

Introduction to CIGRE UK NGN University of Birmingham Hub

Dr Nan Chen, Professor Xiao-Ping Zhang
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For power system expertise

CIGRE UK NGN UoB Hub

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1. Motivations

- **CIGRE UK** is a professional organization based in the UK providing up to date knowledge of the development of the technologies in power systems. CIGRE UK provides a lot of resources like the most advanced technical brochures and thought-provoking insights into the multiple power system topics.
- **CIGRE UK NGN** provides opportunities for young professionals and early career researchers to develop their network in their professional areas.
- **CIGRE UK NGN members** have been playing very active roles in technical activities including WGs. They have already demonstrated the success of such a platform.
- **However**, with the continuous growth in early career researchers, PhD research students, MSc students at UK universities, it has been found that there is a great demand on how to serve these people on the campus more actively at a local level. **For instance**, there are lots of technical topics and areas related to our work, but there are few places/opportunities for these NGN members to communicate with others to exchange our thoughts at a local level more actively and frequently.
- **CIGRE UK NGN University of Birmingham Hub (the UoB Hub)** is a good place to bring our local NGN members together and provide the good opportunity to communicate with each other more actively.
- **CIGRE UK NGN UoB Hub** can provide lots of technical networking opportunities to make people connect with the experts.
- **CIGRE UK NGN UoB Hub** can also support CIGRE UK technical meetings, workshops and seminars at local level.
- Last but not at least, a **CIGRE UK NGN UoB Hub** will facilitate the growth of NGN members locally.

2. What is CIGRE UK UoB Hub

The CIGRE UK University of Birmingham Hub is:

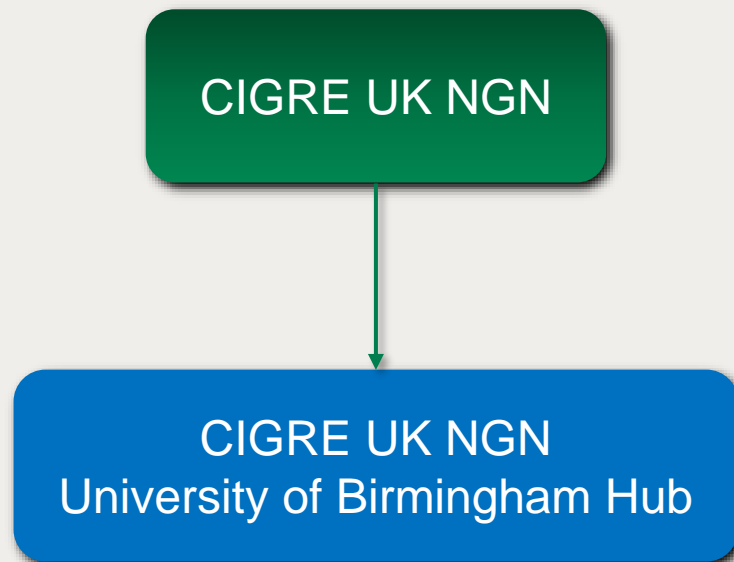
- A university-based (company-based) community
- Formed by NGN junior members, as well as potential members including early career researchers, PhD research students and Master students
- Aiming to provide a platform for the local NGN community to network, discuss and collaborate on research and projects in CIGRE topics (i.e., 16 Technical Study Committee areas).

3. Benefits of CIGRE UK NGN UoB Hub

- **Local Support:** Provide local support for all events held by the CIGRE UK and NGN including face-to-face event venue booking, online-event technical support, hybrid event coordination.
- **Membership development:** Local postgraduate students and early career researchers could be invited to the hub and potentially developed as NGN members after their participation in local CIGRE events. Experts could be developed as CIGRE Member.
- **Reputation increase:** The local hubs could build CIGRE UK and NGN reputations in local communities and institutions by delivering technical activities and providing networking opportunities.
- **Education:** Young professional training and professional development by collaborating and networking with senior CIGRE members.
- **Innovation:** Provide a platform for young professionals and experts to work on innovative topics and projects.
- **Skill Improvements:** Hub members can improve their soft skill like leadership and teamwork through supporting the local CIGRE events, lead interest groups, collaborate with colleagues.

4. Organisational Structure

Organisational Structure:



CIGRE UK NGN UoB Hub

Committee Structure



4. Organisational Structure

The CIGRE UK NGN UoB Hub Committee Roles:



- **Advisors** – Multiple positions, from experienced/senior CIGRE UK Members
- **Ambassador** – One position, from the **CIGRE UK Ambassador Programme**
- **Chair** – One position, from the local NGN members
- **Vice Chair** - One position, from the local NGN members
- **Secretary** - One position, from the local NGN members
- **WiE Officer** - One position, from the local NGN members
- **A Study group lead** (Equipment) - One position, from local Community
- **B Study group lead** (Technologies) - One position, from local Community
- **C Study group lead** (Systems) - One position, from local Community
- **D Study group lead** (New Materials and IT) - One position, from local Community

4. Organisational Structure

The CIGRE UK NGN UoB Hub

4 Study Group:

CIGRE's Study Committees and domains of work

Group A – Equipment

- A1 [Power generation and electromechanical energy conversion](#)
- A2 [Power transformers and reactors](#)
- A3 [Transmission and distribution equipment](#)

Group B – Technologies

- B1 [Insulated cables](#)
- B2 [Overhead lines](#)
- B3 [Substations and electrical installations](#)
- B4 [DC systems and power electronics](#)
- B5 [Protection and automation](#)

Group C – Systems

- C1 [Power system development and economics](#)
- C2 [Power system operation and control](#)
- C3 [Power system sustainability and environmental performance](#)
- C4 [Power system technical performance](#)
- C5 [Electricity markets and regulation](#)
- C6 [Active distribution systems and distributed energy resources](#)

Group D – New Materials and IT

- D1 [Materials and emerging test techniques](#)
- D2 [Information systems telecommunications and cybersecurity](#)

5. Planned Activities

Planned activities include:

1. Provide local support for all CIGRE UK NGN event as well as CIGRE UK Events including technical webinars or **seminars**, promotional events, hot-topic panel discussions, liaison meetings, **the ambassador programme**, Paris Sessions such as **Young Member Showcase** competition, etc.
2. Interest groups in University of Birmingham Hub: The hub could have different interest groups, e.g., net-zero, decarbonization, climate change, electricity market, etc. topics from A1 to D2. Group leader and co-leader could be appointed.
3. CIGRE UK NGN UoB Hub will host **Annual Showcase Conference**, inviting postgraduate students, early career researchers, and young professionals to present posters or make presentations in CIGRE topics, inviting CIGRE experts to give lectures and workshops, and invite industry companies to introduce the techniques of their products or their R&D, to provide a platform for all local members to network and follow up hot topics.

Upcoming Events that will be supported/sponsored by CIGRE UK NGN UoB Hub locally:

1. 8th December 2023: CIGRE UK NGN Membership Drive Promotional Event
2. June/July 2024: Birmingham Decarbonisation Summer School (BDSS) 2024

Topic: Power System Net-Zero!

Thank You!



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