UK Council of Data Centre Operators



Communication:

European Code of Conduct for Data Centres

October 2015

The EU Code of Conduct for Data Centres (EU CoC) is a set of highly respected best practices intended to drive good energy management in the data centre sector. Initially developed by members of the British Computer Society (BCS), it was adopted by the Joint Research Council (JRC) of the European Commission. While the Code is widely adopted informally by the industry and is applied very successfully to minimise power consumption in data centres, formal participation via the registration process has been disappointing.

The UK Council of Data Centre Operators considered how to ensure that the EU CoC best practices are more formally recognised by the industry and by external stakeholders and continue to be deployed as an effective self-policing tool, driving good energy stewardship within the sector. The Council came to the following conclusions:

- The UK Council of Data Centre Operators takes the view that the technical content of the EU CoC (the
 best practices) is excellent, is regularly and competently updated by peer review and, if followed, will
 improve energy stewardship within the sector.
- The Council has very serious concerns regarding the administrative function of the Code, which is deficient in a number of material respects, including (but not limited to) unacceptable response and processing times, haphazard communications, lack of policing regarding data submission, an absence of any published data analysis and no structure for accountability.
- The dysfunctional administration of the Code is a severe constraint on the dissemination of the proven energy saving practices contained within the Best Practices document and a barrier to active participation in the scheme. Moreover these deficiencies are preventing the Code from being recognised by external stakeholders as an effective self-policing tool for the industry.
- Recent Commission initiatives have demonstrated this to be the case: ignorance of the existence and quality of the Code has led to suggestions that the sector needs new energy management tools and standards such as the proposed development of KPIs in 2014. The recent JRC initiative to implement BEMP (Best Environmental Management Practice) in data centres is another example.
- The Council takes exception to implications that the sector is not making adequate use of self-policing mechanisms when the administrative function provided by the Commission is itself a restriction on the effective dissemination of a leading edge tool developed by the industry for this purpose. This paradox is a point of extreme frustration for the European sector.
- The Council therefore supports the adoption of the technical content of the Code (the Code Best Practices) by CEN/CENELEC into a Technical Report (CLC/TR50600-99-1) to be incorporated into the EN 50600 series of standards. The Council believes that this formalisation is the natural evolution for a high quality industry tool and its adoption into other international standards provides evidence of this.
- The Council believes that this should be accompanied by a move away from emphasis on Registration and Participation for the reasons stated above and because the registration process adds no value and creates an artificial barrier to entry.
- Instead the Council takes the view that companies should be encouraged to put in place an audit process to ensure that best practices are being implemented appropriately. Examples include standards like CEN/CENELEC EN 50600 series, ISO 50001, ISO 14001, voluntary initiatives like EMAS, proprietary audit procedures like CEEDA or other approaches such as EED Article 8 reporting.
- Furthermore the Council recommends that procurement or procurement guidance documents require the adoption of relevant recommended practices, preferably accompanied by an audit process, rather than a requirement to be a Code Participant.

About the UK Council of Data Centre Operators

techUK's Data Centre Council comprises twenty individual members who represent the full spectrum of business interests and business models across the data centre sector. Members include wholesale and retail colocation providers, cloud and hosting operators and enterprise providers and range from multinationals to SMEs. Some members specialise in the provision of professional services to data centres such as lawyers, surveyors, investors and advisors, some manufacture the IT and communications hardware that occupy these facilities and others represent the data centre supply chain. The Council is a decision-making body providing strategic direction for all techUK's activity relating to data centres. Formal Terms of Reference provide governance for the group.

The Council was established in 2009 in conjunction with the British Computer Society (BCS). Its primary objective was to provide a representative voice for the sector in policy matters, particularly those relating to energy and carbon taxation. Over the last five years the Council has been responsible for delivering a number of significant outcomes for the UK data centre sector. These include negotiating a Climate Change Agreement for Data Centres, limiting the impact of the Carbon Reduction Commitment, building a certification framework to recognise professionalism in the sector, demonstrating the economic value of the sector to Treasury and BIS and demystifying data centres to policy makers across government. The UK has the largest data centre market in Europe by a significant margin and as a result the Council also takes a close interest in EU policy developments impacting the sector.

Comprising senior decision makers, the Council is the single most influential body representing data centres in the UK.

Current members are:

Andrew Jay (Chairman) CBRE

Rob Coupland (Vice Chairman)

Ian Bitterlin (Chair of Technical Committee)

Derek Allen

Global Switch

Tony Allen (alternate: Billy McHallum) Equinix

Mark Bailey Charles Russell Speechlys

Jack Bedell-Pearce4D-DCAllan Bosley (alternate: Pip Squire)ArkRobin BrownColt

Paul Cranfield (alternate: Patrick Coogan) Digital Realty

Peter Gibson Intel
Nicola Hayes Andrasta
Matt Lovell Pulsant
Gavin Murray Rackspace
John Oliver Barclays
Dave Smith DataCentred

Steve Strutt IBM

Mark Trevor Cushman and Wakefield

Mark Yearwood CenturyLink

Contacts: Emma Fryer, Associate Director, techUK

T: +44 1609 772 137 M: +44 7595 410 653 e: emma.fryer@techuk.org

For further information see: http://www.techuk.org/focus/programmes/data-centres/groups/data-centres-

<u>council</u>

About techUK

techUK represents the companies and technologies that are defining today the world that we will live in tomorrow. More than 850 companies are members of techUK. Collectively they employ approximately 700,000 people, about half of all tech sector jobs in the UK. They range from leading FTSE 100 companies to new innovative start-ups. The majority of our members are small and medium-sized businesses. www.techuk.org

Contextual notes relating to Communication from UK Council of Data Centre Operators on the EU Code of Conduct for Data Centres

NB: Please refer to the Council Communication (above) as our formal position statement on this topic

Background

The EU Code of Conduct for Data Centres (EU CoC) is a set of highly respected best practices intended to drive good energy management in the data centre sector. Initially developed by members of the British Computer Society (BCS), it was adopted by the Joint Research Council (JRC) of the European Commission. While the Code is widely adopted informally by the industry and is applied very successfully to minimise power consumption in data centres, formal participation via the registration process has been disappointing.

Recent Developments

In May 2015 it was agreed by Code administrators (JRC) and Code technical leads that the technical content of the Code would be adopted by CEN/CENELEC as a Technical Report (TR) from 2016. This document would however be available seamlessly via the JRC website.

The process to adopt Code best practices into a CENELEC TR is now well advanced and it will be available from around March 2016 as CLC/TR 50600-99-1 (Information technology - Facilities and infrastructures - Data centre - Energy management – Recommended practices). However, In October 2015, at the annual Code technical review meeting, JRC changed its view and asked to retain the CENELEC TR and the JRC Code as two separate documents. So for 2015 -16 there will be two separate sets of aligned best practices - although one written in a standards-based format integrated within other documents of the EN 50600 series.

Who or what is CEN/CENELEC?

CENELEC, the European Committee for Electrotechnical Standardization, develops voluntary standards and disseminates them through national standards bodies. The objective is to help facilitate trade between countries, create new markets, cut compliance costs and support the development of a single European market. CENELEC has already developed a range of standards for data centres, known as the EN 50600 series. These cover design standards (EN 50600 2-x), operational standards (EN 50600-3-x), and resource efficiency and management (EN 50600-4-x).

What is a TR?

A TR, or Technical Report, is a semi standard, a bit like a BSI PAS (Publicly Available Specification). Rather like the Code, it is essentially a toolkit of recommended practices. TRs can cover all sorts of things, from HR to security. This particular CLC/TR, 50600-99-1 is focused on energy management in data centres. TRs developed by CEN/CENELEC are available from national standards bodies in individual member states (BSI in the UK), for a modest cost. A TR is much more flexible than a formal standard and can be developed and approved far more quickly. This enables the TR to be updated with the same regularity as the EU Code of Conduct—i.e. annually. A formal standard (which would begin EN...) cannot; the process is just too slow. A TR was therefore the obvious choice.

What are the pros and cons of the CLC/TR?

- It may no longer be free (negotiations are currently underway with BSI). If chargeable it is likely to cost £75 £150 to download. Although there had been discussion regarding the possibility of making it free in other languages through a Commission grant, this opportunity has been lost due to the reversal of the JRC decision in October.
- Industry data will not be collected as part of this process (many observers point out that the JRC's
 approach to data collection was haphazard at best and the data that has been collected has never
 been used in any constructive way).

- Companies will not be required to register as participants (this is seen by many as an advantage because the registration process was so poorly administered that it became a barrier to entry)
- As a minimum, the CLC/TR will be translated into French and German. Other member states may choose to translate where language barriers are considered to prevent its dissemination.
- Adoption by a formal, recognised European Standards Organisation confers a higher level of authority on Code practices.
- An established international dissemination process will aid distribution and uptake.

What will not change?

 As with the Code, the CLC/TR is not in itself an audit process, but is suitable as a list of practices, processes and actions to audit against.

Why has this happened?

It's a long story......Many will take the view that adoption as a standard is just part of the natural evolution applicable to any good energy management tool, and indeed Code practices have already been adopted into a number of international standards. The difference is that the CENELEC TR may well replace the existing (JRC) route altogether, so Code practices will become CENELEC practices. When the Code of Conduct was originally handed to the JRC by the BCS as a market-ready tool, the intention was that data centre operators would register, would apply the best practices and would submit data annually that would be aggregated by the JRC into a collective industry dataset.

The scheme has not worked as planned: the registration process is clunky and inefficient, with companies frequently waiting months for a response. Since the Code is free to download, the vast majority have opted to adopt the best practices without participating formally since they can see no additional value from registering. Moreover no obvious use has been made of the data submitted. In fact it is clear that many formal participants do not submit data regularly and that data submission is neither policed nor enforced.

The industry view is that the technical content of the code, the best practices, are excellent, they are regularly peer reviewed by industry experts. However, there is significant frustration with the administration of the Code by the JRC which is widely viewed as inadequate. Industry is particularly concerned that the dysfunctional administration is acting as a barrier both to formal uptake of the code and to recognition of the Code by external stakeholders. Industry is not usually minded to replace something that is free with something that has to be paid for so this move should be indicative of the degree of frustration that is generally felt about the Code.

- For further information, notes and outcomes from the 2014 Code meetings in Brussels please contact: Emma Fryer: emma.fryer@techuk.org
- For further information on the UK Council of Data Centre Operators please visit: http://www.techuk.org/focus/programmes/data-centres/groups/data-centres-council