



**CYANCONNODE**

— Omni IoT —

**John Cronin, Executive Chairman**  
**Regulators & Policy Makers Retreat 2016, Goa, India**  
**23 September 2016**

**“The smart city concept  
should be practical, doable  
and affordable”**

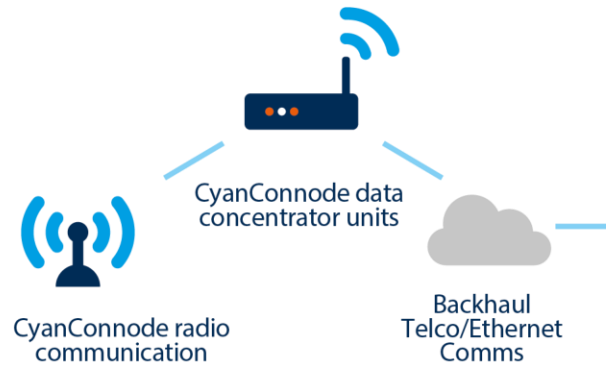
**Piyush Goyal, Minister of State  
for Power, Coal and New &  
Renewable Energy - May 2016**

- CyanConnode is a leader in narrowband RF mesh networks for Omni Internet of Things (IoT) communications
- Customer contract wins in India, UK, Scandinavia, Middle East, Africa, Brazil, China
  - CESC, PVVNL and Tata Power, Mumbai in India
  - Contract for UK Smart Metering Implementation Programme with expected license/support revenue stream of US \$32.8 Million
  - US \$13.1 Million smart metering order from Iran
- Key eco-system partners include Telefonica, Toshiba, Vodafone, Larsen & Toubro, Landis+Gyr, Intel, Itron, Enzen, Newcapec
- Scalable software business model underpinned by perpetual, term or managed service contracts – per meter per month
- 300+ man years of R&D and c.US \$35.4 Million to date across CyanConnode

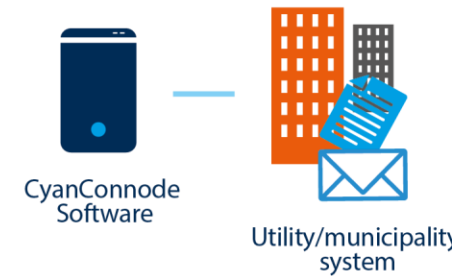
## IoT Devices



## Communications



## Software



- AMI - integrated and retrofit smart electricity, gas and water metering solutions
- Smart city solutions – street lighting control

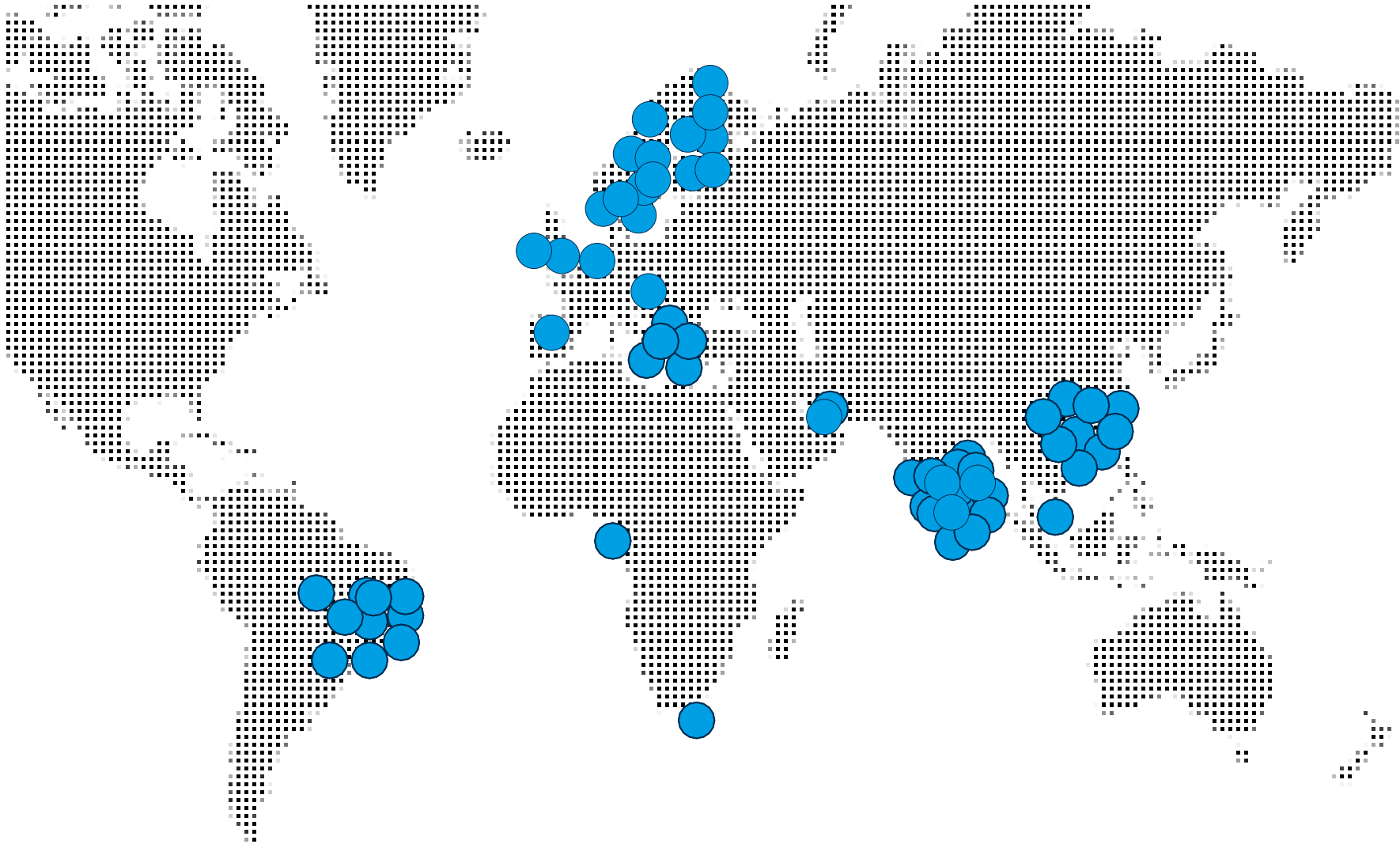
CyanConnode's communication platform enables advanced metering infrastructure systems, providing benefits to utilities:

- Reduce ATC losses – US \$32 Billion of 49 GW
- Improved revenue collection and customer control
  - Accurate and regular billing
  - Improved cash cycle
  - Enhanced customer services
  - Reduced cost to serve
- Reporting and analytics – identify energy usage and loss
- Grid optimisation – load balancing and constraint management
- Demand response – financial incentives for consumers as off-peak tariffs
- Asset Management

Smart metering enables consumers to budget their spend:

- Enabling energy efficiency - real time information on consumption
- Prepay / postpaid options
- Cost management / budgeting
- Less reliance on diesel generators – reducing carbon footprint
- Energy export to the grid – self generation through renewable resources such as solar and wind

# Customer Orders and Pilot Deployments



# Global partner eco-system





## Chamundeshwari Electricity Supply Corporation Limited



### Smart meters delivered

Roll out expected to be complete early 2017



### Smart meters installed

Enzen's end-to-end solution provider for 21k unit AMI smart metering deployment



### Commissioned on HES

First of 14 smart grid pilots under the Smart Grid Task Force in India

## Tata Power Mumbai



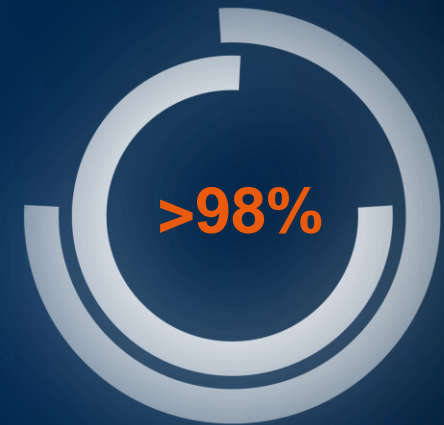
### Smart meters delivered

Follows successful implementation of 5,000 meters



### Commissioned on HES

Led by Larsen & Toubro – demonstrates the transfer of skills to facilitate customer ownership



### Success rate for monthly billing

Lowering the overall carbon footprint and reducing the man-hours in operations

Prime Minister Modi approved UDAY scheme in 2015:

- Targeted to deliver financial turnaround for power distribution companies, smart meters for consumers in phased rollout by 2017 and then 2019.
- Target is to install 35 million smart meters by 2019

Power Minister Piyush Goyal in 2016:

*“My own intention is that in the next 5-6 years, India should be 100 per cent smart”*

*“I have a proposition of 250 million smart meters. That is the scale at which India offers opportunities”*

*“The smart city concept should be practical, doable and affordable”*

- Practical
  - CESC, Mysore – first of the 14 smart grid projects rolled out in India
  - Tata Power, Mumbai – first consumer AMI rollout in India
  - PVVNL – first AMI managed service contract
- Doable
  - CyanConnode's solutions are delivering customer value
  - CESC and PVVNL deployments include full specification smart meters with remote disconnect
  - 100% local CyanConnode delivery team – trained in UK, supporting PM Modi's initiative 'Skill India'
- Affordable
  - Solutions developed in Cambridge, UK for Indian market
  - Hardware components manufactured in India, reinforcing PM Modi's 'Make in India'
  - Technology is available under license model in India – reducing cost to the utility
  - Per meter, per month operating cost model available – reducing upfront capital investment

# Award winning solutions



Judges felt that the company's approach to providing a real solution to a world-wide energy issue was well worth the recognition of being the winner.

Judges felt that the company is contributing greatly to the future of smart metering, smart cities and more efficient power in emerging economies, by enabling wireless data communication with its product suite.



Judges felt that the company had contributed greatly to the formation of Advanced Metering Infrastructure by enabling wireless data transmission to utilities.



Judges praised the originality, practicality and sustainability of the company's Connect retrofit module.



*“CyLec has already demonstrated its practicality in India and Brazil, and has proven to be compatible with existing meters in these countries.” Avimanyu Basu, Senior Research Analyst*