

Minutes of Meeting

Document No CO-1455-18

Subject	CO Sub Group	Circulation	All members
Date	20 th February 2018	Circulation Date	5 th March 2018
Location	CoGDEM offices Hitchin	Circulation by	Website & email

Attendees

Leigh Greenham - CoGDEM
Mike Byrne - Ei Electronics (CO Sub Group Chairman)
David Richardson - Ei Electronics
Doug Longstaff - Draeger
Rob Farquharson - Air Liquide
Brendan Simpson - FireBlitz
Ian Ballinger - Sprue
Jim Hill - Sprue
Kazuaki Watanabe - Figaro
Peter Philpott - TPI
Masahiro Uehara - New Cosmos
Graham McKay - BSI
Kevin Brown - DD Scientific
Kevin Mileson - GES
Jon Bawden - Testo
Jonathan Gilby - HH60 Consultants
Martyn Walley - Aico
Andy Speake - Aico
Damian Cairns - Anton
Adrian Keats - Honeywell Analytics
John Darby - City Technology
Tony Banfield - Chair of EXL/31/1 etc
Paul Rennie - Kidde Safety
Billy Mitchell - Smart Compliance
Rob Lyon - Playfair Marketing

Apologies

Colin Mitchell - Ei Electronics
Jason Perrins - FireBlitz
Steve Cork - CSA/Sira
Andrew Keenan - CSA/Sira
Andrew Yardley - City Technology
Craig Millar - Geotech
John Saffell - Alphasense
Neil O'Regan - Shawcity
John Walsh - Sprue
Bernard Thomas - Kidde Safety
Simon James - Air Liquide
Gary Fairhurst - Kane International

Agenda:

- 1) Apologies and member introductions
- 2) Approval of previous minutes and matters arising
- 3) Lobbying activities (inc. All Party Parliamentary CO Group)
- 4) Publicity update (inc. Europe, Holland, France and UK)
- 5) CO alarms standards review (inc. EN 50291-1 update and ANEC objection, gas testing, EU consultation on Construction Product Regulations)
- 6) Flue Gas Analysis (inc. CO2 concerns, new HHIC boiler guidance)
- 7) Electrochemical toxic gas sensor lifetime testing
- 8) AOB (inc. updates from HSE [proposed new CO workplace exposure limit], boat project)
- 9) Dates of 2018 meetings – Tues 5th June 2018, Tues 23rd Oct 2018

1 Apologies and member introductions

Dr Mike Byrne (Ei Electronics) chaired the meeting and welcomed a few new faces. Members introduced themselves around the table and the above list of apologies was displayed and read out.

2 Approval of previous minutes and matters arising

The Minutes of the previous meeting (17th Oct 2017, CO-1454-17) were read and accepted. Matters arising were covered during the rest of the agenda. New attendees were reminded that CoGDEM meetings would not contain discussions of a commercial nature.

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3 Lobbying (inc. All Party Parliamentary CO Group)

All Party Parliamentary Carbon Monoxide Group (APPCOG):

To enable commercial organisations to be involved with relevant Parliamentary affairs, we are members of the APPCOG Stakeholder Forum funded by industry (including certain CoGDEM members who choose to do so) and overseen by an Advisory Board that LG is a member of.

Parliamentary speeches and a Ten Minute Rule Bill have been presented in the house by Eddie Hughes MP who happens to be a Trustee of a social housing organisation in the Midlands, so he has credibility about his requests for regulation to ensure all tenants are protected by CO alarms. In a January 2018 speech he referred to the DCLG consultation on the review of the 2015 English CO and smoke alarm regulations that apply to properties in the Private Rented Sector. Publicity about the impending speech allowed the Project SHOUT team to get some good media coverage, including an excellent slot on the BBC Breakfast sofa for a victim's relative supported by Mark Hazelton of London Fire Brigade.

APPCOG had published a well-written report on the need to change the PRS alarm regs which was launched at a Parliamentary event on 7th Nov 17 attended by Alok Sharma MP, Minister of Housing. Positive messages were included in a speech from the Minister, but a subsequent letter from his department repeated the old assertion that solid-fuel appliance installations cause a disproportionate number of the recorded CO incidents. The outcome and any published conclusions from the consultation may be deliberately delayed until the publication of the enquiry report into the Grenfell Tower tragedy.

Last summer's APPCOG activities related to CO safety at music festivals were reasonably successful, with banners and posters at the bigger festivals warning of the CO risk from barbecues inside tents. This focus will be repeated this year, with a Parliamentary reception for the organisers of the major festivals, which will hopefully be a media-friendly event with messages that trickle down to the smaller festivals this year.

As reported before, APPCOG has formed a Communications Working Group, attended by Rob Lyon. Several meetings have been held, and Rob keeps relevant companies informed of the Group's activities.

Others:

Safer Tourism Foundation (Thomas Cook funded) Given the recent near-miss event in the French Alps where a British family were overcome by CO in a skiing chalet where snow had blocked a flue terminal, STF have issued press releases about the safety of British tourists abroad. They have appointed a PR expert who has been in contact with LG and RL.

Gas Safe Register With the ten-year contract to run the Register coming to an end in 2019, bids from several commercial organisations to run the scheme for the following ten years are now being submitted to Government. The current provider is Capita, and the existing team conducted a 'decade review' which concluded that the gas industry and its customers are safer now than they were when Capita's Gas Safe Register team took over from CORGI in 2009. The Gas Safe Register brand, logo and name will continue to be used irrespective of the chosen provider post-2019.

Gas Safe Charity 'Profits' from the Gas Safe Register's operations are fed to the GSC, who are funding some 'Think CO' events which will train 'trusted intermediaries' such as health visitors and other social care providers, to be more aware of CO so they can look out for hazards or symptoms when visiting peoples' homes. The first of roughly a dozen 2018 training events are to be held in the next month around the country, and either RL or LG will attend the early events to ensure that any questions about CO alarms are dealt with appropriately. The scripts and e-learning slides have already been checked for accuracy.

IGEM (Institution of Gas Engineers & Managers) The November 2017 IGEM CO conference entitled 'Research into Action' was attended by several CoGDEM members and felt to be worthwhile, especially the presentation by Julie Connolly of Liverpool John Moores University about her PhD research into the 'lived experience' of CO poisoning. As IGEM received complementary feedback about the conference, it is likely another will be held at the end of 2018, as this could capture the results of the research projects at Cranfield and LJMU.

GISG (Gas Industry Safety Group) LG arranged for Martin Brown of DNV/GL to present to the GISG Board the draft scope of a research project to investigate the build-up of CO in typical domestic kitchen environments. This was well-received and funding should be forthcoming, so a fuller proposal will now be created.

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4 Publicity update (inc. Europe, Holland, France and new UK group)

Europe:

The European monitoring and lobbying activity group run by ADS Insight in Brussels held the 7th annual CO Roundtable event in the EU Parliament building in December 2017, hosted jointly by the Irish MEP Marian Harkin and the UK's Linda McAvan MEP. Speakers covered recent successes in getting CO mentioned in European Directives covering the energy efficiency of buildings, and the pan-European media monitoring project which is ongoing and always unearths CO incidents and media stories that would otherwise go unnoticed. The group will meet in late-February to discuss 2018 strategies and activities, including how to maximise the use of the media data from each individual European nation.

Netherlands:

The Dutch government has issued a consultation document on its plan to introduce more regulation to the domestic gas industry, such as competency requirements for heating engineers. COGDEM's NL group will be responding with positive feedback about the plan, and its willingness to participate in any relevant industry initiatives to help set up the regulatory frameworks.

France:

The French group of alarm manufacturers, distributors, energy bodies and health organisations has agreed to continue to work together to raise awareness of CO issues in France. Regular conference calls and meetings in Paris are setting out the initial activities for the group, to be known as 'OPRIM'. Shane Lyons of Ei Electronics has led the formation of the group.

Global:

The International CO Research Network (ICORN) that was triggered by the Toronto conference in Nov 2016 (attended by LG) will be formally launched at an event in the UK Parliament in May 2018, with ICORN members from around the world. The funding of ICORN will be shared by the UK's Gas Safety Trust, the Ontario safety authorities and some US organisations. After the launch, the first main ICORN event will be an international two-day conference in Minnesota in September 2018 to investigate, share and publicise best practice between the emergency services on how they respond to CO incidents. Three CoGDEM member companies have already expressed an interest in supporting this US event, and LG has been invited to make a presentation.

UK:

Rob Lyon gave a brief report on his activities to support the CO alarm and FGA manufacturers who are part of a separate PR working group run by him via his independent company Playfair Marketing. He mentioned the London Borough of Redbridge project to protect residents living above restaurants using solid-fuel cooking appliances, where the manufacturers have donated CO alarms. As well as 'Think CO' as mentioned above, Rob updated the meeting on the APPCOG Comms Group, a proposed feature on a new Channel 5 primetime show with Eamonn Holmes, and the new CO alarm listings guide being developed from SGN's fledgling list.

The National Caravan Council (NCC): As mentioned at October's CoGDEM meeting, the new CO leaflet for caravanners had been delayed, despite getting to final draft form in time for a planned September 17 print run. It now transpires that this delay was caused by the decision to impose mandatory gas-testing of CO alarms in the caravan and motorhome industry's Approved Workshop Scheme, using only the NCC's 'verified' 'calibrated' test-gas. CoGDEM and the affected CO alarm manufacturers have made various submissions to the NCC and the AWS Policy Board, but these have been rebuffed, so further high-level communications will be explored.

HETAS has completed the compilation of its 2018 Guide which includes product listings from nine CoGDEM companies who share the cost between them.

Energy UK will start its 2018 CO-Be Alarmed! campaign with a Parliamentary drop-in event for MPs and publicity in the next quarter about the rented sector, with a particular focus on protecting families and the elderly.

Cranfield University The ongoing PhD project has to remain confidential until its completion, but Roland Wessling has stated that his student has invented and developed a pre-treatment for charcoal (and possibly wood) that can dramatically reduce the emissions of CO when burnt. Cranfield is investigating ways to productionise and then commercialise the technique.

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5 CO alarms Standards Review (including EN 50291-1 update)

The final draft of the CO alarm performance standard EN 50291-1 has been accepted for publication by CENELEC after the final vote, despite ANEC (the European consumer organisation) voting negatively again. Their criticisms and recommendations (such as wanting the audio mute function to be prohibited by the new standard) were not accepted by the committee and suitable responses have been compiled. It is hoped that the revised standard (possibly with the updated part 2 for recreational vehicles) will appear later in 2018.

It was mentioned that the EU is conducting a consultation exercise into the scope of the Construction Product Regulations, although as previously reported, EN 50291 is not yet in an appropriate format for it to be harmonised under these regulations. https://ec.europa.eu/info/consultations/public-consultation-eu-rules-products-used-construction-buildings-and-infrastructure-works_en

6 Flue Gas Analysis (inc pressure meters, MCPD changes, CO₂ concerns, HHIC boiler servicing guidance)

Peter Philpott of TPI has been accepted as a CoGDEM representative on the CENELEC TC216 Working Group (WG13) established to revise the FGA performance standard EN 50379 to allow for 'smart' devices such as those that don't have built-in displays but use the engineer's smartphone's display. This will be convened by the Germans, and it is likely that this same WG will also work on the new standard for gas pressure meters ('tightness testers') which had been sanctioned by CENELEC as WG14. No meeting date has yet been notified.

Peter raised the issue of the NO_x cross-sensitivity of unfiltered CO sensors used on some FGAs which may give different readings when compared with filtered sensors. One solution is to ensure a fresh NO_x scrubbing filter is fitted to the sample line of FGAs. Some manufacturers make this point in their instructions or technical notes, but it was felt this subject should be included in the CPA1 assessment which is now part of the generic CEN1 assessment for heating engineers, so Kevin Milesen was asked to raise this with the organisation which sets the training agenda, Energy & Utility Skills.

At the previous CoGDEM meeting, FGA manufacturers were made aware that the Medium Combustion Plant Directive (MCPD) had a requirement for portable emissions monitors to be MCERTS compliant from 2018. We have now heard that the UK's Environment Agency is likely to accept EN 50397 compliance or MCERTS, which is a sensible move. Jon Bawden of Testo said he had heard similar comments from his German colleagues.

Damian Cairns of Anton had raised the issue of a gas industry proposal to widen the allowable range of the CO₂ content of piped natural gas in the UK. His concern is that a higher than normal CO₂ content in the fuel might affect the CO₂ content of the products of combustion, and depending on the measurement method employed by an FGA, an erroneous reading could be obtained. CoGDEM was represented at an industry meeting dealing with Wobbe Index and gas constituent ranges, Paul Basham of Crowcon attended the meeting at the invitation of Martin Brown of DNV/GL. Kevin Milesen of GES is currently undertaking an MSc in Combustion Science and has also expressed interest in the subject, Graham McKay of BSI was able to explain some of the background, and through their IGEM membership they will keep CoGDEM informed as the subject develops.

LG passed around a draft leaflet being produced by the HHIC for consumers to read what they can expect when their gas boiler is serviced. This is being produced as one of the responses to the ongoing Which? magazine articles about shoddy services by competent engineers from well-known service providers. LG had already received agreement from the leaflet producers that the messages about flue gas analysis would be strengthened, and the elimination of the specific risk of CO poisoning should be mentioned on the list of benefits of regular servicing. Those members of CoGDEM who are members of the HHIC were encouraged to ensure these changes occur.

7 Electrochemical toxic gas sensor lifetime testing

LG and Jonathan Gilby gave a brief overview of the outcome of the second meeting of the sensor group that had been held the day before this CoGDEM meeting. This led to a discussion today of the earlier idea of BSI invoking an agreed test procedure to 'pre-authorise' CO sensors that are to be used in BS EN 50291-compliant products. Graham McKay of BSI confirmed this could mean that certain of the long-term tests which the CO alarm must undergo in order to demonstrate compliance with BS EN 50291 could be avoided, if the alarm contains a sensor that has been previously tested. Graham thinks the existing 3-month reliability test in the standard could be improved, and a standardised pre-compliance test of the sensor could facilitate this. JG will pursue the details with Graham.

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8 AOB (updates from HSE [proposed new CO workplace exposure limit], boat project)

a) HSE

LG reported that an item on the afternoon's Industrial Sub Group agenda on Workplace Exposure Limits was partially relevant to the CO community. The current time-weighted-average WELs for CO are 30ppm averaged over an 8-hour day and 200ppm averaged over a 15-minute window. From August 2018 these limits will come down to 20ppm and 100ppm respectively, but these WELs only apply to workers, not domestic consumers.

b) Boat Safety Scheme

With concerns over the disproportionate number of fatal CO incidents aboard boats on UK inland waterways over recent years, BSS has embarked on various projects and initiatives, particularly targeting the vulnerable live-aboard residents of narrow boats in canal basins during the winter months. LG is helping with a project to assess the third-party risk to BSS Examiners when they board a boat, so a group of fourteen examiners have been given a four-gas workplace gas detector (GMI PS500, 'Wheelmarked' under the Marine Equipment Directive) and been given relevant training. In the first two months since the instruments were issued in Dec 2017, eight CO occurrences have been seen, with some showing high CO₂ as well. LG will be analysing the cases and reporting at appropriate times.

c) Helpline

LG mentioned there had been no repercussions from the two calls he had identified at our previous meeting, the lawyer who enquired about the use of CO alarms on board commercial fishing boats without identifying himself, and the doctor who did not knock on his neighbour's door when he thought they may have a CO problem.

Calls during the winter months and Christmas/New Year period included a caller on Christmas Eve who suspected his council house boiler had not been serviced correctly that week. A heating engineer called about the discrepancies in readings on his Kane 456 FGA when compared with a Testo unit, the former measures CO₂ directly and the latter calculates it indirectly by measuring the oxygen content of the flue gases. A recent industrial workplace caller needed assistance to investigate why a personal CO alarm instrument (Arctic Products) did not alarm when exposed to a high concentration of CO, despite the worker's colleague's Crowcon unit activating correctly. LG arranged for BSI to do a quick test of the instrument in their CO chamber, and Graham McKay told the meeting that the user had been informed they were using the instrument beyond its manufacturer's stated and labelled end-of-working-life date.

d) GASG

The next meeting of the Gas Analysis and Sensing Group will be GASG's 70th, and will again involve younger people who will give 15-minute presentations on relevant gas-related projects that they are involved with, whether in academia or industry. This will be on 15th March 2018 at Chicheley Hall, Newport Pagnell.

e) Portable power generators and CO emissions

At our previous meeting we discussed the situation with fatal incidents in the US from CO in the fumes from portable generators after major storms causes electrical supply outages. The manufacturers were under pressure from the US Senate to protect users in various ways, including catalytic converters, controlled fuel injection, long power leads, better warnings, CO alarms and shut-off systems.

Kazuaki Watanabe of Figaro updated the meeting. There is a new standard published in January 2018, UL 2201 which is titled "Standard for Carbon Monoxide (CO) Emission Rate of Portable Generators". Also, the ANSI/PGMA G300 standard for generator safety testing may be extended to include a requirement for an automatic engine shut-down at 400ppm CO, using an onboard sensor. The existing document can be freely downloaded from http://www.pgmaonline.com/pdf/ANSI_PGMA_G300_2015.pdf

9. Dates of next meetings – Tues 5th June 2018, Tues 23rd Oct 2018