NGN Slovenia.

Attracting new members:
- Every year presentations of NGN Slovenia for students on both universities in Slovenia (Ljubljana and Maribor)
- Invited lectures for students organized by NGN Slovenia
Activities 2021/2022

• Part of CIGRE International Executive Committee (IEC) NGN

• Slovenian National CIGRE conference 2021:
  - possibility of free registration,
  - voluntary work in organizing committee
  - Young members competition for the best paper

• Annual Bedjanič award 2021:
  - respectable student’s award for best doctoral and master theses,
  - up to year 2021, all together have been granted 300 awards.

• International Symposium Ljubljana 2021:
  - on the 100th anniversary of the first CIGRE conference
  - NGN members had the possibility of free participation and volunteering in the LOC

• SEERC Vienna 2022:
  - Paid registration for NGN Slovenia members
  - Cooperation with NGN Austria on NGN booth and NGN panel
THANK YOU FOR YOUR ATTENTION!

NGN Slovenia

NGN Slovenia
Talk and Q&A Session

Mike Heyeck
CIGRE VP Finance

For power system expertise
Brand vision

World’s benchmark for energy transition, technological advancement and more

One place for end to end (E2E) power system expertise
Vision for growth 2023 and beyond

Key Goals
• Growth in membership 7-10% annually
• Long term 50,000 eqv Members
• Improved member experience to enhance retention
  – all new e-cigre.org
• Increased e-product sponsorships and advertisements to offset member costs
Vision for growth 2023 and beyond

Growth with three guiding principles

1. New markets for innovation and new players
2. Global penetration with new members growing worldwide
   - Asia and Africa key
3. Membership diversity with students, NGN and WIE growing for our future

CIGRE’s 2nd century...
The force multiplier effect of membership growth

2nd Feedback loop
Increased profile and scale

Improved SC/technical diversity
Enhanced Session registrations
Increased Sponsor appeal

Financial and technical sustainability

= €

Enhanced membership diversity
Increased web and social traffic

Membership growth
= €

Leads to

CIGRE profile and appeal

1st Feedback loop
Share/like/endorse
2023+ growth marketing strategy
Transformation

Drive affordability of a clean and resilient energy system through digital transformation

- Power system modernization: pervasive sensors, monitoring, advanced analytics using AI
- Upgraded and expanded communications infrastructure and control systems

Decarbonization

Accelerate economy-wide, low-carbon solutions
- Electric sector decarbonization
- Transmission and grid flexibility: storage, demand, EVs
- Efficient electrification

Achieve a net-zero clean energy system
- Ubiquitous clean electricity: renewables, advanced nuclear, CCUS
- Negative-emission technologies
- Low-carbon resources: hydrogen and related, low-carbon fuels, biofuels, and biogas

Resiliency

Mitigate climate impacts and cyber/physical risks
- System and asset hardening
- Improved response
- Faster recovery
- Cybersecurity

Future proof energy system design basis
- Resilient power system design
- Advanced asset design and strategic undergrounding
- Smart integration of energy carriers

Digital Transformation

Making Energy More

Clean
Affordable
Reliable
NGN Speed Networking Breakout Session