

### What we do



# transense technologies pla

**Provider of sensor** systems for industrial, mining and transport applications









# Working With Global Companies







































# **Highlights**

- Trading results in line with board expectations
- Completion of GE license agreement
- Increased penetration of iTrack II TPMS system for mining applications
- Q4 and post year end increased Tyre probe revenue traction
- Initial significant Passenger Car Audit System sale



### Business Review: Surface Acoustic Wave

- GE relationship strengthens The technology has successfully completed rigorous testing within extremely harsh environmental and mechanical conditions
- Discussions ongoing with other GE Divisions
- Continued development in Automotive and Marine applications
- Key benefits of the technology include: wireless, batteryless, light weight, extremely robust and capable of operating in harsh environments



# Licensing IP and Project Development





#### GE

Our license with GE was completed after an extensive testing period for an industrial application in close collaboration with the GE Global Research Centre



#### **Automotive Torque**

Multi-application

Progress with various opportunities continues

Our JV with McLaren is ongoing



#### Industrial Torque

Multi-application

We are supplying torque sensors for Industrial Drives in a range of applications

Trials are ongoing on a Marine application



### Business Review: Translogik – iTrack II

- Successful launch of iTrack II Adoption rates accelerating
- PO's received for 3 mines in Australia totalling 110 trucks in the last 3 months
- Trials in Australia, Namibia, West Africa and Peru are on-going
- 24/7 Data Analytics centre operational and well received



### iTrack II - Features

6 Axis Accelerometer – Advanced Haul Route Analysis

**Advanced Geofencing – Unlimited Zones** 

WiFi (MIMO) and Sim Card Enabled

**Global Control Centre – 24/7 Monitoring and Data Analytics** 



- Real-Time temperature & pressure monitoring
- USB Port (data download)
- Ethernet Port (RJ45)

- CAN Interface
- MobiTrack (User Interface)

- In Cab WiFi Display (Optional)
- Internal UPS (12 hours)



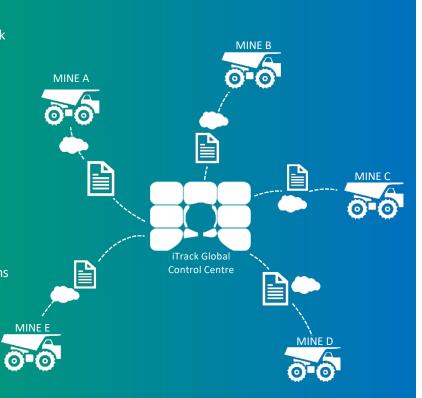
# System Overview & Benefits

#### **System Overview**

- 24/7 Control room solely dedicated to iTrack customers
- Translogik staff report analytics live or on a daily/weekly/monthly basis
- Customised Reports tailored to the specific conditions on the mine

#### **Benefits**

- Reduce Truck downtime
- Minimise Thermal and Mechanical Separations
- Improve inflation pressures
- Reduce tyre inspection times
- Increase tyre performance





# iTrack II Data Analytics



Maximizing the hours a truck is working



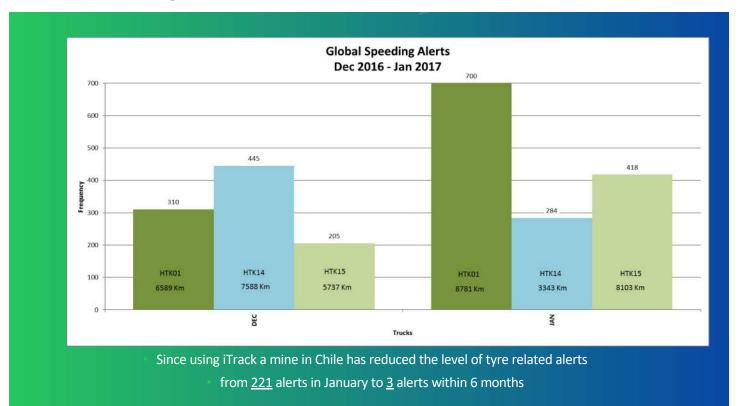
#### Geo-Fences: Timed zones – Pit 1



- A timed geo-fence "Pit 1" was created to track the total time each truck spends in it.
- This assists the user to assess the total time the truck/s spend in the zone versus the average time and make adjustments to improve truck time in production
- HTK01 spent 13.1% of its time in this zone, averaging 23 minutes per visit
- HTK14 spent 28.7% of its time in this zone, averaging 50 minutes per visit
- HTK15 spent 11.9% of its time in this zone, averaging 24 minutes per visit

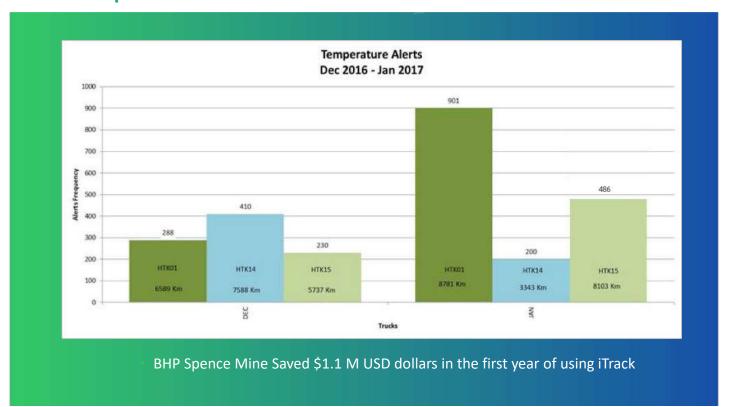


# **Speeding Events**





# Temperature Alerts





# Tyre Inspection Probes



Probe adoption has accelerated considerably in the last 3 months.

One OEM that has adopted the probe has 2,300 distributors in the US alone and 1 client only has ordered 250 probes.

The probe is now the tread depth tool of choice for Bridgestone, Goodyear and Continental as well as being used extensively by Michelin and numerous system integrators and value added resellers



## PCAS Complete

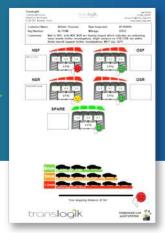
- 'PCAS complete' is a stand-alone tyre inspection and audit reporting workstation that requires no onsite Ethernet or Wi-fi connectivity
- Technicians perform speedy tyre inspections and produce visual reports that customers can easily understand within seconds
- PCAS will increase tyre and wheel alignment sales whilst ensuring customer loyalty and safety







Input customer data and find inspection history to produce reports that can be exported or printed.







# Financial highlights

- Revenues from continuing operations at £2.00m (2016: £2.08m\*)
- Net Cash at year end £2.52m (2016: £3.65m)
- Increasing iTrack rental stream
- Probe sales gained real traction in Q4 and into Q1 FY18
- Capital Reorganisation completed
- Increased investment in iTrack development and launch
- Tax Losses of £18m+



<sup>\*</sup> adjusted to exclude licence fee income associated with the disposal of intelliSAW.

# Financials – Results

	2017 £Millions	2016 £Millions
Continuing Operations		
Revenues	2.00	2.08
Cost of Sales	0.86	0.76
Gross Profit	1.14	1.32
Adminstrative Expenses	3.32	2.54
Operating Loss	2.18	1.22
License Fees (Net)	0.00	2.76
Interest	0.02	0.05
Taxation	0.00	0.03
Profit/(Loss) on Continuing Operations	2.16	1.62
Discontinued Operations		
Loss from discontinued operations	0.01	0.47
Profit/(Loss) for the year	2.17	1.15



# Revenue Analysis

	2017	2016 £Millions
	£Millions	
Tranaslogik		
iTrack (Sales)	0.55	0.83
iTrack (Rentals)	0.18	0.15
Probe	0.46	0.65
Total	1.19	1.63
SAWSense		
NRE	0.23	0.45
Licence Fees	0.58	3.04
Total	0.81	3.49
Total Revenues	2.00	5.12



### Financials – Cash Flow Statement

	2017 £Millions	2016 £Millions
Cash flow from operating activities		
Profit/(Loss) for the period	2.16	1.60
Adjustments	0.31	0.21
Operating Cash Flows before Working Capital Movement	1.85	1.39
Movements in Working Capital	0.97	0.55
Net Cash generated/(used) in operations	0.88	0.84
Cash flow from investing activities		
Interest	0.02	0.05
Capital Expenditure (Net of disposals)	0.34	0.17
	0.32	0.12
Cash Flow from financing activities		
Proceeds from issue of share capital	0.07	2.46
	0.07	2.46
Net Increase/(Decrease) in cash	1.13	3.18



### Financials – Balance Sheet

	2017	2016
	£Millions	£Millions
Non Current Assets	1.25	1.59
Current Assets		
Cash	2.52	3.65
Other	1.69	2.39
	4.21	6.04
Current Liabilities	0.66	0.71
Net Assets	4.80	6.93
Capital and Reserves		
Share Capital	4.77	11.55
Share Premium/Translation Reserve	0.04	17.22
Accumulated Deficit	0.01	21.81
Sharehlder's funds	4.80	6.95



# Summary

- Solid financial condition
- Capital restructuring completed
- Recognition of the value of SAW Technology continuing to grow
- iTrack II successful launch followed by good orders
- Probe sales step up in Q4 and Q1 FY18
- Positive Outlook







# Transense Core Technology - What is Surface Acoustic Wave (SAW) sensing?

Transense Technologies has developed two distinct sensors, one measures torque and temperature the other pressure and temperature, and the requisite electronics to interrogate and read them. These sensors utilise Surface Acoustic Wave (SAW) technology.

A SAW is an acoustic wave that travels along the surface of an elastic material. This kind of wave is commonly used in piezoelectric devices in electronic circuits. These piezoelectric devices will convert electrical pulses into mechanical vibrations and, conversely, mechanical vibrations into electrical pulses. A SAW resonant sensor is designed to resonate at a certain frequency, but if its piezoelectric substrate distorts through heat, mechanical stress or pressure, it will resonate at a different frequency. When a radio wave is directed at this device to interrogate its properties, it will, in the absence of any external forces, reflect (back scatter) a wave of the same frequency to the source. If, however, the device is subject to external force, e.g. heat or stress, the reflected wave will be of a different frequency and that change in frequency can be measured. The Company has developed a way of measuring the difference in frequency between these waves in a range of sensors, which can be used to accurately calculate torque, temperature and pressure. In order to read this change in frequency, the Company has developed associated interrogation electronics and software. These SAW devices are fabricated utilising common processes employed in the manufacture of silicon integrated circuits.

An introduction to SAW by Dr Victor Kalinin - http://vimeo.com/60538246



### **Board and Senior Management Biographies**

**David Ford, Chairman:** Specialist in IP law. In 1990 became Tarlo Lyons first Managing Partner. In 1998 he led the management buyout of the consumer debt recovery department of his old firm, Tessera Group, where he was the non-executive chairman until it was acquired by Arrow Group in December 2014

**Graham Storey, Group CEO**: Previously CEO of The Moyses Stevens Group, which Graham gained control of through a management buy out. Through a combination of organic growth and acquisitions, the group grew to become the biggest commercial and retail florist in the UK. Graham carried out a successful sale of the business in 2004 to a venture capital fund and, prior to joining Transense has been involved in investing in several businesses one of which was Transense Technologies plc.

Melvyn Segal, Finance Director: Mr. Segal is a chartered accountant and experienced company finance director, having previously held Director positions at various high growth businesses. Prior to entering the commercial sector Mr. Segal was a senior partner for 22 years at the accountancy firm Arram Berlyn Gardner (ABG).

Laren Yeomans, Translogik CEO: Previously Sales Director (1998 – 2004) for RBC Electronics -duties included selling white goods products into the major high street retailers including B&Q, Argos and QVC TV shopping channel outlet. During this time also became Managing Director of Pneu-Logic Ltd which specialised in distributing data collection equipment into the tyre industry with customers such as Bridgestone, Michelin, Goodyear adopting the technology.

Nigel Rogers, Non-Executive Deputy Chairman: Mr Rogers qualified as a Chartered Accountant in 1983 spending eight years with PwC before moving into industry. He managed the flotation of Stadium Group Plc as Group FD, before progressing to Group CEO in 2001. Under his leadership, Stadium divested several non-core businesses, focusing on the successful development of its electronic design and manufacturing capabilities in the UK and China to a worldwide customer base. He joined 600 Group Plc as Group CEO in 2012 and led the turnaround of the AIM-listed global machine tool business (Colchester-Harrison), increasing strategic focus on growth of its technology-based laser marking business (Electrox) until April 2015.

Rodney Westhead, Non-executive Director: Chartered Accountant by training and until 2005 was Chief Executive of Ricardo plc, the major automotive consulting engineering group with sales of £200 million a year. Currently Chairman of Clean Air Power plc.

