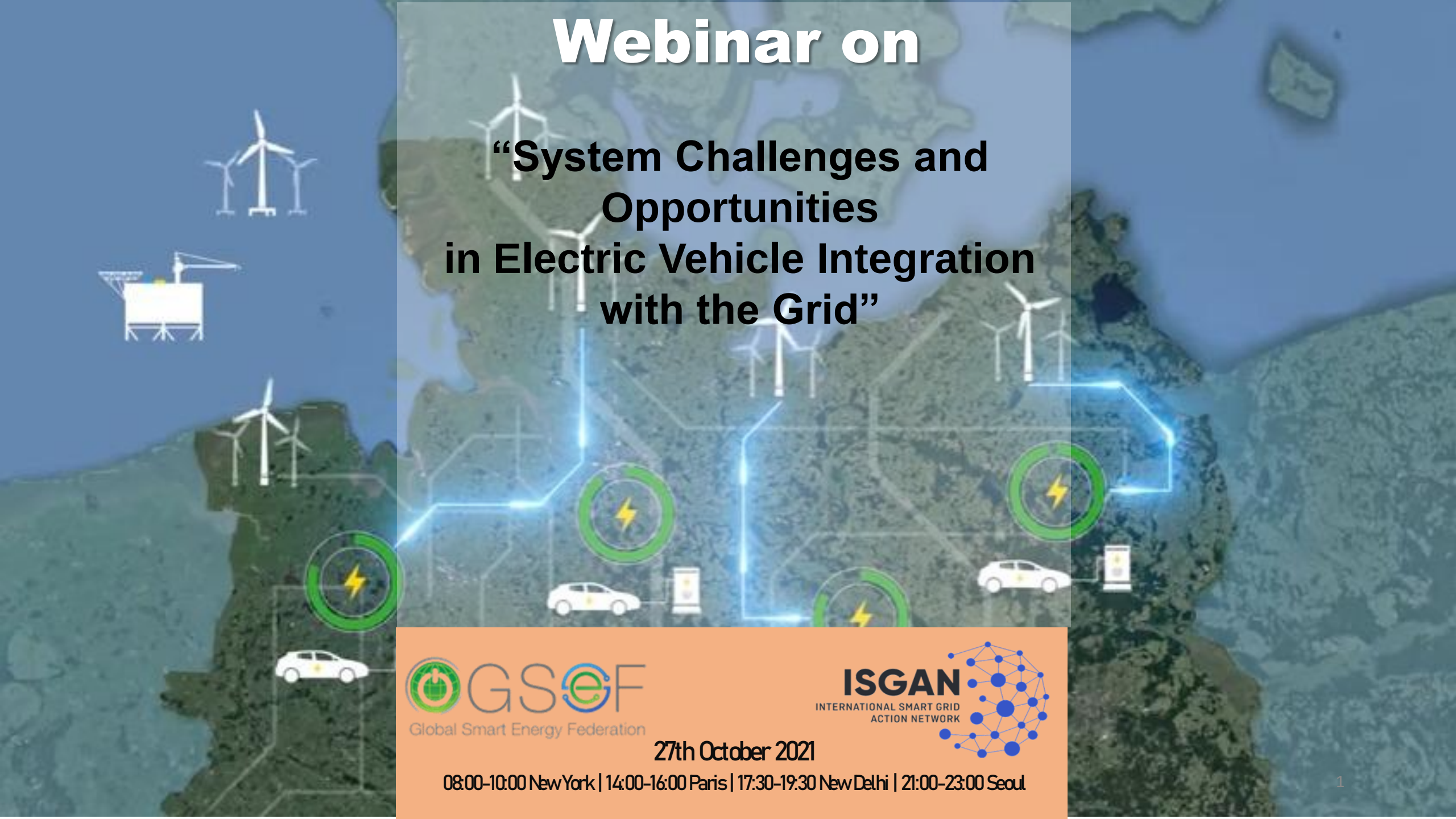
Webinar on

“System Challenges and Opportunities in Electric Vehicle Integration with the Grid”



GSEF
Global Smart Energy Federation

ISGAN
INTERNATIONAL SMART GRID ACTION NETWORK

27th October 2021

08:00-10:00 New York | 14:00-16:00 Paris | 17:30-19:30 New Delhi | 21:00-23:00 Seoul

Context

In most low-carbon scenarios, EV integration is a critical vector for decarbonisation of transport sector. However, effective EV integration presents a variety of high-stakes technical challenges for distribution network operators that must be resolved for that promise to be realized at a speed and scale consistent with global climate and clean energy objectives.

This open event will bring together on-going and upcoming ISGAN and GSEF's work looking at EV integration. The focus of the discussion will be on key policy support, technical issues of EV and cross-sectorial approaches.

Agenda

14:00-14:15hrs: Welcome remarks and joint collaboration between ISGAN & GSEF and the way forward

- **Luciano Martini**, ExCo Chair, ISGAN
- **Reji Kumar Pillai**, Chairman, GSEF

14:15 - 14:25hrs: Keynote Address-1: Global EV Deployment Policies Scenario

- **Pauline Henriot**, Energy Policy Analyst, IEA*

14:25 - 14:35hrs: Keynote Address-2: EV as a Challenge to the Power Grid

- **Willet Kempton**, Professor, University of Delaware*

14:35 - 14:50hrs: Key Insights and Policy Messages from Horizontal Accelerator on EV-Power Sector Integration

- **Magnus Olofsson**, Swedish National Expert and Knowledge Transfer Platform Lead, ISGAN

14:50 - 15:45hrs: Panel Discussion

- **Ravi Seethapathy**, GSEF Ambassador, Americas
- **Magnus Brolin**, Annex 6 Technical lead, ISGAN and Director Electric Power Systems, RISE
- **Lonneke D.Mutters**, Director Standardization, ElaadNL
- **Antonio Iliceto**, Co-Chair of WG1 on Grids & Systems, ETIP SNET
- **Mark McGranaghan**, EPRI Fellow, EPRI
- **Shashi Verma**, Director of Strategy CTO Transport for London, UK*
- **Makoto Dave Yoshida**, Secretary General, CHAdeMO Association, Japan*
- **Marc Petit**, Professor, Centrale Supelec, France*
- **Ki Jun Park**, V2G Project Manager, KEPRI, Korea

***15:45 -15:55hrs*:** Theme for the 8th ISGAN Award of Excellence

- Award Jury Chairs

15:55 - 16:00hrs **:** Closing remarks

- ISGAN and GSEF Vice Chairs

GSEF

Global Smart Energy Federation (GSEF) established in 2010 and formerly known as Global Smart Grid Federation (GSGF), is a global stakeholder organization of national smart grid associations, forward-looking utilities, and think tanks from around the globe working in the domains of energy transition and clean transportation. By linking the major public-private stakeholders and initiatives of participating countries, the federation shares practices, identifies barriers and solutions, fosters innovation, and addresses key technology standards and policy issues.

The activities of GSEF help our member organizations and their member utilities in their energy transition and grid modernization initiatives that enhance access to affordable clean energy and increase the security, flexibility and resiliency of the power system while reducing the emissions.

GSEF has 16 member countries including India, Indonesia, Mexico, Malaysia, Thailand, Mozambique, South Africa, Botswana, Saint Lucia, USA, Japan, France, South Korea. European Distribution System Operators (E.DSO), an organization promoted by European Commission; and several think-thanks of global repute in also a member of GSEF. http://globalsmartenergy.org/

ISGAN

International Smart Grid Action Network(ISGAN) is a Technology Collaboration Programme (TCP) of the International Energy Agency (IEA). The co-operative programme was formally established in 2011 and is also an initiative of the Clean Energy Ministerial (CEM).

ISGAN is an IEA Technology Collaboration Programme, and as such seeks to support governments and industry with insight and recommendations to high-level decision-makers. In addition, ISGAN closely co-operates with Mission Innovation, a global initiative that promotes the acceleration of the clean energy transition.

ISGAN is an international platform for the development and exchange of knowledge and expertise on smarter, cleaner, and more flexible and resilient electricity grids (“Smart Grids”). ISGAN provides an important channel for the communication of experience, trends, lessons learned, and visions in support of global, national and regional clean energy objectives as well as new flexible and resilient solutions for Smart Grids.

ISGAN has 26 members including Australia, Austria, Belgium, Canada, China, Denmark, Finland, France, Germany, India, Ireland, Italia, Japan, Korea, Mexico, The Netherlands, Norway, Russian Federation, Singapore, South Africa, Spain, Sweden, Switzerland, United Kingdom, USA, and European Commission.

https://www.iea-isgan.org/

Speakers

Luciano Martini, Chairman of ISGAN ExCo, has more than 25 years of experience in Research & Development and international cooperation dealing with renewable energies, superconductivity, and smart grids. He is the Director of the T&D Technologies Department at RSE and the EERA Joint Programme on Smart Grids coordinator. He is the Director of the Green Powered Future Mission launched within Mission Innovation phase 2

Reji is the President of India Smart Grid Forum (www.indiasmartgrid.org) since its inception in 2011 and is also the Chairman of Global Smart Energy Federation since November 2016. He an internationally renowned expert with nearly four decades of experience in the electricity sector in diverse functions covering the entire value chain and across continents.

Pauline Henriot, Policy Analyst IEA, is working in the Energy Efficiency Division. She works on the 3DEN project on consumer flexibility and network digitalisation. Before joining IEA, she worked first at the French Energy regulator, on distribution tariffs and smart grid regulation, and then in a utility, on flexibility scheme for power consumers. Pauline Henriot holds a master's in economics from the Université Paris-Dauphine, and a Diploma in Economics from the Ecole Normale Supérieure

Prof Willett Kempton, Professor at the University of Delaware in the College of Earth, Ocean and Environment and Professor in the Department of Electrical and Computer Engineering. He is a nationally renowned expert in two renewable energy fields: offshore wind power and electric cars/vehicles.

Magnus Olofsson, Swedish National Expert and Knowledge Transfer Platform Lead, ISGAN. He holds a Ph.D. in power systems engineering from Royal Institute of Technology, Stockholm Sweden, and has founded Swedish Energy Institute and is an elected fellow at Royal Swedish Academy of Engineering and Sciences. He is currently Senior Nordic Advisor and Non-Executive Director at Downing Hydro AB. He is responsible for managing renewable electricity production, particularly hydro power within the Nordics.

Speakers

Ravi Seethapathy, Executive Chairman of Biosirus Inc., Canada and Corporate Director on the Board of Larsen & Toubro's - Power Transmission & Distribution (IC) Division, India. He also serves as the "Ambassador for the Americas", for the Global Smart Energy Federation, USA, and as an Advisor to the India Smart Grid Forum and the India Energy Storage Alliance.

Dr. Magnus Brolin, Director Electric Power Systems at Research Institutes of Sweden (RISE), has for the last two decades lead and been involved in research and innovation projects regarding electric power systems and markets. His main current research interests include flexibility and market design, system service markets and the role of aggregators in the system. Dr. Brolin is the technical lead of ISGAN Annex 6 on Transmission and Distribution systems.

Lonneke Driessen-Mutters, Director Standardization and Test Lab at ElaadNL is responsible for the EV Charging testing facilities, open standards development in secure EV charging and is in charge of activities regarding the Open Charge Alliance (OCPP) and EClearing.net

Antonio Iliceto, Co-Chair WG1 on Grids & Systems, ETIP SNET, is an active member in ISGAN Annex6 on T&D systems. He is also the Convenor of WG "Future Energy Systems" in ENTSO-E engaged, leading /providing technical and strategic advice on EV-Grid integration, Flexibility, Sector Integration, Hydrogen, Interconnections, Global Grids, Innovation management. On these areas he is also engaged in CIGRE (Chairman of Study Committee C1 "System Development & Economics"), in IEC (Co-Chair of Task Team on Global Grids in ACTAD), in MedTSO (Association of Mediterranean TSOs, as Terna representative) and other International Organizations.

Mark McGranaghan, Fellow at the Electric Power Research Institute (EPRI) provides technical and strategic input and guidance across the organization and for the electric utility industry around the world, working from the EPRI Europe office in Dublin, Ireland. Mark coordinates with research sectors at EPRI as well as the Technology Innovation function.

Speakers

Shashi Verma is CTO and Director of Customer Experience at Transport for London. He joined TfL in September 2002. Shashi has overall responsibility for TfL's Technology and Data Strategy and for its Customer Strategy. The new role of CTO is aimed at bringing a new approach to the development, deployment, and operation of technology across TfL.

Makato Dave Toshida, Secretary General, CHAdeMO Association, Japan is mechanical engineer by training and having been involved in electric vehicles over a decade. Makoto Dave Yoshida brings to table his expertise in Zero Emission Vehicle (ZEV) technology and Vehicle Safety including especially dedicated to ZEV safety as well in the technical standardization and legislation fields.

Prof Marc Petit, Professor in Centrale Supélec and GeePs Lab. His research is dedicated to electrical power systems (power quality, smart grids, flexibility, integration of EVs in the power system). He is involved in the Armand Peugeot Chair dedicated to the economy of electromobility.

Ki Jun Park, Head of Energy Solutions Group, Smart Distribution Laboratory, KEPRI. He has being involved in Commercial grade VGI-V2G development and demonstration of the wireless power transfer EV charging, GIS Substation PD diagnostics and preventive maintenance, PD sensors