



## Tiers for Fears

By Executive Director, Simon Campbell-Whyte

Prior to the public launch of the DCA several meetings were held with the founding members to determine its core values and objectives. One of the overriding and recurring themes were independence, transparency, clarity and consistency of tiers. A poll run on a recent DCA webinar indicated 71% in favour a re-vamping the current tier system. I can certainly see why, I can point to many examples of working with customers and data centre hosting providers that illustrate how this view persists; I remember one example; one day there was a data centre that was advertised as a tier 4 located in the UK, along came a UK based customer and a 6 month courtship ensued and flourished, until a marriage of provider and happy customer looked inevitable, just the ceremony and chinking of glasses in the pub remained. But unfortunately the customer had a secret, a strict parent that was based in the USA that had not met the data centre its sibling had chosen. Soon a meeting was duly arranged with the data centre and one of the US based parent's consultants flew over, but unfortunately the meeting did not go well,

conflicts of opinion persisted which resulted in the data centre provider nearly "sticking one on" the US parent's consultant when he said he was only tier 2 - the resulting marriage was put off forever.

Sad tales like this are pretty common in the colocation world, and it is no wonder, we need change. Customers I speak to want reassurance of a data centre's operational professionalism, an Uptime Institute survey showed 75% of all data centre failures are due to issues in this area. Energy efficiency is often next, as this has a direct relationship to cost.

Both these things need looking at on a regular basis and there is no point at all in basing a certification on a design or simulation model. The DCA certification will be independent, clear, transparent and will deliver consistency. It will also be affordable. By the time you read this it will be January and I hope to be able to share more details in the near future of the programme, in the meantime may I wish all the very best to you and yours for 2012!

## DCA Event Round up

By Louise Fairley DCA PR Manager



It has been an extremely busy conference season this year for the DCA. November saw the launch of the DCA on mainland Europe at Powering the Cloud -The Congress Frankfurt, the event over two days saw much interest and support for the DCA, which resulted in many new members from Germany and the Netherlands. Later in the month the DCA showcased over two days at the Gartner

Data Centre & IT Operations Summit 2011 in Westminster, London. At the same time the DCA held a Data Centre Master Class for the public sector at The GovToday Carbon Reduction 2011 at the Brewery, London. December saw a speech by DCA President Steven Norris at Data Center Dynamics at London's Excel. On the 5th and 6th December DCA Vice-Chairman Prof Dennis chaired the two day Data Centre Dialogue 2 on behalf of the DCA at Old Windsor.

## Dr Jon Summers from the University of Leeds, reports on the first set of DCA Webinars and Data Centre Question Time



The first of a monthly series of Data Centre Alliance webinars kicked off on 6th December with three interesting talks. The format is a morning consisting of three presentations followed by a lunchtime panel session inspired by the BBC Question Time TV programme.

The first of the presentation sessions was from David Cameron of Operational Intelligence which lifted the lid on the real risk element within data centres with a talk entitled Data Centres - The Human Element.

Next, Phil Bindley, CEO of Blue Chip talked about how Blue Chip designed and built their low PUE facility in Bedford. Alan Fisher of Dycem finished the presentations by looking at the threat posed from dust contamination and using polymeric material to combat this.

The Question Time session was hosted by Dr Jon Summers of University of Leeds Who put audience questions to a panel of experts comprising Dr Shaun Smith of CS Technology, Lee Funnel of The Siemon Company and Dr Ian Bitterlin of Ark Continuity, the ensuing debate was thought provoking and informative.

You can view recordings of all the sessions at [www.datacentrealliance.org/webinars](http://www.datacentrealliance.org/webinars)

The line up for the next webinar on January 10th includes some fascinating talks including technology that will revolutionise the design of data centres from 3M, more on the issue of anti-contamination from PROtech and an essential insight into PUE from Dirk-Achim Tellbach of Wusys. The Question Time session will be hosted this month by Professor Harvey Thompson.

# Centres of Energy Excellence?

By Dr. Shaun Smith, Technical Director, DCA & Principle Consultant  
at CS Technology



In the media there is usually some item relating to Global Warming, Climate Change or the Energy Crisis. It's a huge issue and I think it is likely that historians will look back on this period and label it the "Green Period" or the "Energy Era". Whatever the debates, and whatever the crisis, one thing is certain, the way in which we use energy from here on in will be forever changing, and the clearest message today is that "We cannot continue to use or waste energy as frivolously as we have, so we have to take action, now". Thankfully within the mission critical industry, some are doing just that. One good example of this is Facebook's new Data Centre in Oregon, USA that is already a year old. Free air cooling, purpose built low energy servers and swapping UPS systems for DC power racks are just a few of the key energy efficiency features they have deployed. Yes this may not be the route that an investment bank may take, but it is fit-for-purpose for Facebook, and they are planning increasing the logical resilience to counterbalance the physical resilience some Data Centres are centred on.

Data Centres have not escaped the watchful eye of the statisticians as we see figures confirming that this industry is on a par with the aviation industry for energy use and therefore Carbon Footprint. It is reported that Data Centres consume approximately 3% of the world's electricity production, that's 345 Million MWh per year, or £35 Billion each year based on the UK's current average tariff, and finally the cost to the planet is 183 Million Tonnes of CO2 per year. It is no wonder that as we are amidst a digital explosion that many feel we are only seeing the tip of the iceberg with respect to the huge potential the "Digital Era" has in store. This is not however all doom and gloom! This should be seen as an opportunity, and a vision of the huge playing field of energy savings in front of us and how we can develop our industry moving forward. In essence the digital boom should help us become much smarter with energy management and operational excellence, especially within electrical systems across all technologies

including power distribution, uninterruptable power supplies (UPS), battery charging, HVAC control (Cooling), backup generation, ICT power usage, and so on.

We all know that a Data Centre has one purpose, which is to meet the needs of the business, whatever that business function is, energy efficiency will always take second place and why? Because there's no place in the world for a facility that makes the papers for being "green" but is not fit for its purpose. However, there is no doubt that every Data Centre, whatever the size and function should be as energy efficient as possible within the boundaries of the business requirement, this is "Energy Efficient Enablement". I see Data Centres that are over engineered, poorly operated, and even today facilities that are being built missing some major opportunities for being energy smart. Many Data Centres are opting for free cooling systems where the ambient temperature is used for cooling and a shift away from refrigerant based cooling is evident. There still remains however a need for refrigerant based cooling as a backup where the resilience and business need demands it. Therefore we are seeing sophisticated hybrid cooling systems that are primarily designed for efficiency and low energy but have integrated conventional cooling technologies for redundancy and resilience. This in turn has required a greater need for smarter control.

Additionally the development of passive and ultra-efficient UPS systems, for example the compressed air driven technology is making its mark in the industry as simple alternative approaches to providing continuous power. Again it requires a greater level of control not just with the UPS system, but how that fits into the operation of the whole facility. We must embrace and help develop new and smarter ways of integrating alternative but highly efficient technologies into mission critical environments, whilst understanding and leading the way with energy management and power control within these facilities. A smarter energy approach can only lead to better business.

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