The Institution of Engineers (India)
Delhi State Centre
World Telecommunication and Information Society Day
Theme: "Bridging the Standardization Gap"
On May 17, 2019

1. Delhi State Centre of The Institution of Engineers (India) jointly with IETE and The Institute of Engineering and Technology (UK) Delhi Local Network celebrated 51sst 'World Telecommunication and Information Society Day' on 17 May '19 focusing on the theme chosen by ITU, namely 'Bridging the Standardization Gap at IETE Headquarter, New Delhi. The event was organized in joint sponsorship of.

2. Chief Guest, **Shri Vinod Kumar Yadav**, Chairman Railway Board and ex-officio Principal Secretary, Govt of India inaugurated the function. **Shri Arvind Chawla**, Sr Dy Director General TEC and **Shri AK Gupta** CGM(OP & Maintenance) BBNL were the Guests of Honour. **Prof (Dr) KTV Reddy**, President, IETE chaired the function.

3. **Shri Dinesh Kumar**, Chairman Delhi State Centre of The institution of Engineers (India) welcomed the Chief Guest and VIPs on the dais: **Prof M N Hoda**, Chairman, Technical Programs and Publicity Committee, **Shri RN Rajpoot**, Vice Chairman, CCSA, IET (UK) ; Invited speakers **Shri Aniruddha Bose**, Nokia**, Shri Sushil Kumar**, TEC, **Dr Sujay Deb**, IIITD, **Dr Abhijit Mitra**, IIITD and **Prof Anirban Pathak**, JIIT Noida.

4. Prof **Hoda** in his inimitable style elucidated compelling-significance of the theme in view of mind-blowing technical strides overwhelming present-day society for tackling the daunting challenge of Interoperability. He outlined historical background of establishment of International Telecommunication Union at Paris when 20 European countries signed the landmark charter on 17th May 1865, paving the way for synergistic global cooperation in the vital field. He mentioned that India joined ITU in 1868 -- eight years before discovery of telephone by Graham Bell in 1876!

5. Invited speaker, **Shri Aniruddha Bose** pointed out the telecom value-shift taking place every 10 years. He emphasized that today communications is evolving from being voice-centric to Data-Centric mode, wherein as much as 30 petabytes of data every day is consumed by 400 million. With 4G becoming all pervasive and affordable, 70% of users' time is spent on video. Next year with deployment of 5G, we shall experience enhanced mobile broadband, low latency and massive machine-to-machine communications. Operating system will not matter that much because 'Cloud computing' will enable faster secure processing.

6. Invited speaker, **Shri Sushil Kumar** remarked that establishment of smart infrastructure can effectively address challenges of cities facing the onslaught of rural migration. He nicely explained importance of 'Internet of Things' to meet United Nations enunciation of 17 Sustainable Goals for humanity. Enumerating Artificial Intelligence applications in various verticals to enhance effectiveness of governance, he contended that Instead of operating in silos, it is imperative to have cross-domain data utilization. Highlighted 5G usage scenario for enabling Emerging Technologies such as Intelligent

transportation Systems, Wearable Devices, Industrial IOT, Connected Vehicles and Smart Living, concluding that 'Analytics need to be done in an automobile itself for secure commuting'.

7. Invited speaker, **Dr Sujay Deb** spoke on 'IOT Standardisation: Promises and Challenges'. Explaining the term IOT for a common man, he said it implies, devices talking to each other without human intervention. Though less than 1% of devices are interconnected, industry estimates had suggested that by 2020-end as many as 50 billion devices will be interconnected, putting enormous pressure needing harmonization of operating protocols. Intelligent deployment of IoT will reduce incidents of wildlife poaching besides trade in banned items like ivory. Overcoming the resource-constrained scenario characterizing developing countries, IOT will usher preventive care for teeming millions besides guiding farmers to optimize cropping-patterns & usage of inputs like fertilizers. He gave a new perspective to the term, 'Smart', *i.e.* An entity is smart if it can quickly find means to delegate, thereby optimizing operations to achieve efficiency. Basically, Smartness comes from 'Communication capability' as computing will occur in the 'Cloud', he concluded. Finally, he cautioned, that in India, technology solutions to be successful have to be affordable.

8. Invited speaker, **Dr Abhijit Mitra** pointed out that world is observing overwhelming surge of data, with each human being becoming data-generator via social media tools available on smart phones. Stressing that such a data tsunami will need optical networks for efficient handling, he explained his PhD work done on the topic of Elastic Optical Networks (EON). This new technique using optical fibres in C-band is an enabler for 5G core networks. He highlighted ongoing novel efforts to use LEDs to serve as base stations besides Solar panels becoming telecom platforms. Such innovative developments will see evolution from 'Fixed' power grids of today to become 'Flexigrids', transforming society from an 'era of deprivation' to 'always-availability of essentials'.

9. The last invited speaker for the day was Prof Anirban Pathak, JIIT Noida who spoke on quantum computing and communication.

10. Then were the addresses from the Guests of Honour Shri Arvind Chawla, Sr Dy Director General TEC and Shri A K Gupta, CGM (OP.& Maintenance) BBNL. Prof (DR) KTV Reddy, President IETE delivered the Presidential Address. **Shri Dinesh Kumar**, **Chairman Delhi State Centre IE(I)**and **Shri R N Rajpoot**, **Vice Chairman CCSA, IET (UK)** also shared their views on the subject topic. Then was the address by the Chief Guest **Shri Vinod Kumar Yadav, Chairman Railway Board and Ex-officio Principal Secretary, Govt of India**.

11. The programme concluded with a formal Vote of Thanks by the Secretary General IETE, which was followed by the Cultural programme and dinner.