दूरसंचार विभाग
DEPARTMENT OF
TELECOMMUNICATIONS
सत्यमेव जयते

tsdsi
India's Telecom SDO

National Telecommunications Institute
For Policy Research, Innovation and Training
(NTIPRIT)

WEBINAR:
5G USE CASES IN POWER SECTOR

Date : 27.04.2022 | Time: 1000 hrs onwards

For Registration click: ***https://tinyurl.com/2mzpt2x4*** or SCAN

PROGRAMME SCHEDULE

S.No	SESSION & SLOT	NAME OF THE TOPIC
1	**Inaugural Session** 1000 hrs – 1020 hrs	**Welcome Address** - Sh. U. K. Srivastava, Director General NTIPRIT **Special Address** - Ms. Pamela Kumar, Director General TSDSI **Keynote Address** - Sh. Vishal Kapoor, Joint Secretary, Ministry of Power **Inaugural Address** - Sh. K Rajaraman, Secretary, Department of Telecommunications
2	**Session 1** 1020 hrs – 1045 hrs	**Potential 5G Use Cases for Power Sector** - Prof. Kiran Kuchi, Indian Institute of Technology Hyderabad
3	**Session 2** 1045 hrs - 1200 hrs	**Showcasing 5G Use Cases in Power Sector for India** - Sh. Subrata Kumar Mitra, M/s Ericsson - Startup - Stratup
4	**Session 3** 1200 hrs - 1315 hrs	**Use of Disruptive Technologies in Power Sector** - Sh. Reji kumar Pillai, President – India Smart Grid Forum - Ms. Kumud Wadhwa, Senior General Manager (NPMU), National Smart Grid Mission - Sh. Sanjeev Rana, M/s Tata Power
5	**Session 4** 1315 hrs - 1330 hrs	- Questions and Answers - Vote of Thanks by Sh. B Sunil Kumar, DDG (WA), NTIPRIT

ABOUT THE WEBINAR

5G is the 5th generation mobile network. It is a new global wireless standard after 1G, 2G, 3G, and 4G networks. 5G enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices.

5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users. Higher performance and improved efficiency empower new user experiences and connects new industries.

5G is a unified, more capable air interface. It has been designed with an extended capacity to enable next-generation user experiences, empower new deployment models and deliver new services. With high speeds, superior reliability and negligible latency, 5G will expand the mobile ecosystem into new realms. 5G will impact every industry, making safer transportation, remote healthcare, precision agriculture, digitized logistics — and more — a reality.

Next-gen wireless network capabilities offer the potential for revolutionary applications extending far beyond smartphones and other mobile devices. A new range of 5G use cases and applications that converge connectivity, intelligent edge, and Internet of Things (IoT) technologies will benefit everyone, from industry to consumers to governments.

The webinar on “5G use cases in Power sector” on 27th April 2022 brings together leading minds of Government, Industry, OEMs, Academia cutting across sectors to discuss 5G key capability and technologies to support potential use cases in Power Sector. During the Webinar, Speakers from Industry and Startups will be showcasing 5G Use cases in Power Sector.

The 5G-enabled three scenarios – enhanced mobile bandwidth (eMBB), ultra-reliable low latency communication (uRLLC) and massive machine type communication (mMTC) - have the technical characteristics of ultra-high bandwidth, ultra-low latency and large scale connectivity, and play an important role in the power generation, transmission, transformation, distribution, consumption, dispatching and emergency communication process in the power system. They can transform the Energy Power Control and Networks and comprehensively promote the informatization of the power system. It is estimated that 5G-enabled global digitalization revenues for ten major industries will be USD1.3 trillion in 2026, with energy and utilities (water, electricity, gas, etc.) accounting for the highest share of 19%1 , or about USD250 billion.

The 5G-based smart grid will greatly facilitate the penetration of distributed new energy, distributed energy storage, electric vehicles, high-power electric smart machines and other new appliances into homes, commercial buildings, factories and designed zones, while providing connectivity for personalized, diverse and market-oriented energy supply services. 5G offers an ubiquitous, flexible, cost-efficient, quality new technology option for power terminal access networks, and serves as a powerful foundation for building a more secure, reliable, green, and efficient smart grid. 5G+Smart Grid will significantly reduce the average power outage time for customers and effectively improve power supply reliability and management efficiency.

Smart meters work with a smart energy monitor, that can be placed anywhere in homes. This will then allow viewing how much energy one is using and an indication of how much it’s costing.

Smart meters have already been introduced to many homes around the world using existing telecommunications infrastructure to manage, send and monitor the data they provide. However, with the introduction of 5G, these services will be much more precise, allowing for more data to be sent and received more often, resulting in a lot more detail for the consumer and service provider.

As with smart meters, remote energy monitoring, with the introduction of 5G services, the improved speed of service and vastly improved latency will mean higher detail in terms of the information it will gather. There are many different types of energy producing sites that can be monitored with smart meters such as solar farms, windfarms and power stations.

DISTINGUISHED DIGNITARIES

Sh. K. Rajaraman, Secretary, Department of Telecommunications
Shri K. Rajaraman, current Secretary, Department of Telecommunications, is a senior Indian Administrative Service Officer of 1989 Batch Tamil Nadu cadre. He is a B. Tech in Electronics & Communications & a first class MBA and Master of Economics. During his rich and varied experience as an IAS Officer, he had held various administrative positions in the areas of Investment Promotion, Foreign Direct Investment, Public Sector Undertakings, Industrial Infrastructure, VAT Administration, etc.

Sh. U.K. Srivastava, Director General NTIPRIT
Sh. U.K. Srivastava is a senior officer of Indian Telecommunication Service and is at present Director General and Head of National Telecommunications Institute (NTIPRIT), the apex officers training academy of Department of Telecommunications, Government of India. Under his able leadership, NTIPRIT is conducting various National and International level training and capacity building programs which include Certification courses on next generation technologies like 5G, Network Security etc., training and capacity building programmes for foreign delegates as part of ITEC and APT apart from induction training programme for newly recruited ITS Officers and Mid-Career Training Programs for ITS officers.

Ms. Pamela Kumar, Director General TSDSI
Ms. Pamela Kumar is currently Director General, Telecom Standards Development Society India (TSDSI). She is an alumnus of PEC Chandigarh, Rutgers University and IIM Bangalore. She has more than 35 years of experience in communications, computers and semiconductor industry.

Sh. Vishal Kapoor, Joint Secretary at Ministry of Power, Govt of India
Shri Vishal Kapoor is IRSME (1995) and presently appointed as Joint Secretary at Ministry of Power, Govt of India. He leads and administers various Government interventions and reforms in the Distribution Sector. He is also leading Cyber security and IT initiatives in the Power Sector in India

Sh. B Sunil Kumar, Deputy Director General (Wireless Access) NTIPRIT
Sh. B Sunil Kumar is an Officer of Indian Telecommunication Service and is currently Deputy Director General (Wireless Access) in NTIPRIT. He has vast experience of more than 32 years in the field of Telecommunications in various capacities in Transmission Projects, O&M of Transmission networks, Training in transmission technologies, Planning & Operation of mobile networks and preparation of specification/ procurement/validation/rolling out of 3GPP mobile networks.

EXPERT SPEAKERS

Prof Kiran Kumar Kuchi, Professor, Dean R&D, IIT Hyderabad and Founder WiSig Network
He has led India's 5G research and standards development efforts at 3GPP (Third Generation Partnership Program), a global body that develops 5G standards and specifications. He is the author of more than 100 international patents, some of them are declared as 5G standards essential patents (SEPs) to TSDSI and 3GPP. Prof. Kuchi founded WiSig Networks Pvt Ltd, at IITH technology incubator.

Reji Kumar Pillai, President - India Smart Grid Forum | Chairman - Global Smart Energy Federation
He is the President of India Smart Grid Forum since its inception in 2011 and is also the Chairman of Global Smart Grid Federation since November 2016. He is 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. He is spearheading a mission to leverage technology to transform the electric grid in India and provide clean and reliable electricity to every citizen 24x7 at affordable cost.

Kumud Wadhwa, Senior General Manager (NPMU), National Smart Grid Mission
She is a Smart Grid professional supporting Ministry of Power as part of National Smart Grid Mission for design of Smart Grid solutions for DISCOMs in India, with over 30 years of cross domain experience in Power Sector, leading company-wide campaigns for digital transformation.

Subrata Mitra, Head - Government & Industry Relations at Ericsson India
Mr. Subrata Mitra is a senior business executive with experience in government relations, policy advocacy, solution and product sales to large enterprises and government organizations. His areas of expertise include Public advocacy and public speaking, Government relationship management across levels, executing Go To Markets strategies in Indian government market and Leading teams and managing individuals.

Sanjeev Rana, Head of Group - IT Infra & Smart Grid Communications at Tata Power Delhi Distribution Ltd.
He is an experienced Smart Grid professional with 9 years of deep business, functional and technical domain knowledge of power distribution utility. He has experience of leading diverse cross-functional teams, focused on delivering consistently measurable results in challenging work situations by leveraging deep analytical and technical insight.

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