

2018 RESULTS PRESENTATION | MAY 2019 |



GLOBAL LEADERS IN NARROWBAND RF SMART MESH NETWORKS FOR SMART CITY SOLUTIONS

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About CyanConnode



- World leader in Narrowband Radio Frequency (RF)
 Smart Mesh Networks for smart city solutions
- Blue-chip client base and partner eco-system validates technology offering
- Vendor agnostic model allows multiple routes to market
- Revenues in 2019 from existing contracts in UK, India, and Scandinavia
 - Opportunities for growth in China, Bangladesh, and UAE
- Revenues of £4.5m being significantly higher than 2017 revenue, significant pipeline of opportunities with several near term
- High margin revenue model
- Targeted breakeven profitability in 2020
- The first Licensing Agreement with Beijing Instruments, potentially worth \$4m (£3.1m)





FY 2018 Highlights



- Revenue of £4.5m achieved for 2018 significantly higher than 2017 (2017: £1.2m)
- Innovative Omnimesh product launched in June 2018 - generated substantial commercial traction since launch (£15m orders to end 2018 and >£3m revenue in 2018)
- First Licensing Agreement (£3.1m) with Chinese Partner, Beijing Instruments signed
- Centralised operations to Cambridge to improve efficiencies
- Strong cash position of £4.6m at yearend with significant reduction in cash operating costs

Revenues

+281%

2018: £4.5m 2017:£1.2m

Operating Costs

J22%

2018: (£9.1m) 2017: (£11.7m)

Gross Margin

+452%

2018: £2.7m 2017:£0.5m

LBITDA

+45%

2018: (£5.8m) 2017: (£10.7m)

Indian Orders Won

+1400%

2018: £15m 2017:£1m

Financial Results



Consolidated Profit & Loss	2018 £'000	2017 £'000	Change %
Revenue	4,465	1,171	+281%
Cost of Sales	(1,724)	(674)	-156%
Gross Profit	2,741	497	+452%
Gross Profit Percent	61%	42%	+19%
R&D Costs	(2,466)	(4,140)	-40%
Other Operating Costs	(6,112)	(7,011)	-13%
Acquisition Costs, Amortisation & Depreciation	(472)	(489)	-3%
Loss before tax	(6,309)	(11,143)	-43%
R&D Tax Credit Refund	927	1,402	-34%
Net Loss	(5,382)	(9,741)	-45%

- Revenue significantly higher than 2017
- Operating costs reduced from £11.6m to £9m, (£8.4m excluding stock write down of £0.6m)
- Operating loss down 43%
- Adjusted LBITDA down to £4.8m from £9.9m in 2017
- John Cronin and Harry Berry agreed to reduced rate of remuneration between July 2018 and June 2019

Financial Results



Consolidated Balance Sheet	31 December 2018 £'000	31 December 2017 £'000
Intangibles	6,978	7,399
Investments (Bank Securities)	44	48
Property/Plant/Equipment	73	83
Inventories	319	1,128
Receivables (Trade/Other)	4,827	3,019
Cash	4,564	5,394
Total Assets	16,805	17,071
Trade and Other Payables	(1,994)	(2,248)
Total Liabilities (includes deferred tax)	(2,684)	(3,106)
Net Assets	14,121	13,965

Consolidated Cash-Flow Statement	2018 £'000
Cash at 1/1/2018	5,394
Net cash-flow from operating activities	(5,843)
Proceeds on issue of shares	5,467
Share issue costs	(428)
Fixed asset purchases	(41)
Other items (all less than £20K)	15
Cash at 31/12/2018	4,564
Proceeds on issue of shares Share issue costs Fixed asset purchases Other items (all less than £20K)	5,467 (428) (41) 15

- Reduction in average monthly operating cash outflow from £808k to £487k
- No debt
- Trade receivables of £3.4m of which £2.2m not due at 31 December 2018
- Receivables includes R&D tax credit receivable of £822k, prepayments of £239k
- Reduction in inventory due to stock provision for obsolete items

Centre of Excellence



- Headquartered in Cambridge, UK, one of the leading technology hotspots in the world
 - European business functions have been consolidated to
 Cambridge, providing operational and financial efficiencies
- World class engineering team responsible for the development and validation work required to fulfil customer contracts
 - The centralised team utilise streamlined processes, improving efficiency, predictability, and performance
 - The Indian-based team assist with local technical and integration support
- Provide world-class technology and expert support to customers from integration to ongoing maintenance
- Expertise to support the seamless integration of customers' devices and software with CyanConnode's communication platform





Narrowband RF Technology



- Provides a hybrid (IoT) M2M data communication for utility smart city solutions
 - Standards-based, IPv6 LoWPAN narrowband RF technology with cellular backhaul
 - Electricity and soon to be gas, water metering and district heating, and street lighting
- Low cost, low power and future proof unlimited scale, coverage, density and penetration through all terrains
- Uses license-free, regulated ISM* bands that support interoperability between devices as well as connectivity in hard to reach places
- Ease of integration and deployment technology integrates into existing smart metering designs via plug-in modules paired with an antenna
- Offers critical infrastructure-grade security

CyanConnode's RF Smart Mesh Network technology

√ Highly Reliable

√ Low Power

√ Cost Effective

√ Long Distance

√ Easy Integration

√ Standards Based

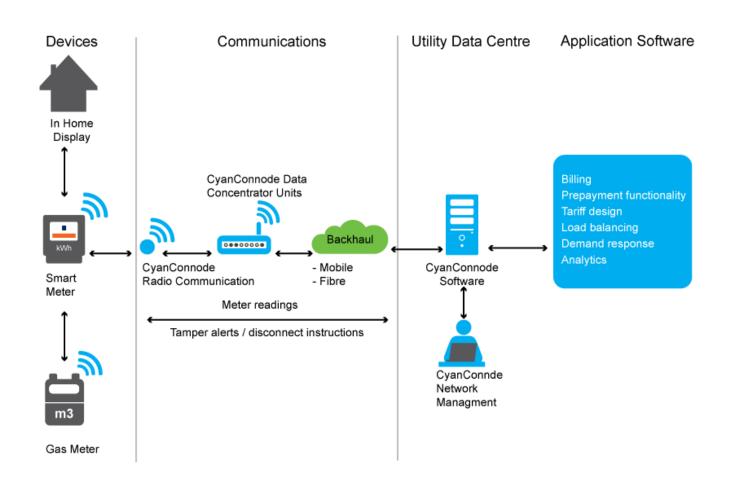
√ Self forming & Healing

√ Hardware Agnostic

√ Always On

^{*}ISM - industrial, scientific, and medical radio band refers to a group of radio bands or parts of the radio spectrum that are internationally reserved for the use of radio frequency (RF)

Typical Smart Metering Deployment © CYANCONNODE



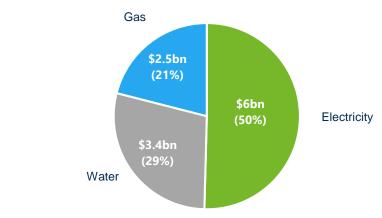
Market Opportunity



- CyanConnode's technology is focused on smart metering – a huge growth opportunity, with fewer than 25% of the world's 3bn meters currently smart
- Global meter market estimated at \$12bn in 2017 expected to grow by 14% CAGR p.a.
- Smart meter penetration expected to increase rapidly driven by energy efficiency regulation
- To date, the Company has primarily focused on electricity meter market, which accounts for ~50% of the global meter market
- CyanConnode also targets gas meter market number of large, advanced opportunities in place which have the potential to be applied to the smart water market in the future
- Deployed technology in the smart lighting market an \$8bn market in 2018 expected to grow at a CAGR of 22% to 2023¹

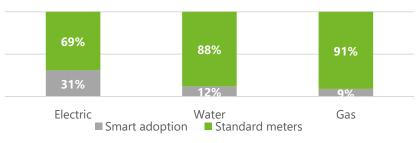
Well positioned to benefit from rapid forecast market growth





Source: McKinsey analysis from the Xylem Investor Presentation - April 2017

Global smart meter adoption (2017)²



Source: 1. Markets and Markets; 2. McKinsey analysis from the Xylem Investor Presentation – April 2017

Customers and Partners



Blue-chip client base and partner eco-system validates technology offering

Customers

- Deployed 1.04m electricity meters and streets lights to date across approximately 20 customers globally
- End customer typically an electricity utility with the direct customer (often a major prime contractor partner or meter OEM)

Partners

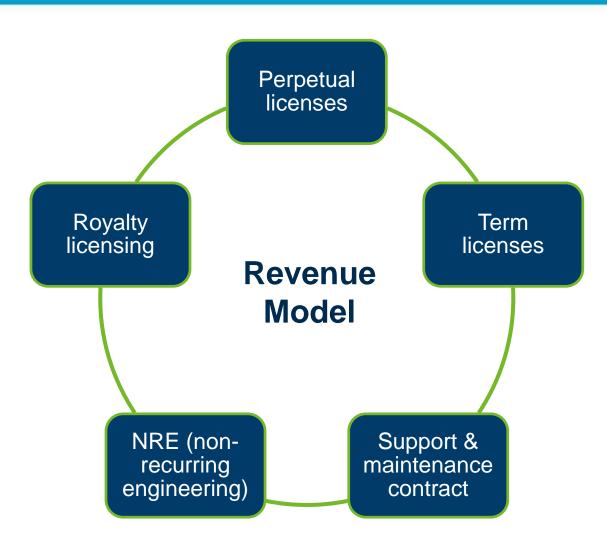
- Formed deep relationships with major local partners in target geographies which hugely enhances ability to win and deliver landmark projects
- Have integrated technology into a number of major global meter manufacturers' devices meaning it can rapidly deploy its technology with these OEMs on new projects



Deployed with major end customers, partners and hardware providers

Revenue Model





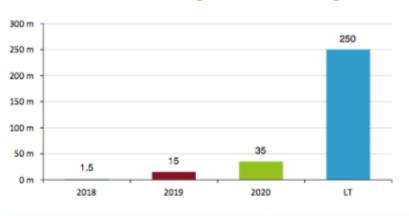
- Perpetual licences for: Modules, Gateways and Software – one off payment plus 22% annual SMC
- Term licenses for: Module, Gateway, Software over X years, plus 22% annual SMC
- Support & maintenance contract: per device once installed, recurring revenue
- NRE (non-recurring engineering): rate card, per engineering day
- Royalty licensing: manufacture of hardware via reference design

India



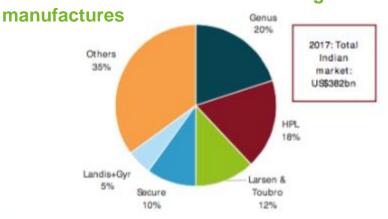
- Market leading position in India
- Significant progress made in the Indian smart metering market during 2018
- Order booking totalled £15.2m for FY 2018
- Revenue of £3.4m for FY 2018
- Launch of Omnimesh smart metering solution gained significant commercial traction in the region
- Testament to the suitability of Omnimesh for the Indian smart metering market
- Established strong partner eco-system in county to facilitate contracts through tenders
- Government has mandated the use of smart prepaid electricity meters in the country from April 2019
- India poised to be the second fastest growing adopter of smart metering globally (smart meters estimated to increase from 1-2 million to c.250 million meters by 2021)
- Renewal of orders started happening after seeing the benefits of Omnimesh solution

Indian smart metering market set to grow



Source: Bloomberg, 2018.

Established market - smart metering



Source: Frost & Sullivan, 2018.

Market Potential in India

Accelerated Growth through Government initiatives



Indian Smart Grid

- Projected Spent \$44.9 bn (2017 to 2022) (Smart meter, storage, Distribution automation)
- Eleven Smart Grid demonstration/pilot projects with 50% govt grant in progress. (India Country Report by DST, Govt of India)
- 3 Full Smart Grid Project sanctioned

Indian Smart Meter Market

- Govt plan to replace 220 million meters in next three years (Statement of Power Minister R K Singh quoted in Economic times)
- Government has mandated the use of smart prepaid electricity meters in the country from April 2019
- Current size of energy meter market \$340 Million with Projected CAGR 9.34% (2017-2022)(Source: ReportsnReports.com is an online market research company)
- India produce Approx. 35 million meters per annum with annual growth of 29% (source IEEMA report)
- Electrical Industry has grown by 18.7% whereas Energy Meter sector has the highest growth of 42.8% in 2018

Indian Experience



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

Smart meters delivered

CESC, Mysore

Project Completed

Smart meters installed

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

UGVCL, Ahmedabad







MPWZ, Indore

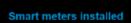






Smart meters Contract

Roll out started in Dec'17 and expected to complete by July 18



First of its kind implementation under IS 16444 standard

Commissioned on HES

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

Smart Meters
Contract Awarded
RF canopy for 1.5 lacs
Smart Meters
Installed on

meters covering 225 sq. km area of Indore city Smart Meters Installed on 15th May

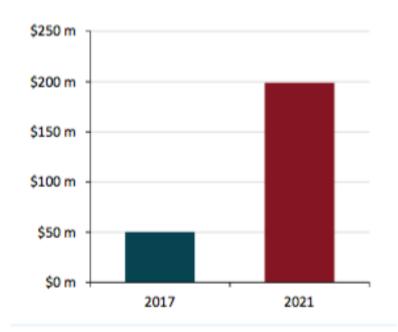
Commissioned on HES on 15th May

APAC, Europe and Middle East



- Large pipeline of new business opportunities
- Revenues £1.1 million in 2018
- South East Asia (ex-India) presents attractive market opportunity – pipeline for region > \$200 million
- First licencing agreement secured in China
- Continue to form strategic alliances to help build market position
- New contracts signed in Scandinavia
 District heating, Long Distance 12km

South East Asia smart meter estimated growth

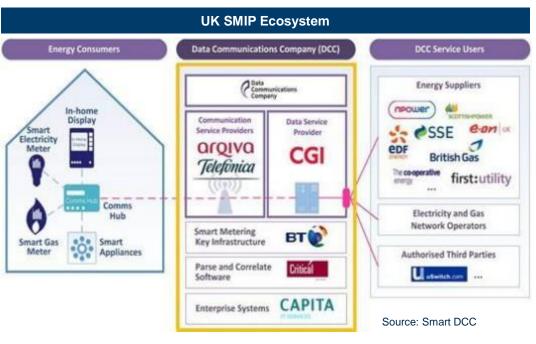


Source: Landis+Gyr company estimate, 2018.

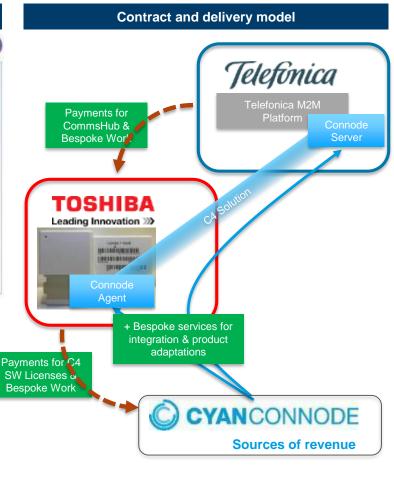
UK Smart Meter Implementation Programme



CyanConnode's solution connects meters in 'not-spots'



Revenue	Expected 10% mesh
Contracted licence fees until 2020	£6m
Support fees (over 15 years)	£18m
Total 500k SMET2 Installed 1.5 m Toshiba Hubs, 150K Mesh	£24m



UK Smart Meter Implementation Programme – SMETS2



- Rollout meters commenced in Q4 2018. To date 0.5m SMET2 meters have been installed
- Installations are running at over seven thousand Meters per day
- Toshiba approx. 1.5 million hubs made and sent to DCC of which 150K
 Mesh
- Assumption that 10% of SMET2 meters under the Telefónica "not-spot" projected to deliver £24 million of revenues over a 15-year period
- 500,000 prepaid licenses were purchased from Connode prior its acquisition. Some revenues already taken in previous years.
- CyanConnode does not expect material revenue from this contract during 2019 until they are used up

Beijing Instruments



- December 2018, the Company signed its first agreement to license Beijing Instrument to manufacture its hardware
- BI will pay a royalty to CyanConnode for each item manufactured under its reference designs
- Experienced as Contract Equipment Manufacturers ("CEM") to manufacture its products
- Potential \$4 million and this fee will be recognized as revenue as the modules and gateways are manufactured over several years
- Additional revenue for CyanConnode's Omnimesh smart meter platform
- The aim is to have BI manufacturing ready in Q3

HM Power



- Order announced in April 2019 for £0.7m. Total order value including software and annual maintenance = £1.5m
- Order is for a product with a new feature giving long-range communications (at least 12km), which will maximise the resilience of the RF Smart mesh network in rural areas – e.g. summer houses. In India rural homes are occupied by 70% of the population
- New application district heating good for environment and saving carbon emissions

Sales Pipeline* Extract APAC, Europe and Middle East



Region	Solution	Units'000
Asia Pacific	Electricity Meters, Lighting, Smart City	>2,000
Middle East	Electricity Meters	850
Asia Pacific	Electricity Meters	625
Europe	Electricity Meters	500
Asia Pacific	Metering, Lighting	400
Africa	Electricity Meters	200
Europe	Electricity Meters	200
Asia Pacific	Electricity Meters, Lighting, Smart City	150
Europe	Electricity Meters	110
Middle East	Electricity Meters	40
Middle East	Electricity Meters	40
TOTAL		>5,115

Summary



- £4.5m revenues for FY 2018 significantly higher than 2017
- Costs significantly reduced during 2018, with a budgeted monthly cash cost base of c.£540k January 2019
- Omnimesh product generated substantial commercial traction since launch -£15m orders in 2018 and >£3m revenue in 2018
 - New platform extends the market opportunity
- Licensing royalty agreement signed with Chinese meter manufacturer
- Full rollout of existing customer contracts will create recurring revenue stream
- Significant pipeline of opportunities being pursued with several near term





Established board with a proven track-record



Executive Chairman: John Cronin

- Joined the Board in 2012 initially as Non-Executive Director
- Highly successful Chairman, CEO and MD in international markets (Europe, Americas, SE. Asia) in the Technology, Media and Telecommunications sector



Non-Executive Director: Paul Ratcliff

- Multi-disciplined entrepreneur with a wealth of practical experience in creating shareholder value by growing businesses
- A highly successful Chairman and Director in the SME environment



CFO: Heather Peacock

- Joined the Company as Financial Controller in 2008, and appointed to the Board in July 2018
- Over 20 years' global financial experience at senior level, having worked for large international organisations in the UK and South Africa



Non-Executive Director: Chris Jones

- Joined in March 2019 from global technology giant Arm Limited, where he held the position of Vice President of Commercial Operations
- Prior to this he held the position of Chief Operating Officer for mobile, device and IoT security leaders, Trustonic I td



Non-Executive Director: David Johns-Powell

- Joined the Board in July 2018
- Over 30 years' experience in Small to Medium Sized Enterprises over a diverse range of industries including Ceramics, Farming, Insurance, Leisure & Property



Non-Executive Director: Peter Tyler

- Peter is a fellow of the Chartered Institute of Certified Accountants
- He has held a number of roles in finance, mainly in the pharmaceutical sector, and is well versed in growing businesses and creating shareholder value

Vision, Mission and Values





Vision

Enable a smart world



Missior

- Provide connectivity for IoT applications globally and build on industry leading smart energy solutions
- Deliver smart technology providing innovative solutions and greater cost efficiencies worldwide
- Aim to be the partner of choice for stakeholders of the IoT eco-system

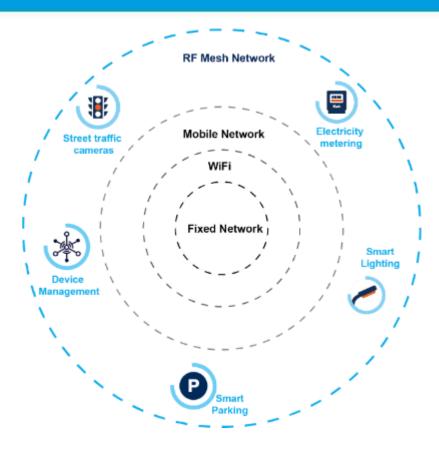


/alues

- Leadership
- Respect
- Resilience
- Positivity
- Integrity

Narrowband RF Technology





- Point-to-point Wi-Fi Broadband and Cellular communications have limitations:
 - Coverage / 'not-spots'
 - Penetrations (through walls etc.)
 - Cost and availability of spectrum

RF mesh networks provide end-to-end coverage including 'not-spots':

Self-configuring

Nodes determine the best route to the gateway either directly or through another node

Self-healing

If a node becomes unavailable the network will rearrange itself automatically

Multiple hops

Data (traffic) can be routed through another mesh node before reaching a gateway

Constantly optimising

The nodes will constantly try to optimize the network topology by evaluating the radio conditions to neighboring nodes

Smart Metering



- An intelligent provision of utilities such as gas, electricity and water to consumers and enterprises - accurately gauges consumption, controls supply and automatically bills
- Offers significant economic benefits to the utility companies while consumers gain better budget energy spend and stability of supply
- Smart meters are the electronic devices which are fitted within or near consumer homes and commercial sites
- Smart meters transmit data back to a utility provider utilising advanced metering infrastructure, a key pillar of smart grid technology



Smart metering benefits

Enabler for utilities

- Automated meter reading
- Reduction of non-technical losses
- Flattening the duck curve by reducing peak-power demand
- Improved revenue collection and customer control
- Accurate and regular billing
 improved cash cycle
- Enhanced customer services and reduced cost to serve
- Remote meter disconnection and reconnection
- Alerts and alarms including outage notifications
- Reporting and analytics identify energy usage and loss
- Demand response financial incentives for consumers as off peak tariffs

Empowering consumers

- Reduction of greenhouse gasses by better use of energy
- Reducing peak-power demand and the need for electricity to be generated by environmentally harmful diesel generators
- Ability to seamlessly change energy suppliers
- Driving energy efficiency through use of smart phone apps
- Smart metering enables consumers to budget energy spend
- Varying tariff options by consumer choice
- Consumer energy export to the grid – self generation through renewable resources such as solar and wind

Key Data



AT A GLANCE

Market cap	£12.3m
Market	AIM
Ticker	CYAN
Share price (10.05.19)	6.75p
Shares in issue	182,400,000
Shares not in public hands	12.3%
Cash Position (31.12.18)	£4.6m

BROKER RECOMMENDATION

SIGNIFICANT SHAREHOLDERS > 3%



- William David Johns-Powell (Non-Exec Director) 9.64%
- Canaccord Genuity Group 7.54%
- Herald Investment Management Limited 6.80%
- Nightingale Investment Co Limited 4.60%
- Biggles Enterprises Limited 4.57%

Employees • 52 FTE's

Locations

- UK (Cambridge) head office and centre of excellence
- India (Gurgaon) India operations

Recent awards

- Best Smart Grid project in India ISGF Innovation Awards
- Energy reduction commendation Rushlight Awards
- Fastest growing tech company Deloitte UK Fast 50
- Worldwide Company of the Year 2018 Frost & Sullivan

Growth Strategy



- To build a sustainable market position in the smart metering leading to a major force in the Industrial IoT sector, for example:
 - Gas and water metering
 - District heating increasing demand for energy-efficient and cost-effective heating systems driven by growing urbanisation and industrialisation
 - Smart street lighting lighting deployed in China and Brazil, recent report forecast from Northeast Group forecast that cities and utilities will deploy 72 million smart streetlights over the next decade
- Key drivers delivering existing contracts, control of costs, win new business, and recurring revenue streams
- Scaling the business through manufacture of hardware, royalty licenses and metering as a service model

Market Reach



CyanConnode has implemented over 1M devices worldwide



FY 2018 market revenue % by region:

• India: 76%

 APAC, Europe and Middle East: 24%

Solution Overview



Key components of smart meter platform

mpononic or omart motor pianorm



Mesh node



Narrowband RF mesh



Gateway



- Embedded into third party smart meters - enables communication with the Gateway
- Intelligent with tamper proof functionality, last gasp capability and security
- Integrating technology into different meters can be complex, requiring knowledge of RF antenna tuning, embedded devices and silicon
- Standards-based IPv6 / 6LoWPAN and optimised IPv4 narrowband mesh offerings
- Dynamic able to operate on any spectrum from 410–975MHz
- True narrowband mesh many competitors are peer to peer and can't operate on low frequencies
- Self forming / healing can re-route if there is a network problem, providing resilience
- Optimising adaptive noise floor monitoring algorithms enable multiple parallel conversations, reducing latency in the network

- Typically 1 for every 200 smart meters - sends meter data to Network Management System
- Self configuring once installed, meters automatically find and connect with closest Gateway
- Intelligent can store data for up to 45 days and schedule meter readings to avoid network contention
- Full support for IP addressing IPv6 stack enables rapid integration of data into third party software

- Manages smart meters, mesh network and the system - linking via APIs to core end-customer services (e.g. CRM, billing, revenue management and operations)
- Requires a deep understanding of end customer systems, meter protocols, network and data management systems
- Customers value flexible approach to integrating into their data centres

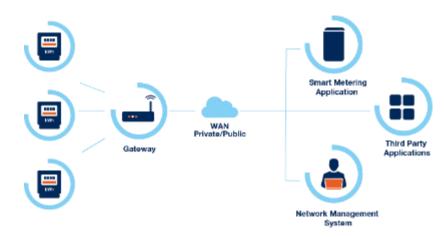
A high performance, resilient, scalable and secure solution

Omnimesh Solution



Network Management System and Smart Metering Application

Feature	Comments
Java-based application	 Database and hosting servers usually outside of CyanConnode's scope Possibility of cloud-based, managed service
High Availability High Capacity	 Pool of Servers / Horizontal scalling Active / Active mode between sites Load Balancers for HTTP (Web Services) Load Balancers for UDP&DTLS traffic to/from all Mesh Nodes
Mass-management	Dynamic grouping of nodes
Web Interface	 User friendly & intuitive All features exposed through Web Services are available in UI User roles
Security Management	Integration with any PKIExtensive Security LOG

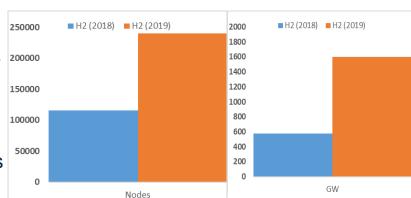


Local Production – Make in India



- July'18: Started Customer Production at Syrma new plant for India Projects
 - Aug'2018 : First production batch size for customer-5000 nodes & 45 GWs
 - Dec'2018 :Production line capacity doubled Month on Month and ramped to 50K nodes and 400 GWs
 - High Availability production facility: 2 Jigs for Nodes and GW





- End-to End Operating Process and QA documentation, Routine audits
 - High quality levels achieved .. Not a single drop reported from Meter Manufacturer's assembly line
 - End to End testing and traceability maintained
 - RMA process in place
- Cost Optimization
 - Component procurement for nodes 100% through Syrma from 2019
 - 90 Days rolling forecast process
 - Cost and payment cycle optimized .. 45 and 60 days credits
 - Target further 5% cost reduction once volumes cross 40K /Month

Delivery Capabilities



MPWZ Indore : India's biggest RF Mesh

deployment of 66 K

meters ~ consistent

99%+ Availability

- Lean Delivery Model
 - Multiple projects under one Project Manager
 - 2 Project Manager: 6 ongoing and 3 under O&M
 - 1 or 2 On Site Engineers on fixed third party contract for each project
 - Core central team for Project Engineering and Technical support
 - 3 member team for Project support, 2 SMEs (Shared) for technical support
- Standard Operating Processes mapping for field activities
 - Roles and Task definition
 - GW Installation
 - Field Issue Investigations
 - Network Planning and Optimization
- Integrations and Demos scripts
 - 3 HES <->MDM integration completed
 - L1/L2 support model
 - Test and Simulation Lab





India - Case Study



MPWZ/L&T-India

Client: MPWZ, Indore

Go-to-market partner: L&T

Location: Indore, India











Billing Data Availability over last 5 months – 99.42%

Background

- Partnered with L&T to deliver smart meters to MPWZ that provides electricity to Indore city
- · Largest Smart Meter Project in India
- is to deliver facility management services for 5 years post deployment

Challenges & Requirements

- Cellular Coverage
- Site Not Ready in Some cases
- Consumers are reluctant, Apprehension of electricity charge increase
- Legacy Metallic Boxes for Meter installation
- Resource Optimization
- Managing interests of Utility persons while implementation

Solution

- Provided over 1,20,000 smart meters and associated hardware and software.
- Till Date 70,000 smart meters have been deployed

Benefits

- Improvement in Billing Efficiency and reduction in losses
- 100 % correct bills without any human intervention by seamless integration of XML files with RAPDRP billing system. Resulting in reduction of bill related complaints
- Effective Disconnect / Reconnection.
- Theft Detection & revenue Protection:- Real time alerts in case of occurrence of tamper events (Magnet, Meter cover open, switch weld etc.) helps in detecting theft cases.
- Increased Customer Satisfaction:- For customer satisfaction mobile app is being developed which will help customer in monitoring his consumption pattern

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India - Case Study

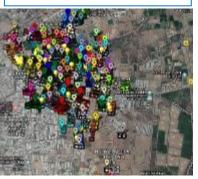


UGVCL/ GENUS- India

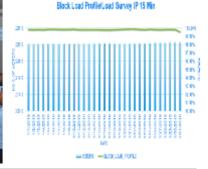
Client: UGVCL, Gujarat
Go-to-market partner: Genus
Location: Naroda, Gujarat











Hon. Minister of Energy Shri Saurabh bhai Patel cut the ribbon and officially inaugurated the Smart Grid pilot project at the Company's SCADA Center, Gandhinagar.

Background

- Partnered with Genus to deliver smart meters to UGVCL that provides electricity to Gujarat
- is to deliver facility management services for 3 years post deployment

Challenges & Requirements

- Cellular Coverage
- Consumers are reluctant, Apprehension of electricity charge increase
- Legacy Metallic Boxes for Meter installation
- Resource Optimization
- Managing interests of Utility persons while implementation

Solution

- Provided over 23,760 smart meters and associated hardware and software.
- All meters deployed. UAT is in progress.

Benefits

- Achieving ~99.5% Service Level Agreement as per CEA Guidelines
- Improvement in Revenue collection, defaulters have started paying outstanding bills
- Improvement is attending faults at site
- Customer acceptance

India - Case Study



CESC Mysore / Enzen Global Solutions - India

Client: CESC Mysore

Go-to-market partner: Enzen

Global Solutions

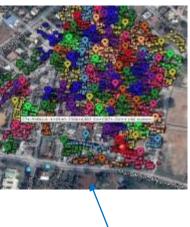
Location: Mysore, India

Value: £1.0m





Winner of a Platinum Award for Best Smart Grid Project at the ISGF Innovation Awards in India – March 2018



DCU and meters in mesh network

Background

- Partnered with Enzen to deliver smart meters to Chamundeshwari Electricity Supply Corporation Limited (CESC Mysore) that provides electricity to five districts in the Indian State of Karnataka
- This project is the first of 14 smart grid pilots funded by MoP to be rolled out
- is to deliver facility management services for years post deployment

Challenges & Requirements

- A project of this type had never successfully been completed in India
- Local infrastructure limitations and disparate property layouts

Solution

 Provided over 21,000 smart meters and associated hardware and software. CyanConnode will provide facility management services for a 2 year period post deployment.

Benefits

- The system is achieving over 97% data availability
- Reduce the cost of meter readings, and aggregate technical and commercial losses
- Improve peak load and power outage management

The Future

- The project has been declared 'Go Live' and formally handed over to the utility.
- Project has become a valuable reference for the wider Indian Smart Grid community (first AMI project in India), and now holds a leading position in the Indian market
- Energy Minister DK Shivakumar has visited the first phase

Leading position in the India market

UK - Case Study



Telefonica / Toshiba - UK SMIP

Client: Telefonica

Go-to-market partner: Toshiba

Location: Across UK

Value: £ 24m based on 10% of SMETS2 meters would require a 'not-

spot' solution.





Key supplier into one of the world's landmark national smart meter infrastructure projects

Background

- The UK's Smart Meter Implementation Programme is a major national infrastructure project involving the national roll out of 53m gas and electricity meters across the country by 2020
- Telefonica is the preferred communications service provider in two out of the three regions tendered by the UK Government. CyanConnode has a contract with Toshiba to provide a software platform that uses narrowband mesh technology to complement Telefonica's existing cellular network

Challenges & Requirements

- Poor or non-existent signal in local area where the solution was required to be deployed
- Smart meter network spread across a large distance
- Highly technical design work required on the smart meter hardware, aerials and gateway units
- Passing stringent UK security requirements

Solution

 Telefónica's SMETS2 communications solution is based on its existing cellular network in the UK, supported by solution to connect meters in households without cellular coverage

Benefits

- Allows households to be reached where mobile phone network coverage is poor or non-existent
- · Reduce the cost of meter readings
- Allows utility companies to manage the grid and benefit from efficiency savings

The Future

- January 2019 hit the milestone of 250,000 secondgeneration smart meters
- CyanConnode has a contract to provide software and support, which will yield long term revenues



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