

April, May and June have been consumed by the usual plethora of issues, spiced up by a few new worries for operators and with the General Election and associated Purdah adding a Stop-Start element to our policy dialogue. Brexit is not going away any time soon, we are still wrestling with generator emissions regulations of one kind and another, we are bracing ourselves for the Commission's proposals on Green Public Procurement for data centres, and are now investigating a potential compliance issue presented by that bundle of regulatory joy, the Heat Networks (Metering and Billing) regulations. Never a dull moment! On a more positive note we are promoting the sector as a career destination of choice, showcasing individual success stories and supporting the development of a bespoke Apprenticeship Standard for data centre technicians. We've produced the usual array of briefings, blogs, articles and guidance and are working hard to get our thought leadership pieces ready for publication in September, which will explain why the UK is such a great location for data centres, why data centres are such amazing, wonderful things and why we should pay less for energy. No surprises there! We also plan to report on how the sector performed against its second milestone in the Climate Change Agreement.

We've arranged this update by topic, as follows:

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Energy

Energy Costs: we continue to be very worried about the impact of energy costs on the competitiveness of the UK sector and how the projected rise in non-commodity costs will affect operators from the end of 2017. We produced a [communication on the impact of energy costs](#) on competitiveness and ran a [Risk Radar session](#) on cost escalation. [Agenda, briefing notes and slides](#) are available. Following Q1 meetings with MEUC and ETG and our inputs to [BEIS](#) and [OfGem](#) we contributed to techUK's input on the government's [Industrial Strategy](#) where we stressed the impact of energy costs on competitiveness. The same points were made in our [techUK Manifesto](#). On the broader energy front techUK has provided input on the role of technology in delivering the UK's emissions reduction plan, which revisited and updated arguments we made back in 2008 with [High Tech Low Carbon](#) and our [directory of case studies](#).

Energy use: Members expressed concern about erroneous and misleading claims about sector energy use being made by the press and by people who should know better. Building on our work last year where we explained why it is difficult to aggregate data centre energy consumption robustly we are working on a simple document that sets out the facts and dispels some of the myths. We have also had to make further use of our [Communication](#) that explained the difference between power provisioning and energy consumption and our [Donald Rumsfeld](#) piece. Finally we are working with the Government's Green Delivery Unit and other stakeholders to provide more transparency to customers on the carbon impacts of their outsourced data centre and cloud services.

Climate Change Agreement: Target Period Two results: We were informed, to our relief, that the sector has successfully reached its energy efficiency milestone and met its Period Two Target. We will be reporting on this formally in Q3. This will be our third CCA report.

Environmental Standards and performance metrics: As many will know, the best practices from the EU Code of Conduct for Data Centres have been adopted by CEN/CENELEC as a technical report. We produced a [Communication explaining the implications of this development](#). We have also drafted a note on [environmental performance metrics](#) for data centres and invite review. This sets out what a good metric should do and explains why most metrics cannot be used to compare sites with one another. We are also developing a simplified map of environmental standards relevant to data centres. Final versions should be ready in Q3.

DSR (Demand Side Response): The move to a smart, decarbonised energy supply with a higher proportion of renewable generation will require flexible generation and demand side response is likely to form an increasingly important part of load balancing. Data centres could play a useful role here but regulatory constraints are likely to prevent this. We wrote a [Council Communication](#) back in Q1 explaining the issues and are still working with the Environment Agency, DEFRA and National Grid to resolve this paradox. We should have something to report after a meeting with DEFRA on 12th July.

Compliance

Heat Networks (Metering and Billing) Regulations: This is a potential compliance issue that we are exploring. The purpose of this legislation is to address perverse incentives that discourage tenants from taking energy efficiency measures because they will not benefit from the savings. So companies providing heat or, more relevantly, cooling, to multiple customers or end users must be able to meter that provision and bill it accurately. Data centres providing chilled water cooling, district or shared heating could be captured under certain circumstances. We started work with BEIS and operators to establish whether any sites are in scope and how the legislation might affect future design and operation. We issued a [provisional briefing note](#) and arranged a workshop and Q&A with BEIS for 19th July.

Generator Woes: IED/EPR (Industrial Emissions Directive/Environmental Permitting Regs): Generator permitting under IED/EPR is causing problems for larger operators (with standby capacity >15MW): the process is costly and cumbersome despite the fact that the plant is rarely used. We invited the Environment Agency for a closed workshop with affected operators on Friday 5th May and this provided useful clarity on what evidence the Regulator needed and (even better!) what actions were not deemed necessary. Follow up activity includes data gathering on outages, on power supply to data centre clusters and putting together some briefing materials. Our notes on [Emergency Generation in Data Centres](#) came in handy here. It will perhaps come as no surprise that we are starting to look more keenly at long term alternatives to diesel standby.

More Generator Woes: MCPD: The Medium Combustion Plant Directive is going through transposition. It requires generators to meet minimum emission level values (ELVs) and be registered. After our intervention, DEFRA seem minded to retain concessions for standby plant. Further regulations are being developed to address the air quality impacts of generator farms and again we have worked hard to seek exemptions for data centre operators who

would otherwise be caught in the crossfire. Following our [response to government](#) we contributed to a stakeholder workshop on 4th April and have been invited back for more discussions in July. So far it has been a productive dialogue. DEFRA guidance should be out at the end of 2017 with the requirements becoming law at the end of 2018.

Even more generator woes - EU ETS (EU Emissions Trading Scheme): Whilst the Government considers whether we remain in EUETS or not, we continued to iron out ETS related issues for members who found themselves caught, despite emitting negligible Scope 1. We've helped operators develop arguments to mitigate fines, linked allowance buyers and sellers and raised awareness of compliance obligations within the industry.

Policy Developments

Brexit: Brexit continues to dominate our thoughts and techUK has further strengthened its policy team (who deal with sector-wide priorities) so we've recently welcomed Giles Derrington who leads on [Brexit](#) and Simon Spier who leads on [Trade](#). Tom Morrison-Bell continues to lead our generic public policy activity. On a data centre-specific level, the update to our [Silver Linings report](#) on the implications of Brexit for the UK data centre sector had to take a back seat during the election but should be ready shortly. It will be another interim position simply because of the speed at which things (including negotiating priorities!) are changing. Meanwhile we covered some of the implications regarding data flows in a [video interview](#) with Data Economy magazine.

Green Public Procurement for Data Centres: European Commission proposals to develop green public procurement criteria were met with anxiety: partly due to poor "GPP previous" (a few years ago the criteria for printers were so onerous that not a single device could meet them) and the low level of understanding of existing metrics and standards applicable to data centres. Fortunately the Commission's technical consultants are familiar with the data centre environment and they met the Data Centres Council on 27th April to set out the direction of travel for the project. We also had a very constructive meeting with the lead consultants and representatives from the EURECA project to exchange information on 16th May. While Commission proposals are being developed we are not twiddling our thumbs. We are working on explanatory material on existing data centre standards and [performance metrics](#) (see standards above) to manage expectations. On another procurement related note we have had a really interesting dialogue with the US Government exploring the different models that have been deployed for consolidating and modernising public sector data centre estate.

Lot9: This issue has been rumbling on for some time and was covered in our last quarterly update. It is part of the EcoDesign Directive, which aims to improve energy efficiency of devices at design stage by regulating out the poorest performers. Lot 9 relates to computer servers. We have been engaged with other members of the European sector to demonstrate that metrics developed by industry are far more reliable than those proposed by the Commission in identifying efficient devices, and that no metric is perfect. Industry experts worked on a huge dossier of evidence and presented the findings to the Commission and the technical consultants on Thursday 29th June. We await the official response. If you need context on this have a look at our [briefing to BEIS](#) and our [notes on ASHRAE](#).

Resilience to severe weather (Climate Change Adaptation Reporting): Having submitted our [report on the sector's readiness for climate change risks](#) to DEFRA and being grilled by the Climate Change Committee, we received feedback on the strengths and weaknesses of our submission: Apparently we demonstrated a very good understanding of risks but could have considered longer term issues and international interdependencies. In the meantime we have been busy defining a list of [sector level actions](#) that we will be implementing before the next Adaptation Reporting period and we plan to roll these out over the next 18 months.

Skills

The [professionalism steering group](#)'s remit is to seek ways to address our technical skills shortage, raise the level of professional registration and improve recognition of existing skills within the sector. We held a very productive meeting with IET (Institution for Engineering and Technology) on 29th March to set out plans to upgrade professional

representation for the sector. While we wait for a formal response from IET we have not been idle. The group is supporting the development of a bespoke Apprenticeship Standard for Data Centre Technician, is identifying the best outreach routes to potential employees, is explaining why the sector is a career destination of choice and is helping to streamline the route to professional registration for technical staff already working in the industry. Outputs this quarter include an [explanatory briefing on Trailblazer Apprenticeships](#), and [Oh my God, I forgot to Study Maths](#). We are also developing a note explaining why the sector should be a career destination of choice, currently in draft: [Why work in a data centre?](#) The group has also started to develop a directory of industry role models.

Platforms

We attended [Datacloud Europe](#) in Monaco on June 6,7, and 8th where we chaired a session on GDPR and provided an introductory commentary on the key issues for data centre operators. We were delighted to be judging the [DataCloud Awards](#) again this year. We also took our regular slot providing a policy update at the Data Centres Interest Group on 4th May and we spoke at the NoordGroup Tech Infrastructure Forum on 22nd May on a similar theme. Press coverage included a [video interview](#) in Data Economy on the implications of Brexit for data centres and a longer article in the Journal of the Institute of Telecommunications Professionals (ITP) exploring the sector's readiness for climate change risks. While the Journal is not available without subscription a copy of the text article will be available shortly. We are also providing an insight call for the ITP in August. In June we also enjoyed the honour of being included in the [top 50 of EMEA influencers](#) in the sector by Data Economy magazine.

Summary of Q2 publications and other outputs

- [Communication on the impact of energy costs](#) on competitiveness
- [Risk Radar](#) session [Briefing notes and slides](#)
- [Communication](#) explaining the difference between power provisioning and energy use
- Technical committee briefing on [Emergency Generation in Data Centres](#) (context for EPR/IED dialogue)
- MCPD: [response to DEFRA](#) (submitted Q1 but provides context for ongoing discussions)
- [Provisional briefing](#) on implications of Heat Networks Regulation on data centres
- Climate change adaptation: [proposed actions](#) following our [report on sector readiness for climate change risks](#)
- [Comment for our session at Datacloud](#): The Brave New World of GDPR
- [Communication explaining the adoption of the EU CoC as a CENELEC TR](#).
- [Explanatory briefing on Trailblazer Apprenticeships](#)
- Briefing on career pathways in data centres: [Oh my God, I forgot to Study Maths](#)

Governance

We held the second and third [Data Centres Council](#) meetings of 2017 on 27th April and 20th June to review priorities and confirm the direction of travel for the programme. Council ToR, member bios, application criteria and formal Communications are available from the [Council pages of our website](#). Notes and papers are available for all Council meetings on request.

Further information

See also our [2016 overview](#) for a digest of last year's activity and [2017 Q1](#) for the previous quarter.

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