CyanConnode's Communication Solution the best way forward for Discoms

The Government of India is committed towards providing uninterrupted, reliable and quality power supply to all the consumers. To achieve this an operationally efficient and financially sustainable power sector is a must. DISCOMs are often termed as the most important, but the weakest link in the power sector value chain, as their poor financial health at the bottom of the value chain has far reaching negative impacts upstream. The Government has come out with timelines for replacing 250 million conventional electricity meters with Smart prepaid meters. This step is likely to bring revolution in power sector by way of reduction in AT&C losses, better health of DISCOMs, incentivising energy conservation, ease of bill payments and doing away with the paper bills. Smart meters enable twoway communication and are the backbone of smart grid. Several competing technologies could be used for this communication, including GPRS, power-line carrier communication and radio frequency mesh (RF mesh) technology, which uses radio waves to communicate among groups of meters that send the data to a data concentrator unit (DCU) for transmission to the server.

CyanConnode is a world leader in the design and development of narrowband RF mesh networks. Within the energy sector, CyanConnode's IoT platform enables Advanced Metering Infrastructure (AMI) solutions, providing highly secure communication between utilities and consumers. CyanConnode has been working in India since 2009 and the Indian team have been trained at CyanConnode's headquarters in Cambridge where the communication technology was developed. In addition to establishing a local team in India, CyanConnode has manufacturing facilities in India - reinforcing the 'Make in India' programme

CyanConnode has established a significant in-country partner ecosystem encompassing multiple meter manufacturers, system integrators and utilities. Its commitment to project delivery and support is proven by successful deployments for public and private utilities across India. Furthermore, CyanConnode provides partners with a licensing package that delivers market-leading technology to support their business models.



CyanConnode, in the projects that it is implementing in India, has been able to achieve meter readings of over 99.5%. CyanConnode's world class communication solution, Omnimesh is based on IPv6 narrowband RF mesh networks and meets the technical requirements for AMI for many of the utilities in India. Omnimesh is designed to enable utilities to gather complete, accurate and timely customer metering data.

CyanConnode's technology provides diverse routing through self-forming, self-healing mesh networks, maximising the use of bandwidth while minimising power consumption. Furthermore, CyanConnode technology reduces the amount of data being sent over the network and enables concurrent communication. These network enhancements ensure minimal network latency and efficient use of finite, valuable spectrum. CyanConnode in India is currently active in over 5 utilities and catering to an orderbook of ~1.3 million Smart meters.

CyanConnode's Omnimesh solution is an easy-to-deploy, highly secure IPv6-based wireless Neighbourhood Area Network (NAN) solution that interfaces smoothly with other networks and applications. Omnimesh is the world's first hybrid Narrowband RF mesh networking solution. It's versatile enough to adapt to the wide-ranging needs of users around the world, including those operating converged networks.



We commend the push by the Government of India to fast track the implementation of smart prepaid meters in the country. These meters are the best way forward to mitigate the high commercial losses faced by Discoms. Prepaid requires real time meter reading on a daily basis and we believe our RF communication is the right solution. CyanConnode is best placed to cater to this requirement as it is already delivering over 99.5% daily

readings in its deployed projects in India. It also has a solution for every requirement such as long range RF for remote locations, a hybrid of RF and Cellular and our core RF solution through our unique Omnimesh technology. CyanConnode is already the second largest smart metering player in India in terms of its orderbook and deployments, and with the suitability of its Omnimesh technology to the requirements and ambition of the Government of India, this will only grow exponentially.

John Cronin, Executive Chairman, CyanConnode



As an innovative technology company, we pride ourselves in enabling transformation. Therefore, in delivering our advanced Omnimesh networking solutions we use a collaborative engagement business model, working closely with local & global suppliers and manufacturers. Our aim is simple: to provide customers with straightforward, user-friendly solutions that meet their needs, while helping them

face the challenges of a rapidly changing world. We offer Smart IoT communication solutions with edge computing capabilities, end-to-end networking solutions and high-performance applications to help deliver on our service level agreements. Our industry-leading solutions enable governments, metropolitan authorities and utilities to make the most of smart technology.

Rajiv Kumar, MD & CEO, CyanConnode India

CyanConnode Pvt Limited

