

Data Centre Trade Associations

Standards Authorities, Publications,

Industry Groups and Training Organisations



Trade Associations, Industry Groups and Standards Authorities

7x24 Exchange

<http://www.7x24exchange.org/aboutus.html>

7x24 Exchange aims to be the leading knowledge exchange for those who design, build, operate and maintain mission-critical enterprise information infrastructures, 7x24 Exchange's goal is to improve end-to-end reliability by promoting dialogue among these groups. US based.

Non inclusive – full membership only available to corporate members.

Contact: David Schirmacher (Chairman) davids@7x24exchange.org

Currently no UK presence. Commercial status uncertain but assumed to be for profit.

AFCOM

<http://www.afcom.com/about/>

AFCOM aims to support the educational and business development needs of data center management, executives and vendors around the globe. Claims to be “the leading association of data center and facilities management professionals”.

Owned by iNET Interactive (Also WHIR): <http://www.inetinteractive.com/communities/>

Contact: Jill Yaoz (President) jyaoz@afcom.com

Individual membership available with full suite of services.

US based with little or no UK or European presence. Commercial status uncertain but does not appear to claiming “Not for Profit”.

American Society of Heating, Refrigerating and Air Conditioning Engineers

ASHRAE (TC 9.9)

<http://www.ashrae.org/about-ashrae/>

ASHRAE is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality and sustainability within the industry.

Technical Committee 9.9 - Mission Critical Facilities, Technology Spaces and Electronic Equipment is concerned with the design, operations, maintenance, and efficient energy usage of modern data centers and technology spaces. This is the standard to which data centre designers and operators adhere for environmental parameters. Importantly this is also the standard against which IT manufacturers warrant their equipment.

<http://tc99.ashraetcs.org/>

Individual membership available with full suite of services.

US Based and heavily influenced by large US IT equipment manufacturers.

BCS Data Centre Specialist Group (DCSG)

<http://dcsbg.bcs.org/>

Special interest group within the British Computer Society (BCS), the Chartered Institute for IT.

<http://www.bcs.org/>

Responsible for CEEDA Data Centre Energy Efficiency Certification based on EU Code of Conduct criteria (Currently delivery arm is Data Centre Dynamics – see below).

Also behind Fixed to Variable Energy Ratio (FVER) data centre energy efficiency metric.

Individual membership is available with a full suite of services.

Mark Acton is a BCS DCSG Committee Member. Contact: Mark.Acton@BCS.org

Strong international presence. Not for profit Industry Association backed by formal governance and royal charter.

The British Institute of Facilities Management (BIFM)

<http://www.bifm.org.uk/bifm/home>

Focuses on Facilities Management which is crucial to successful data centre operations. BIFM is the professional body for facilities management (FM) in the UK. Founded in 1993, the Institute represents and promotes the interest of members and the wider FM community.

Individual membership available with full suite of services.

Not for profit Industry Association.

British Standards Institute (BSI)

<http://www.bsigroup.co.uk/About-BSI/>

Genuine standards body subject to formal governance, BSI are a national representative body of CENELEC, IEC, ISO and ISO/IEC.

Leading the development of the EN50600 series of standards (data centre facilities and infrastructures) in Technical Committee TCT/7. (CENELEC TC 215 WG3).

Contact: Rob Cardigan rob.cardigan@nexans.com

Currently also leading the development of the ISO/IEC 30134 series of standards (data centre resource efficiency KPIs) in Technical Committee IST/46.

Contact: Chris Francis CHRISF1@uk.ibm.com

Building and Construction Authority (BCA – IDA Singapore)

http://www.bca.gov.sg/greenmark/green_mark_criteria.html

http://www.bca.gov.sg/greenmark/others/GM_DC_v1.pdf

BCA Green Mark is a green building rating system to evaluate a building for its environmental impact and performance. It is endorsed and supported by the National Environment Agency. It provides a comprehensive framework for assessing the overall environmental performance of new and existing buildings to promote sustainable design, construction and operations practices in buildings. Includes:

BCA - IDA Green Mark for **New** Data Centres Version NDC/1.0

BCA - IDA Green Mark for **Existing** Data Centres Version NDC/1.0

Green Data Centre Standard - SS564 based on the published international standard ISO 50001 for Energy Management

<http://www.ida.gov.sg/Collaboration-and-Initiatives/Initiatives/Store/Green-Data-Centre-Standard>

Building Industry Consulting Service International (BICSI)

<https://www.bicsi.org/regions.aspx?l=2536>

BICSI is a professional association supporting the information technology systems (ITS) industry. US based with a strong European presence.

Contact: Andrew Stevens AStevens@cnet-training.com

Individual membership available with full suite of services.

Has published a very poorly adopted data centre "Standard", ANSI/BICSI 002-2011. Draft copy available.

Building Research Establishment (BRE)

Responsible for Building Research Establishment Environmental Assessment Method (BREEAM) Arguably the precursor to LEED, BREEAM now has a data centre specific class and is arguably more applicable internationally than LEED.

<http://www.breeam.org/>

Bundesverband Informationswirtschaft, Telekommunikation und neue Medien (BITKOM)

www.bitkom.org

BITKOM is the voice of the information technology, telecommunications and new media industry in Germany.

Non inclusive – full membership only available to corporate members.

Has a data centre reliability standard (Draft copy available).

The Chartered Institution of Building Services Engineers (CIBSE)

<http://www.cibse.org/>

CIBSE promotes the career of building services engineers by accrediting courses of study in further and higher education, by approving work based training programmes and providing routes to full professional Registration and Membership, including Chartered Engineer, Incorporated Engineer and Engineering Technician.

Individual membership available with full suite of services.

Not for profit Industry Association backed by formal governance and royal charter.

Data Centre Alliance (DCA)

<http://datacentrealliance.org/>

The DCA is an international Industry association based in the UK. The DCA's stated objective is not only to encourage collaboration between the 27 member states of the EU but also to widen participation to both new and growing data centre markets.

Originally an effort to develop commercial opportunities for paid consultancy, seeking to become an arbiter of other organisation's standards in order to achieve this.

Contact: Simon Campbell-Whyte simoncw@colofinder.co.uk

UK Based alliance with international connections.

Commercial organisation.

EU Code of Conduct for Data Centres / EU Joint Research Centre (JRC)

http://re.jrc.ec.europa.eu/energyefficiency/html/standby_initiative_data_centers.htm

Voluntary code of Data Centre efficiency best practices sponsored by EU Government JRC.

Contact: Paolo Bertholdi (EU Commission Leader) Paolo.Bertoldi@ec.europa.eu

Mark Acton is currently a contributing author and chair of the Best Practices committee.

EU Government sponsored body.

European Committee for Electrotechnical Standardization (CENELEC)

<http://www.cenelec.eu/>

<http://www.cenelec.eu/dyn/www/f?p=WEB:5:1236358059276397>

CENELEC is the European Committee for Electrotechnical Standardization and is responsible for standardization in the field of electro-technical engineering. CENELEC prepares voluntary standards, which help facilitate trade between countries, create new markets, cut compliance costs and support the development of a Single European Market.

Designated as a European Standards Organization by the European Commission, CENELEC is a non-profit technical organization set up under Belgian law. It was created in 1973 as a result of the merger of two previous European organizations: CENELCOM and CENEL.

CENELEC TC 215 WG3 (EN 50600 series), are responsible for the development of EN50600 series of standards (data centre facilities and infrastructures) via Technical Committee TCT/7 of BSI in the UK.

CENELEC are a member of the CEN / CENELEC / ETSI Coordination Group: Green Data Centres which operates to co-ordinate standardisation activity on resource management in relation to data centres.

The UK national position is provided by BSI.

European Data Centre Association (EUDCA)

<http://www.eudca.org/home>

The EUDCA will proactively generate ideas that influence debate at technical, environmental and political level. The data centre sector needs a body that can provide a coherent voice to both the media and the institutions that impact its future development.

Contact: Alex Rabbetts (Chairman) alex.rabbetts@migrationsolutions.com

Non inclusive – Full membership only available to corporate members.

Pan European organisation. Commercial status uncertain but assumed to be for profit.

European Telecommunications Standards Institute (ETSI)

<http://www.etsi.org/>

ETSI seeks to produce globally-applicable standards for Information and Communications Technologies (ICT), including fixed, mobile, radio, converged, broadcast and internet technologies. Officially recognized by the European Union as a European Standards Organization, ETSI is a not-for-profit organization with more than 700 ETSI member organizations drawn from 62 countries across 5 continents world-wide.

The telecoms based standards produced offer wider environmental parameters than would normally be accepted for IT equipment yet this is a standard that is referenced in relation to non telecoms equipment.

Two main Technical Committees act on data centre issues. TC EE (Environmental Engineering), TC ATTM (operational issues). ATTM also works in co-ordination with an ETSI Industry Specialist Group “Operational energy Efficiency for Users)” which comprises major IT user bodies. These groups produce documents concerning energy management of data centres. ETSI are a member of the CEN / CENELEC / ETSI Coordination Group: Green Data Centres (see CENELEC).

Green Data Centre Alliance

<http://greendca.org/>

The Green Data Center Alliance was started as a linkedin.com group in May of 2008. Our intent was to see what vendors, consultants but most importantly owner/operators were doing with regards to energy consumption and cost control in the data center. Daniel Skutelsky and Derek Schwartz leveraged Information Technology Infrastructure Library (ITIL) and Service Management principals into our solutions portfolio and became students of this philosophy. Five years ago Derek left IT for the world of data center design, build and relocation and Daniel continued on in his role, becoming an expert in ITSM and ITIL, and Six Sigma methodologies. We have since reunited and brought these two very different and distinct worlds together. In the last several months we have discovered that IT Service Management and ITIL principals are easily applied to design, build, and relocation projects and also create the added value of better operational methodologies which will extend the life of existing and new centers. Individual membership is available with a full suite of services. US Only.

The Green Grid

<http://www.thegreengrid.org/home>

Industry association aimed at promoting energy efficiency within data centres. The Green Grid is a non-profit, open industry consortium of end-users, policy-makers, technology providers, facility architects, and utility companies collaborating to improve the resource efficiency of data centres and business computing ecosystems.

US based with a strong European presence.

Responsible for the development of PUE / DCiE and DC Maturity Model.

Individual membership available with full suite of services.

Has European base but driven from US. Not for profit.

Institute of Engineering and Technology (IET)

<http://www.theiet.org/>

Individual membership available with full suite of services.

Developing an increasing interest in IT and Data Centres in particular.

Not for profit Industry Association backed by formal governance and royal charter.

The Institution of Mechanical Engineers (IMechE)

<http://www.imeche.org/Home>

Individual membership available with full suite of services.

Developing an increasing interest in Data Centres.

Not for profit Industry Association backed by royal charter.

International Electrotechnical Commission (IEC)

<http://www.iec.ch/>

The International Electrotechnical Commission is the leading global organization that publishes consensus-based International Standards and manages conformity assessment systems for electric and electronic products, systems and services, collectively known as electrotechnology.

The International Electrotechnical Commission (IEC) is a not-for-profit, non-governmental organization, founded in 1906.

The IEC's members are National Committees, and they appoint experts and delegates coming from industry, government bodies, associations and academia to participate in the technical and conformity assessment work of the IEC.

IEC publications serve as a basis for national standardization and as references when drafting international tenders and contracts.

JTC1 (Joint Technical Committee), is ISO and IEC combined so SC39 is ISO/IEC JTC1 - SC39.

International Standards Institute (ISO)

<http://www.iso.org/iso/home.html>

The international standards body subject to formal governance.

The UK national position is provided by BSI.

ISO/IEC JTC1 SC39 WG1 are responsible for the development of the ISO/IEC 30134 series of standards (data centre resource efficiency KPIs) via Technical Committee IST/46 of BSI).

Development of PUE / DCiE from The Green Grid now falls under ISO/IEC JTC1 SC39.

JTC1 (Joint Technical Committee), is ISO and IEC combined so SC39 is ISO/IEC JTC1 - SC39.

Japan Data Center Council

<http://www.jdcc.or.jp/english/index.html>

The Japan Data Center Council aims to “pursue what data centers should be to support the foundation of an IT oriented nation by forming an organization in which data center businesses and major data center related businesses participate and cooperate with each other vertically and horizontally to resolve the above-mentioned issue”.

Japan Electronics and Information Technology Industries Association (JEITA)

<http://www.jeita.or.jp/english/>

The objective of the Japan Electronics and Information Technology Industries Association (JEITA) is to promote the healthy manufacturing, international trade and consumption of electronics products and components in order to contribute to the overall development of the electronics and information technology (IT) industries, and thereby further Japan's economic development and cultural prosperity.

Japan Green IT Promotion Council (GIPC)

<http://home.jeita.or.jp/greenit-pc/e/about/>

The Green IT Promotion Council seeks to utilize the strength of Japan's manufacturing, environment and energy-saving technological capacity to transform all aspects of the Japanese economy, society and lifestyles, while also working toward further Energy-saving of and by IT devices. Proponents of the Data centre Performance Per Energy (DPPE) metric.

Japan Information Technology Services Industry Association (JISA)

<http://www.jisa.or.jp/Portals/0/resource/e/profile/index.html>

Korea Information Technology Service Industry Association (ITSA)

<http://www.itsa.or.kr/eng/eng2.asp>

Green Data Center Certification Program.

National Australian Built Environmental Rating System (NABERS)

<http://www.nabers.gov.au/public/WebPages/ContentStandard.aspx?module=10&template=3&include=DataCtr.htm>

NABERS is a national rating system that measures the environmental performance of Australian buildings, tenancies and homes. Put simply, NABERS measures the energy efficiency, water usage, waste management and indoor environment quality of a building or tenancy and its impact on the environment.

Similar to BREEAM in some respects and has a DATA CENTRE “standard” in development

Network Equipment-Building System (NEBS)

NEBS was developed by Bell Labs in the 1970s to standardise equipment that would be installed in a central office and remains the most common set of safety, spatial and environmental design guidelines applied to telecommunications equipment in the United States. It is an industry requirement, but not a legal requirement. NEBS describes the environment of a typical United States Central Office as defined for a Regional Bell Operating Company and is now widely adopted as a more general standard. Broadly equates to ETSI in Europe and defines broadly similar environmental operating parameters for equipment.

Singapore Information Technology Standards Committee (ITSC)

http://www.itsc.org.sg/index.php?option=com_content&view=article&id=52&Itemid=63

<http://www.singaporestandardseshop.sg/data/ECopyFileStore/130522165441SS%20564-1-2013%20Preview.pdf>

SS 564: Part 1: 2013

Singapore Standard for Green Data Centres -- Part 1: Energy and Environmental Management Systems. Aims to align the requirements of SS 564 with the published SS ISO 50001 : 2011 on energy management. Specifies guidelines for organisations to establish the policies, systems and processes necessary to improve the energy efficiency of their data centres and lessen their impact on the environment. Comprises three key components:

- i) A certifiable, management system which provides data centres with a recognised framework as well as a logical and consistent methodology to achieve energy efficiency and continuous improvement.
- ii) Recommended metrics for data centres to track their performance, and identify potential areas for improvement.
- iii) A set of best practices which data centres can adopt, depending on their needs and requirements.

STANDARDS@fia

The Fibreoptic Industry Association has established its technology-agnostic standards body as a series of Working Groups to support the work of BSI Technical Committee TCT/7/ WG TCIF/3 provides expert contribution as UK input to the CENELEC CLC TC215.

The FIA is fee paying member-based but non-profit organization. However STANDARDS@fia is a semi-autonomous body within which the Working Group membership is open and free of charge, subject to the rules of the Working Group.

<http://www.fia-online.co.uk/eservice-standards.htm>

Contact: Mike Gilmore standards@fia-online.co.uk

TechUK (Formerly Intellect)

<http://www.techuk.org/focus/programmes/cloud-infrastructure-data-centres>

Seeks to represent the views of industry to government and regulators and also provide opportunities for government and regulators to interact with industry on key policy and market issues. TechUK do not seek to be experts or to change industry behaviour, rather they seek to clarify and where appropriate influence policy calling on industry expertise as appropriate. Membership is expensive however expertise is sought and utilised beyond the membership base. TechUK are particularly involved in energy efficiency and climate change elements of the data centre industry, particularly the CCA / CRC debate.

Non inclusive – full membership only available to corporate members.

Contact: Emma Fryer emma.fryer@intellectuk.org

Close co-operation with DigitalEurope: <http://www.digitaleurope.org/>

Contact: Sylvie Feindt Sylvie.Feindt@digitaleurope.org

Commercial organisation.

Telecommunications Industry Association (TIA)

<http://www.tiaonline.org/about>

The Telecommunications Industry Association (TIA) claims to be the leading trade association representing the global information and communications technology (ICT) industry through Standards development, Policy initiatives, business opportunities, market intelligence and networking events. Specifically TIA-942 - [Telecommunications Infrastructure Standards for Data Centers](#)

Contact: Jonathan Jew jew@j-and-m.com

US Based commercial organization with no European presence. “Standard” widely referenced but cannot be implemented in many locations outside US due to inconsistency with local regulations.

It is worth noting that TIA themselves do not offer certifications nor do TIA certify others to offer certification. Some institutions do offer unofficial certification on the TIA-942 documentation but this is not subject to any form of governance.

Non inclusive – full membership only available to corporate members.

Commercial organisation.

The German Sustainable Building Council (DGNB – Deutsche Gesellschaft für Nachhaltiges Bauen e.V.)

<http://www.dgnb.de/dgnb-ev/en/>

Analogous to USGBC and BRE. Germany only.

Uptime Institute

<http://uptimeinstitute.com/about-us>

The Uptime Institute claims to offer unbiased, third-party data centre research, education, and consulting focused on improving data centre performance and efficiency through collaboration and innovation.

Owner of Tier Topology and Operational Sustainability Standards – Used industry wide but rarely based on official certification.

Owned by 451 Group: <https://451research.com/>

Non inclusive - Full membership only available to corporate members.

Contact: Julian Kudritzki jkudritzki@uptimeinstitute.com

Used to claim not for profit but now a fully commercial US based organisation.

US Green Buildings Council (USGBC)

<http://new.usgbc.org/leed>

Responsible for LEED (Leadership in Energy and Environmental Design). LEED is often applied to data centres but as there is no specific data centre class the criteria used to evaluate the environmental impact of a data centre is based on elements that are not valid in data centre design an operation such as associated office space. Not a useful data centre standard but often used for marketing purposes.

European Data Centre Event Organisations

Broadgroup (Datacentres.Com) including Datacentres Europe

Multiple data centre events globally plus consulting and training.

<http://www.broad-group.com/>

<http://www.datacentres.com/>

UK Based.

Contact: Philip Low philip.low@broad-group.com

DataCentres Ireland

Irish Data Centre event in Dublin run by Stepex <http://www.stepex.com/>

<http://www.datacentres-ireland.com/>

Contact: Hugh Robinson hughrobinson@stepex.com

Data Centre Dynamics - DCD

Multiple data centre events globally plus consulting and training.

<http://www.datacenterdynamics.com/about-us>

UK Based.

Contact: Dan Scarborough dan.scarbrough@datacenterdynamics.com and

George Rocket g.rockett@datacenterdynamics.com

Data Centre World

<http://www.datacentreworld.com/>

Now owned by CloserStill Media <http://www.closerstillmedia.com/>

Free to attend event in London and Asia

Uptime Institute (Symposium)

<http://symposium.uptimeinstitute.com/>

Owned by 451 Group: <https://451research.com/>

US Only.

UK Based Data Centre Training Organisations

Capitoline

<http://www.capitoline.co.uk/DataCentreTrainingCoursesandSeminarEvents.aspx>

Data Centre courses delivered by Chartered Engineers. Courses recognised and endorsed by external institutions.

Contact: Matt Flowerday mflowerday@capitoline.org

CNet Training

<http://www.cnet-training.com/the-global-data-centre-network-infrastructure-education-framework/>

Offer a range of data centre specific courses that have been developed in house and are now offered internationally. The course framework builds towards a set of structured certifications. CNet clearly differentiate qualifications and certifications (A qualification is awarded for life and certification requires a renewal). All courses have been awarded qualifications by nationally recognised awarding bodies. Certifications offered are awarded on the basis that a qualification has been passed.

Courses recognised and endorsed by external institutions (Edexcel).

Contact: Andrew Stevens AStevens@cnet-training.com

Data Centre Dynamics / DCProfessional

<http://dc-professional.com/>

A subsidiary of Data Centre Dynamics offers a range of data centre specific courses delivered internationally. A framework of certifications and career development follow very similar lines to those established by CNet. Courses recognised and endorsed by external institutions.

Data Centre Specific Publications

Data Centre Solutions (UK) - <http://dcseurope.info/>

Data Centre Management (UK) - <http://www.datacentremangement.com/>
Turret Group Ltd – UK based.

Data Centre News (UK) - <http://www.datacentrenews.co.uk/>
Terrington Media

Data Center Knowledge - <http://www.datacenterknowledge.com/>

Data Center Journal - <http://www.datacenterjournal.com/>

Mission Critical Magazine - <http://www.missioncriticalmagazine.com/>

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