



**Presentation to
ADS Workshop
Sensing a Defence Requirement**

23rd April 2008

Alan Henderson Managing Director

www.gassensing.co.uk



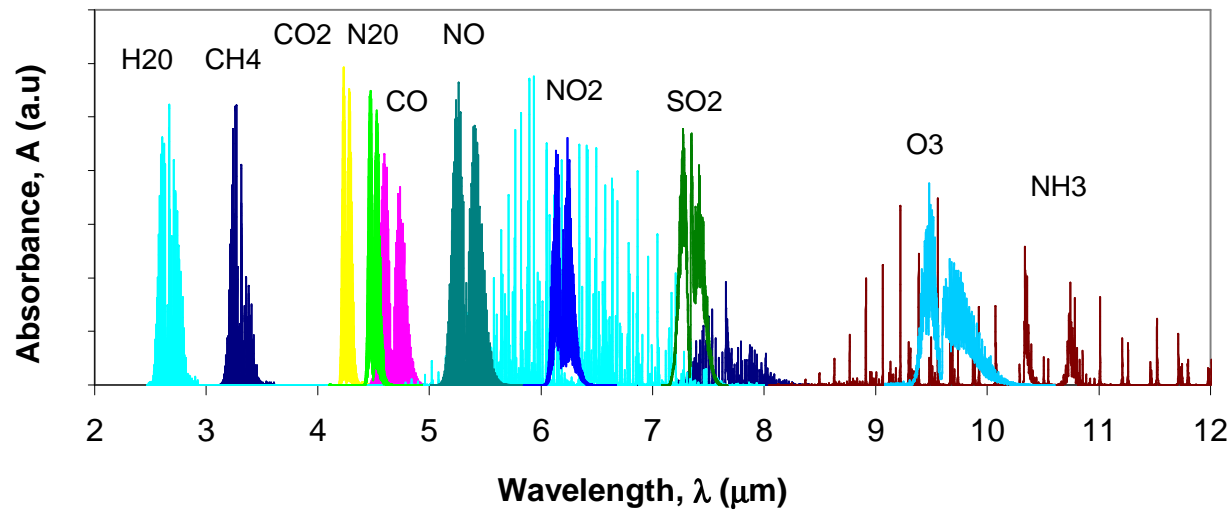
GSS Status

- GSS start up company 2005- Equity, SFGL, RSA, SMART, UK Steel & WSLF funding with extensive Due Diligence
- Engaged with Key Players- (Auto),(Japan) CoGDEM (Industry)+Distributors
- GSS Team Experienced in R&D, Product Dev, Manufacturing, Delivering New Product to Market
- Worldwide Exclusive License with world wide QinetiQ & GSS (seven) patents being progressed



Gas sensing using infra-red methods

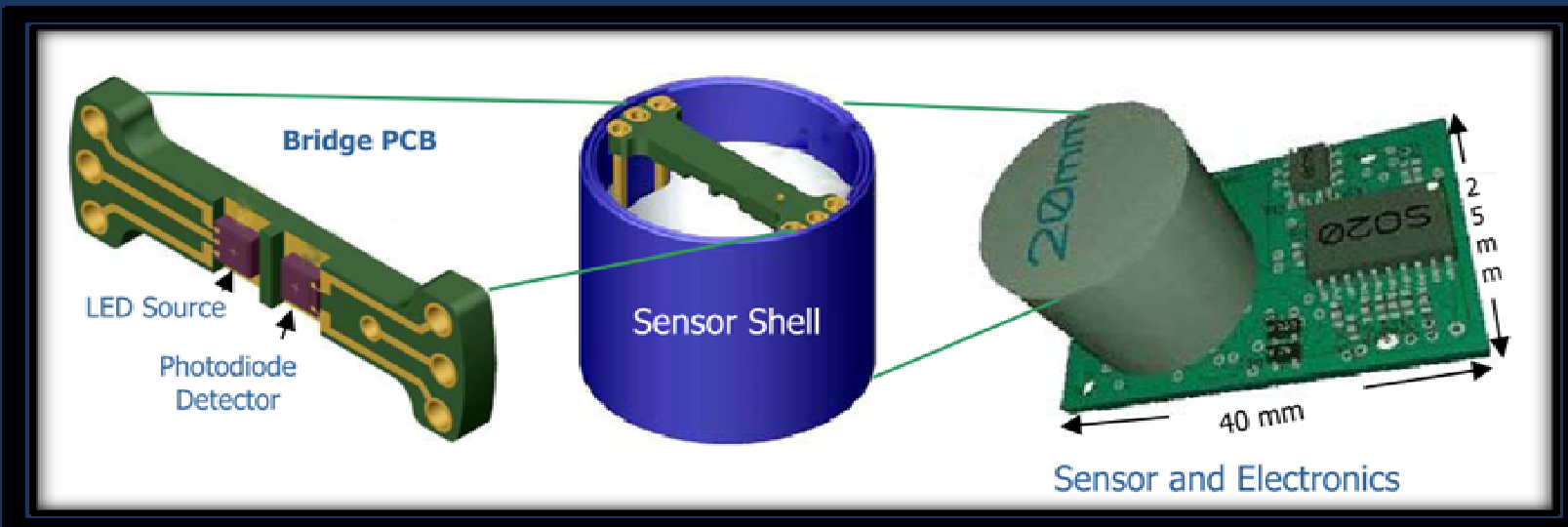
Mid-IR absorption fingerprints for gases of interest





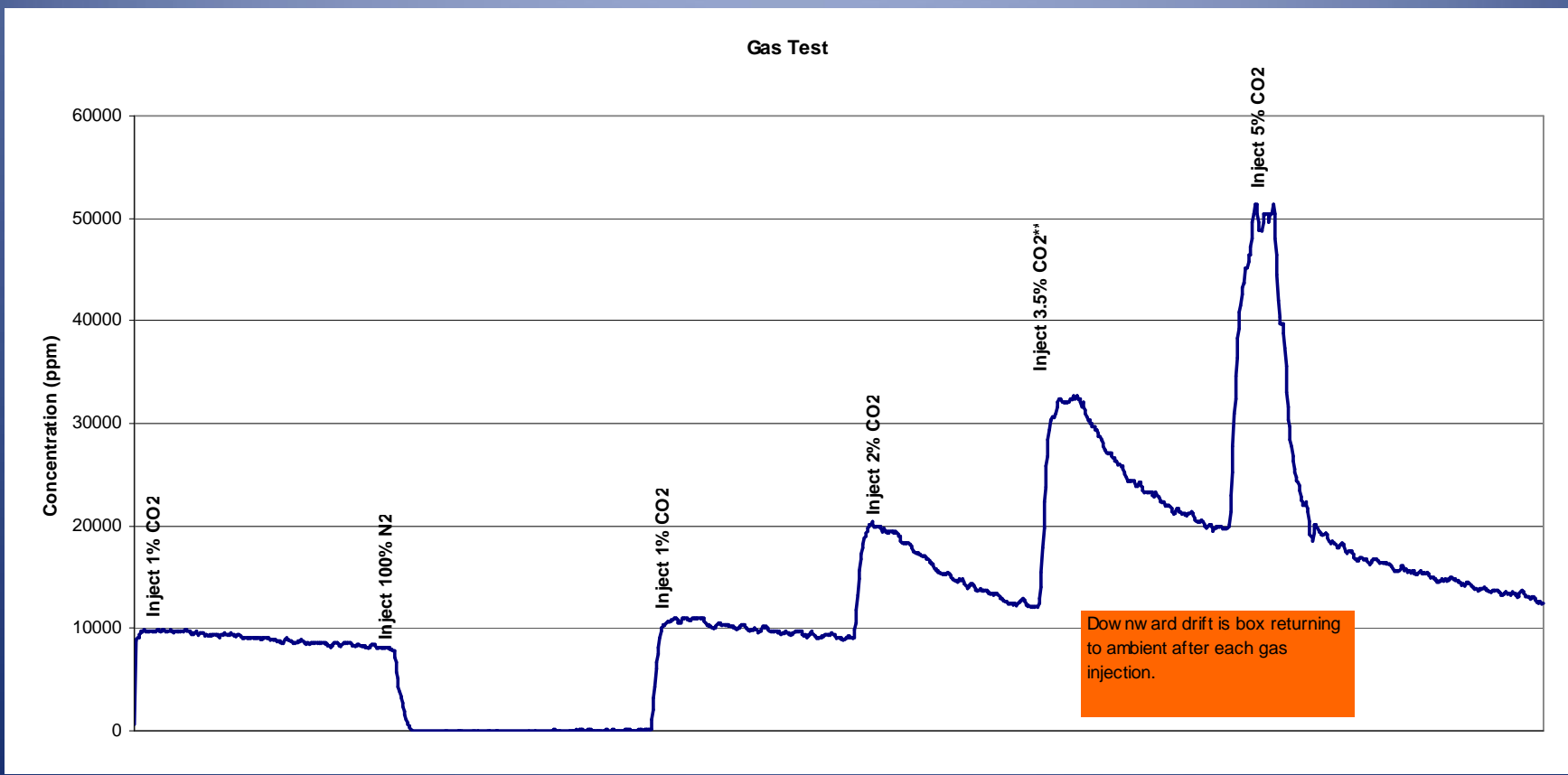
GSS Sensor

- LED & PD mounted on a bridge board PCB over lensed mirror reflector + drive electronics





Performance





Differentiators

- CO2 Solid State InSb sensor, utilising QinetiQ & GSS patented technology
- Worldwide exclusive license, technology commercialised by GSS for CO2 sensor applications
- 4 readings/sec- sensor measuring in real time, no further signal processing required, Drive voltage 3.3V-9V
- LED technology allows sensor to operate at low power <100mW, poison resistant
- LED & matched PD operating within narrow optical band centred at 4.26 μ m
- Technology delivers- high speed, low power consumption, sunlight immunity, real time, accurate, competitive CO2 sensor



SUMMARY

Portable Carbon Dioxide Sensors



Defence Medical	Confined Spaces Process related Landfill Biogas Nuclear
HVAC IAQ Environmental agricultural,	Pharmaceutical Industry Fermentation) Distilling

Price


Commercial

Industrial



SUMMARY

Fixed Carbon Dioxide Sensors



Medical Defence	Up Stream oil & Gas Landfill Biogas Refrigeration Extinguishing
HVAC IAQ Building Services, Pub Cellars Greenhouses, Health Clubs Restaurants, Theatres, Stores/retail,	Refrigeration Breweries Gas Generation/Supply Automotive

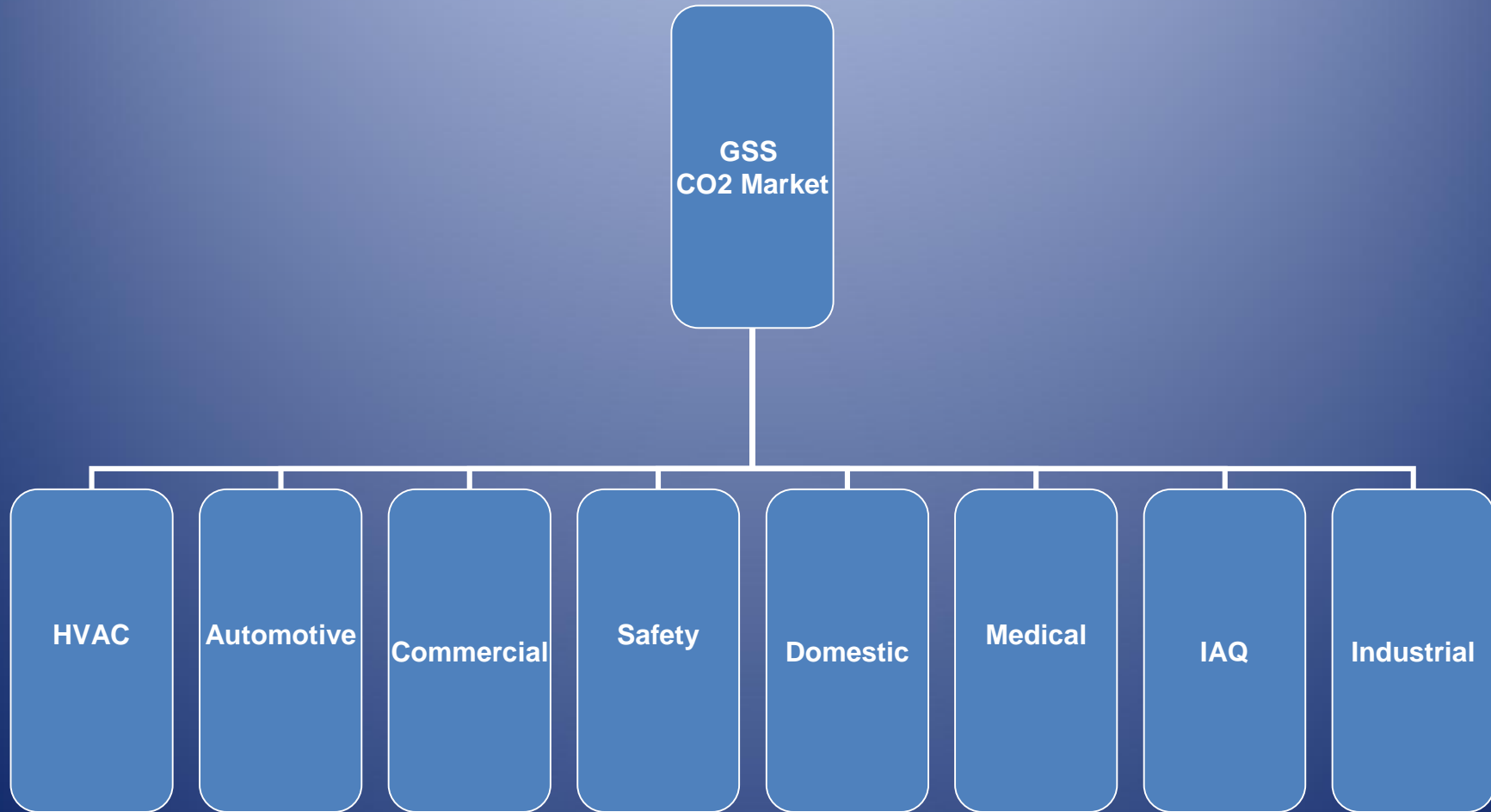
Price

Commercial

Industrial



General Market Sectors





Defence Sectors





Summary

- Broad gas range 200-650,000 ppm
- Integration of output to meet specific applications
- Broad number of market applications
- Low power, fast response (when required)
- Interface standard RS232 or customer specific
- Extensive number of Market sectors-niche to high volume
- Delivering now..... “the holy grail”