



## 1 Company overview

**TriDiNetworks** provides advanced tools for Building Managements Systems (BMS) which automates and simplifies the Design, Setup and maintenance of wired and wireless control networks.

The focus is to provide automatic tools for the design of control systems which enable setup using Smartphones and Tablets at significantly lower costs relative to current solutions and can be performed by regular electricians or technicians without dedicated training.

In a the \$70 B Market of Building Management Systems (**BMS**), **TriDiNetworks** Targets the segment of Infrastructure for **BMS** that includes: Lighting control, Heating Ventilation Air Conditioning - HVAC control, Smart appliances, Smart Grid, Energy metering, Security and Access control.

The technology is currently adapted to be used by a **Global company**. The company won **AUTODESK** Cleantech partner award and a **Grant** from The Infrastructure Ministry for the development of a new generation of wireless sensors. The technology was demonstrated in a wireless lighting control system for commercial buildings that was installed in the **Strauss** group offices.

**TriDiNetworks Ltd** was founded on July 1 2007.

**Share holders above 5%:** L.N innovative technologies , Rutledge Global Pte , Founders  
The current investment in the company is 1,300,000 USD

### Major milestones ahead:

- |  |    |      |
|--|----|------|
| – OEM sales                                      | Q3 | 2011 |
| – ZigBee Lighting and HVAC control Installations | Q3 | 2011 |
| – Demonstrate Low Power WiFi Modules             | Q1 | 2012 |
| – Additional applications on the same platform   | Q2 | 2012 |

## 2 The problem

Buildings account for 39% of all energy consumption in the world. Control systems can save up to 50% of that energy cost, but despite the need to save energy and new energy regulations and codes there is no masse deployment. Wiring costs, Networks Design, setup and maintenance complexity are main barriers to mass adoption of sensor control networks in buildings. Current wireless and wired solutions for commercial buildings has long setup time and need factory trained technician with special tools. Above all the BMS Market is very fragmented between competing standards, systems and corporate that invest huge resources to develop Design, Setup, Maintenance and training programs for technician for each new product and system

## 3 Technology and Products

**TriDiNetworks** has developed a patent pending innovative technology and system that allows for automatic Design configuration, identification, location of wireless and wired networks devices.



The automatic "Universal Setup" technology, enables a new generation of simple to install and maintain wired and Wireless Sensor Networks (**WSN**). Using a Smartphone, setup and configuration is done by a simple "**Point & Click**" operation, overcoming a major barrier to mass introduction of **BMS** into buildings. System setup and maintenance is independent from the need for factory trained technicians and costs 80% less than current wireless solutions.

### **Technology advantages that enable mass deployment are:**

- Drastically reducing setup time and costs
- No need for manuals and special tools
- Setup and maintenance by electricians or users with basic skills

### **The technology enables additional Applications on the same platform**

- Remote diagnostics and maintenance
- Brand protection – Anticounterfeit application
- Sell and warranty control

An international patent application PCT " Design and Control Systems, Commissioning Tools, Configuration Adapters, and Method for Wireless and Wired Networks Design, Installation and Automatic Formation " was filed. Priority date November 2007. US, Europe, China national applications were filed on 2010.

TriDiNetworks technology provides a complete solution and products for design, setup and maintenance of BMS. Including:

- "Networks Designer" software interfaced with the building architecture and allows a control system designer to place and configure field devices on building map.
- "Commissioning Tool" equipped with the "Point & Click" technology for Smartphones and tablets that allows to simply and intuitively setup sophisticated wired and wireless networks.
- Hardware Adapters – Various hardware adapters include embedded software
- SDK for Control Networks Devices - SDK and Reference Design for ZigBee and WiFi

## **4 Market potential and strategy**

In a the \$70 B Market of Building Management Systems (**BMS**), **TriDiNetworks** Targets the segment of Infrastructure for **BMS** that includes: Lighting control, Heating Ventilation Air Conditioning - HVAC control, Smart appliances, Smart Grid, Energy metering, Security and Access control.

- a) The OEM horizontal \$1.5 billion segment of infrastructure and field commissioning tools which is applicable for the entire **BMS** Market and for Wireless and Wired Sensor Networks in Industrial automation and Mobile medical devices.

TriDiNetworks looks for OEM agreements and partners for the adaptation and distribution of its products. The company promotes licensing by global providers.



The following table describes the companies offering. the green area is under a cooperation agreement with a Global Company

Customer Type	Product	Deliverable
<b>Developers &amp; Manufacturers:</b> <ul style="list-style-type: none"> <li>• Building Management Systems</li> <li>• Lighting and HVAC control</li> <li>• Smart Meters</li> <li>• Smart appliances</li> </ul>	Network Designer	Software
	Smartphone / Tablet Commissioning Tool	Software
	Setup Adapter	Hardware & embedded software
	SDK for Control Networks Devices	SDK and Reference Design ZigBee, WiFi

The Market and opportunity analysis was provided by **Building intelligence group LLC** market research and consulting company [www.buildingintelligencegroup.com](http://www.buildingintelligencegroup.com) . The company was hired to conduct a market research, to survey potential customers, analyze need, installation and setup processes.

**5 Competition**

Worldwide the BMS market is badly fragmented between competing Wired and Wireless Standards, Protocols and proprietary solutions. In a focus on one segment, Wireless, the competitive landscape and the market for wireless control is fragmented between competing standards and proprietary solutions. Main competing standards are Z-Wave, ZigBee, Insteon, EnOcean.

Zigbee, the standard which is promoted by leading companies in has implementations in commercial buildings by Adura, Daintree, Kanepi, Lightcorp. These companies are also potential Customers and Partners of **TriDiNetworks**.

A comparison is presented below for a typical 5 floor 5000 SqM office with 300 sensors. Setup of the systems takes 5 minutes per device by factory trained technician while using **TriDiNetworks** technology it takes less then one minute as a short additional task by the electrician.

**Competition Comparison (cost in US\$)**

	Tridinetworks	Current Systems
<b>Setup and commissioning Cost</b>	<b>300</b>	<b>2100</b>



## 6 Key Personal

**Arie Trinker – Co-founder & CEO.** Formerly, Director of Corporate Business development of RAFAEL, a leading Israeli defense company. Co-founder & CEO of **Estimotion** (ITIS Israel).  
[arie.trinker@tridinetworks.com](mailto:arie.trinker@tridinetworks.com)

**Julian Dinur - Co-founder and VP R&D.** Formerly head of systems development groups at RAFAEL and visiting lecturer at the University of California, Berkeley. Extensive experience in systems engineering and real time embedded audio, cellular and telephony networks.

**Israel Ben Yehuda – Board Director.**

Former president and C.E.O Frutarom Lt. Now companies director, management and business adviser. Public member in National Labor Court of Israel panels.

**Moshe Zelnik – Advisory Board.**

Former VP Finance & CFO of DSP Group Inc., a leading global provider of wireless chipset solutions. Now Financial and M&A consultant.

## 7 Conclusion

TriDiNetworks will deliver a new family of advanced tools for Building Managements. The company is currently seeking to raise an additional 1,000,000 USD that will be invested in R&D, strengthening the IP by a new patent, Product cost reduction, Operating capital and Marketing. The capital raised will position the company as a major supplier of BMS automation technology by the year 2012.