Indext Image: Construction of the second second

Newsletter of the Commissioning Specialists Association

This Edition of Index is sponsored by:





The CSA phone number has now changed. Please note the office phone number is now +44 (0) 208 809 679. We are contactable between 8.30am and 4pm alternatively leave a voicemail outside these hours and we will return your call.

Our GCC Chairman announces first gala awards for the GCC. Please watch this space for more details or if you would like to get involved in anyway with organising or sponsoring this event please contact Jo on: jo@csa.org.uk who can pass on your details to the right person.



In this edition of Index: • CSA OFFICE NEWS

And much, much more...

CHAIRMAN'S SAY GCC CHAIRMAN'S SAY MODERN BUILDING SERVICES NEW ITCM COURSE DATES

in

Our Linkedin network is continuing to grow and our plans for 2023 include expanding our network further. Remember we are happy to re-share any of our members posts that may be of interest to our audience. Please remember #CSAHORSHAM and # Commissioning or drop an email to the office.



"Commission with Confidence"

16 Barrmill Road, Galston | 01563 821991 <u>www.handv.co.uk</u> | <u>Tony.Anderson@handv.co.uk</u>

CSA SOCIAL MEDIA #CSAHORSHAM or #COMMISSIONING



Office News

Fi everyone and welcome to the first issue of Index for 2023 ! Myself and Kate hope you all had a great Christmas and that you are looking forward to a busy and prosperous year.



The CSA Gala Awards date has already been set for 5th October 2023. If you would like to get involved /enter in this year's awards, please visit our dedicated CSA Awards website: www.csa-awards.co.uk. Alternatively, you can contact Touchwave Media at: hannah@touchwavemedia.co.uk Details of this years Gala Awards can be found on page 10.

The May 2023 Grade 4 exam is set for Saturday 20th May 2023. To add your name to the list please email: office@csa.org.uk Please also note the ITCM courses are filling up fast and January and May are already fully booked. Dates available can be found on page 11.

Sometimes its nice to know a little bit more about the people you deal with on a day to day basis. The CSA Horsham office has a dog friendly policy and on occasion these three visit (Not all at the same time!) Did you know that interaction with a dog for just 15 minutes is shown to: Reduce stress levels, lower blood pressure and improve mental health. If you don't own a dog and like this idea for your colleagues you can hold an event ! You can find out more at: https://www.worldanimalprotection.org.uk/blogs

I would also like to take this opportunity to acknowledge how well the new Commissioning Management grading structure has been received and would like to congratulate the following members on their commissioning management Grades: Adrian Umand, Arjay Mirabueno, Charity Butiong, Emmanuel De Castro, Ephrain Orritz, Mark Loresto, Benedict Morelos, Thomas Dunn, Craig Powell, Gary James, Neil Philliskirk, Andrew McAvoy, Patrick Barry, Wayne Wild, Martin Payne, Stuart Kelly, Carlo Gambardella, Nick Boardman, John Wilson.

On a final note the Association is getting busier and busier and if you would like to get involved with one of our many committees, our assessment panels, or would like to be a tutor for our courses please get in touch and we can talk you through the various options available.

Distance Learning Courses A, B & C

Well Done to those listed below who have recently passed the DLC tests.

DLC A Adam Harris, William Clark

DLC B Peter Matthew, Oliver Trevett, Matthew Johnston, Alan Crawford.

GRADE 5 PASSES

Congratulations

Chris Brown Greg Eusebi Congratulations to the following students who passed their Grade 4 exam in October 2022:

Luke Pennal, Ben Greenland, Ben Weatherley, Ryan Mcculloch, Craig White, Anthony Newton, Declan O'connor, Ben Hamer, Sean Wight, Craig Ferguson, Ryan Lundie, Jack Neeley, Ryan Doran, Stephen Cargill, Eyad Turkmani, Fadi Hammad, Earl Guevarra, Pravinkumar Jha, Bachir Hatem, Hussein Mostafa, Rawad Diab, Wafi Rafeh, Youssef Abouzeid, Mazen Ayyash, Kamal Khalifa, Taha Khaled

Please welcome our newest members to the association:

Adrian Umandap, Arjay Mirabueno, Rayan D'souza, Yahia Alfararjeh, Amer Abulawi, Amin Abou Saad, Honsy Mahmoud, Kasim Choori, Manoj Kumar Gs, Rogelio Alabsatro, Saleh Alshoufi, Thomas Nikhil, Visakh Krishnan, Ahmed Ellaimony, Sherif Khattab, Sharooq Ali Beig J, Muhammad Al Jinna, Kumar M, Mohamed Maher

CSA SOCIAL MEDIA PLEASE REMEMBER: #CSAHORSHAM



Chairman's Say



2022 was a busy year for the CSA office and the various committees within, we have made some positive steps forward in what we planned out to achieve, seeing some significant changes made, which is reflecting across our association. A big thanks to Jo and Kate in the office, new systems and processes are working efficiently, especially our social media drive which I'm sure you will all have noted the CSA's presence more on a daily basis.

We have some positive news regarding the current SKILLcard issue that myself, Jo and Darren Harbor are currently dealing with.

Firstly, our members must be assured that the SKILLcard issue is our highest priority for the CSA, we've held various meetings with stakeholders from CSCS, Construction Leadership Council (CLC), SKILLcard and BESA, submitted a detailed application to prove that the CSA's main role is to educate/validate the technical aspect of our industry, proving a technical development programme which aligns with the requirements of these bodies.

The main stumbling block to date concerning our SKILLcard application has been around proving Health, Safety & Environmental (HSE) competency, following a meeting held just last week, SKILL card has now advised they have an acceptable route for individuals to apply for a SKILLcard, allowing individuals to access construction sites. This will see changes for employers in that they will need to sign a declaration to take on the responsibility that their employees are safe to undertake the associated commissioning role aligned to the CSA grading system and that their employees have been trained in the relevant health & safety associated with the works they are undertaking.

Next step for the CSA, we have some revisions to our SKILLcard application, including statements surrounding H&S, revise the CSA job descriptions and revise the path of development before we re-submit to the approvals board in February, we will keep you all update as we know more.

"Commissioning Standards"

In recent years we have started to see basic commissioning standards slip throughout our industry. The CSA is getting feedback from various parties in the commissioning world, reporting that the initial steps of the commissioning process are not being adhered to, with various basic steps being missed and errors occurring throughout the whole process.

This is a reminder to all our members that the CSA Commissioning Engineers Compendium, CIBSE Commissioning Codes and BSRIA Application Guides should be always adhered to.

Some of the key items being drawn to our attention:

Item	Notes
Design Information	× Systems are being commissioned using superseded design information.
	\checkmark The commissioning engineer MUST always check that they are using the latest design information.
Correction Factors	 Only overall system factors or single grille correction factors are being taken resulting in erroneous flow rates.
	✓ Correction factors should be established, wherever possible, for each type of terminal and flow capture hood in use. Where this is not possible, the commissioning engineer must agree a suitable compromise with the design team and/or witnessing agent.

Item	Notes
Initial Readings	 Initial total volumes and fan/pump pressures are not being recorded, which are essential data if the system has any issues following completion of the proportional balancing.
	✓ The commissioning engineer MUST record the initial total volumes and fan/pump pressures, ensuring in excess of 100% of the design volume. Any issues at this stage must be investigated.
	✓ For traditional systems (not PICV/VAV systems) The commissioning engineer MUST record the initial indicated rates of flow at all Terminals/Grilles, Index grilles should also be indicated on the test sheets.
	Note: Records of the system 'initial scan' are invaluable to indicate the extent of the balancing required on the system. They may also be useful in the investigation of any problems, such as excessive noise or system resistance experienced with the system once it is balanced.
Valve Kv Values	Commissioning engineers have been using incorrect Kv/Kvs values from the manufacturers literature, resulting in pumps being inaccurately indicated as down on duty. Engineers are also using the wrong information, such as looking at the regulation valve as opposed to the orifice plate where these are separate.
	✓ The commissioning engineer MUST always ensure they use the correct Kv or Kvs value from the manufacturers' literature. They must phone and check with the manufacturers if unsure.
	✓ For variable orifice valves a range of flow coefficients (Kv values) for each hand wheel setting are to be used to determine flow rate or pressure drop.
	\checkmark For fixed orifice values the flow coefficient (Kvs value) is used to determine flow rate or pressure drop.
PICV DP's	 Test sheets are being issued without recording Pressure Independent Control Valve (PICV) Differential pressure drops.
	✓ The commissioning specialist MUST always record pressure drops across PICV's to ensure that the valves can control under their design parameters. The pressure drops must be included within the test documentation.
Sub-Main Total Volumes	 Fresh Air systems serving fan coil units, may wrongly be installed with VCD's located at the ends of spigots, thus disrupting the airflow and hence anemometer readings. Engineers then look to balance the spigots inadequately while not recording a traverse to said leg to validate indicated readings from the anemometer.
	✓ The Commissioning Engineer MUST always validate branches of spigots where the above installation occurs to ensure accuracy and system optimisation.
Pressure	× Final system operating characteristics are not being recorded.
Profiles	 Fan suction / discharge pressures are being inaccurately recorded on test sheets, with engineers using the unit in/out pressures which does not provide the required information to enable plotting of fan curves.
	✓ The commissioning engineer MUST record operating characteristics of Fans/Pumps. This should include a pressure profile of the Fan/AHU and pump system pressures including closed head readings.
Final Set Points	 Final system setpoints are not being set or recorded, resulting in BMS engineers not setting the systems up to the correct parameters.
	✓ The commissioning engineer MUST ensure once commissioning is completed that they have set up the system with the BMS engineer using the correct inverter setpoints and pressure setpoints to ensure the correct system operation.
	✓ All set-points are to be recorded within the commissioning reports for record purposes. Systems should be offered for witnessing in their automatic state with valves driven fully open or to an agreed scenario where there is a designed diversity.
Damper/	× VCD's are not being locked / Marked
Valve Settings	× Valves are not being locked / settings recorded
, in the second s	✓ The commissioning engineer MUST ensure that all VCD's / Valves are locked, marked and setpoints recorded at all times.

Item	Notes
System Reports	 System test packs don't include a detailed narrative of the commissioning process or any issues identified. The nature and complexity of some systems requires a narrative to describe the system, the parameters, commissioning/proving process and the reasoning behind this. Explaining how the system diversity was set up, or filters/strainer dirty condition was simulated makes it clear and easier for the consultant or witnessing authority to understand or the process to be repeated at a future stage.
Schematics	 ✓ Schematics are not being included within test reports. ✓ The system schematic should clearly identify the terminal units / equipment that has been commissioned with specific notes for test point locations. ✓ These days it's easy to grab the design schematic, mark it up electronically and attach to the test report.

Reminder:

Our constitution sets out to promote excellence in the technical expertise and business practice of those engaged in the profession of Commissioning Specialists. Membership of the Association shall be dependent on acceptance of the Code of Practice. Such acceptance embodies an undertaking by the Member to conduct themselves, at all times, in a manner commensurate with the requirements of that Code. The Member shall observe a good standard of workmanship, services shall be of good quality. The Member shall consistently check all of the work carried out forms part of quality assurance.

Neil Burdess - CSA Chairman & Associate Head of Commissioning BANYARDS.



With all the Christmas and New Year festivities behind us, it's time to reflect on the achievements of 2022 and look forward to what 2023 has in store for the GCC CSA. 2022 has been a year of significant, and positive change. The uptake of applicants has seen a sharp increase over the same period last year, several members have successfully passed their Grade 4 exams, and GCC entries for the 7th annual CSA awards included local representation for five out the seven categories, all of which demonstrates our members passion and commitment to providing industry best practice across the Middle East.

In partnership with the UK, we have prepared and subsequently released the **New Commissioning Managers Grading System** allowing candidates from other sectors to gain CSA certification, moreover, dates for the prerequisite, online **Introduction To Commissioning Management** (ITCM) course have now been released for 2023. Check out the website for recent press releases.

As we enter 2023, new ideas will be rolled out that will benefit new and existing members, whilst giving our clients the comfort that they have chosen suitably qualified vendors and individuals. The Kingdom of Saudi Arabia (KSA) and some of its major government led construction entities have shown a keen interest to partner with the CSA to help educate and promote industry best practice. Noting the level of activity and investment in the region, this opportunity will certainly be a major focus for 2023. Additionally, the GCC intends to hold its inaugural CSA Awards ceremony, details of which will be released in due course, however, should any member and or, interested sponsor, or potential media partner be keen to get involved, please contact our chairman, Lee Hewitt at l.hewitt@core-emirates.com

The above wouldn't be possible without the support of the wider GCC committee members who all take personal time out to dedicate to the CSA, however, should you meet the criteria to become a Committee Member, we'd be keen to hear from you so we can keep up with the demand of our ongoing expansion.

Finally, I'd also like to take the opportunity to thank the UK's Chairman, Neil Burdess, Joanne Rowe and Kate McIntyre, for their tireless support provided to the GCC Chapter.



WHATS NEW IN 2023?

Target 1: Zero Emissions Driving by 2028!

The 1st phase of our ambitious plans to achieving zero drive emissions by 2028 is ahead of schedule and we are pleased to announce that our latest Electric Vehicles bring our total Electric range up to 20% across our fleet.

Target 2: L&D Training Academy – Commissioning & Water Treatment

Our bespoke L&D experience provides each new and current site-based personnel with a variety of learning and training opportunities to suit their individual situation and needs.

We offer a variety of training opportunities, directly and indirect to commissioning with a huge emphasis on the ever-popular E-Learning side!

In 2023 we have placed a huge emphasis on making 50% of our internal training via E-Learning with at least 50% of that being 100% mobile friendly.

In addition to our internal L&D Training Academy, we also invest heavily in external training courses with **100%** of our commissioning staff currently registered on the **C**ommissioning **S**pecialists **A**ssociation Pathway of Development – Either via Distance Learning Courses (DLCs) and or on the Management Pathway.

WE ARE HIRING!

We are delighted to secure key projects across 2023 and 2024 and are looking to expand our commissioning & water treatment teams within the UK.

No experience?

We are flexible! We provide a fast-tracked and bespoke internal training service accompanied by industry leading Distance Learning Courses from the CSA, tailored to your needs.

Feeling like a new challenge in 2023?

We are delighted to offer comprehensive training & salary packages relating to site experience and grading level. Get in touch with Kevin Gardner at <u>Kevin@handv.co.uk</u> or Tony Anderson at Tony.Anderson@handv.co.uk

We look forward to welcoming you to our team!



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Established in 1975, we are the longest serving commissioning company in Scotland. Throughout this period the company has extended its range of services to meet the requirements of industry, and now has a clientele ranging through, Public Sector and Commercial Building Services.

We are well established as a leader in our field. We continuously seek to improve all aspects of this service. Our site-based engineers are all trained internally via our unique L&D Training Academy and to the Industry Standards set by the Commissioning Specialists Association (CSA).

Core services offered:

- Commissioning Management Services (CxM)
- Commissionability Studies (Remote Desktop Review & Site Verification)
- Building Services Commissioning, Testing & Balancing
- Water Treatment and System Maintenance
- Domestic Services Disinfection
- Clean Air Validation
- Fire Damper & Smoke Control Damper Inspections and Operational Checks
- RPZ Valve Testing (approved by SNIPEF)

Contact Us

Kilknowe Office 16 Barrmill Road Galston KA4 8HH

tel: 01563 821991 e-mail: <u>karen@handv.co.uk</u> web: <u>www.handv.co.uk</u>



Modern Building Services – Commissioning Plan

A SIMPLE TOOL THAT PROVIDES CLARITY TO COMMISSIONING PROJECTS

For those that have never used one (shame on you!) and those that are unfamiliar with a project specific commissioning plan it can be initially difficult to gauge how beneficial having a commissioning plan in place would be to the testing and commissioning of any project.

On the other hand, if you have had experience working on projects that had a detailed commissioning plan in place you will undoubtedly know and understand the importance of having one.



So What is a Commissioning Plan?

According to BSRIA's BG8/2009 "Model Commissioning Plan" in its simplest form a commissioning plan should:

- Provide general information about the project
- Identify the commissioning team members during each stage of the commissioning process
- Define the roles and responsibilities for each commissioning team member
- Create a schedule of commissioning activities for each stage of the commissioning process
- Establish documentation requirements associated with the commissioning process
- Establish communication and reporting procedures for the commissioning process

The Benefits of Having a Project Specific Commissioning Plan

Reflecting on projects I have worked on across the UK & overseas the most successful have benefited from having an accurate and updated commissioning plan.

The commissioning phase of any project is normally the most difficult by its very nature. Systems only near completion towards the end of construction phase and the commissioning phase of a project is generally shoe-horned into a few weeks/months preceding project practical completion or handover.



Testing and commissioning at the latter part of a project is a necessity to allow systems to be tested with advanced/final building envelope completed. This is also when construction teams are eager to get everyone out of zones/floors to close out areas and zones and this is when I have found that the commissioning plan can make a massive difference. The installation team managers at this stage know what the main systems are (as opposed to floor area only) and what is required from them to allow completion of each building service.

Construction teams know what commissioning activities are taking place – a small example is they understand why "commissioning tiles" are not installed for duration of commissioning (reminding of the cost of replacing ceiling tiles or downtime of removing commissioning access tiles usually helps).

The commissioning teams know what systems are to be commissioned, method statements are approved, they know who to report progress to and how to finalize system paperwork to allow systems to be fully witnessed.

Managers are aware of the process of what systems are being commissioned, where commissioning documentation is being kept & when system will be available for witnessing.

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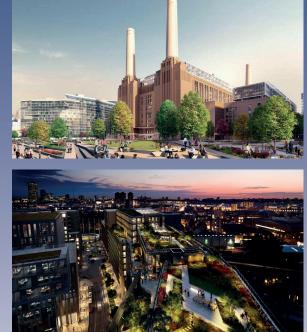
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Keith Barker - CSA Marketing Chairman, Tectonic Techniques





ELEBRATE YOUR ACHIEVEMENTS **CELEBRATE YOUR TEAM** CELEBRATE YOUR BUSINESS **CELEBRATE WITH US**

Recognising and Rewarding Commissioning Excellence

Following the huge success of past CSA Awards Ceremonies, 2023 will again see the sector come together in celebrating the wonderful achievements of commissioning businesses, large and small, on 5th October at The Tower Hotel, St Katherine's Way, London.

IAA

If you or your company have something to shout about, these awards provide the perfect platform to get your accomplishments noticed. Check out the categories opposite and see which ones you will be entering! Entry is easy, completely free of charge and you can submit as many nominations as you like. Just visit www.csa-awards.co.uk to complete an online entry form... and if selected as a Finalist, enjoy some fantastic publicity as we count down to the Gala Awards Ceremony.

CATEGORIES

- PROJECT OF THE YEAR
- PRODUCT/SERVICE INNOVATION OF THE YEAR
- COMMISSIONING PROVIDER OF THE YEAR
- COMMISSIONING MANAGER OF THE YEAR
- INVESTMENT IN TRAINING AWARD
- STUDENT OF THE YEAR
- COMMISSIONING ENGINEER OF THE YEAR
- LIFETIME CONTRIBUTION AWARD

EVENT CALENDAR

NOMINATIONS OPEN - 16th January 2023 NOMINATIONS CLOSE - 14th July 2023 JUDGING SESSION - Late August 2023 FINALISTS ANNOUNCED - 6th September 2023 WINNERS ANNOUNCED - 5th October 2023







Organised by Touchwave on behalf of



www.csa-<u>awards.co.uk</u>



MAKING BUILDINGS WORK

6. Commissioning during the design stage

COMMISSIONING SPECIALISTS ASSOCIATION

Introduction to Commissioning Management – 2-Day Training Course

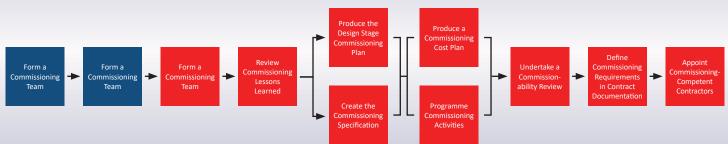
This world-leading training course about the commissioning process and its management is based on Commissioning Code M: Management, which was recently published by the Chartered Institution of Building Services Engineers (CIBSE) and the Commissioning Specialists' Association (CSA). People from both the client-side and project delivery-side of the built environment attend this highly interactive course, which provides delegates with ready-to-go tools that can improve both construction project delivery and building performance. This is evidenced by this type of feedback from companies whose people have attended the course:

Commissioning Code M has been an absolute game changer, we've adopted the whole documentation structure into our organisation. The feedback from everyone has been excellent. A superbly delivered course on an extremely important topic.

On successful completion of the course, each delegate will be awarded a CSA Introduction to Commissioning Management certificate. Grade 5 CSA members, who have the relevant path of development, would then also be able to apply for their Grade 6 accreditation. This agenda for this 2-day course is illustrated below:

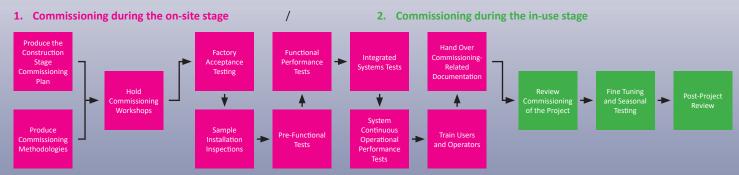
Day One

- 1. Project delivery in the 21st century built environment
- 2. Commissioning: what is it and why it is important
- 3. Commissioning on a construction project
- 4. Management of commissioning
- 5. Commissioning during the pre-design stage



/

Day Two



In-Person Course Dates 2023

Tuesday 21st & Wednesday 22nd March - Mill Hill House, Oxford (2 SPACES LEFT) Monday 19th & Tuesday 20th June - Mill Hill House, Oxford (4 SPACES LEFT) Tuesday 12th & Wednesday 13th September - Mill Hill House, Oxford (6 SPACES LEFT) Tuesday 7th & Wednesday 8th November - Mill Hill House, Oxford (12 SPACES LEFT)

Online Course Dates 2023

Wednesday 25th & Thursday 26th January - (FULLY BOOKED) Wednesday 24th & Thursday 25th May - (FULLY BOOKED) Wednesday 23rd & Thursday 24th August (3 SPACES LEFT) Wednesday 25th & Thursday 26th October (10 SPACES LEFT)

Course Pricing

This unique 2-day course is priced at £650.00 + VAT for CSA Members and £750.00 +VAT for non-members. For further information and to express interest in attending this course, please contact Kate McIntyre or Joanne Rowe at the CSA office on: +44 (0)1403 754 133 or by email at office@csa.org.uk. ESTABLISHED 50 YEARS 1968-2018

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