techUK

Climate change adaptation and resilience: Core Digital Infrastructure (data centres)

Summary of proposed actions against identified sector weaknesses

Problem	Solution	Proposed activity	Progress/Outcome
Poor conceptual understanding of climate change adaptation	Raise awareness of climate change risks within the industry and provide clear guidance to help operators differentiate climate change mitigation from climate change adaptation.	Follow-up sector briefing on addressing climate change risks (one sector briefing session already held in conjunction with the Environment Agency)	Risk Radar briefing workshop held in Q4 2017 Adaptation now incorporated in our regular policy briefings and included as a business risk on our risk radar.
Low level of awareness of relevant information sources	Provide further guidance to operators on the information sources they should be accessing and how they should be using them. Alert the sector to relevant standards.	Follow-on sector briefing session. Provide relevant links and references online. Include guidance in Climate Change Adaptation for Tiny Tots	Publication: "Climate Change Adaptation for Tiny Tots / Data Centre Operators: Things You Need to Know" scheduled for Q1 2020
Lack of evidence base needed to direct future initiatives	Build the evidence base to inform future action: monitor any publicly reported incidents and identify the lessons that can be learned from them for wider application within the sector.	New initiative to report failures has been launched by industry stakeholders: DCIRN (Data Centre Incident Reporting Network) has been initiated and will provide a systematic register of failures and root causes. Climate change or weather related incidents can be identified.	DCIRN established but still at early stage so we will take a view in 2020.
Non systematic approach to re-examining flood risk (flood zones)/ Reactive rather than proactive approach	Develop simple recommendations for operators on reviewing flood risk proactively, on a regular basis, rather than at point of site selection or in response to a bid, insurance request or incident.	Request made to the standards bodies responsible for the most relevant operational standards (BICSI and CENELEC) to add requirement for regular flood risk review to operational standard.	BICSI agreed in table proposal and support in principle informally. CENELEC have already discussed and proposal on livelist for inclusion in the next iteration of EN 50600-3-1
Difficulty in identifying sub-sector interdependencies due to infrastructure complexity.	Build closer relationships with stakeholders: insurers, academia, the supply chain and other infrastructure providers	Engage formally with EC-RRG (Electronic Communications Resilience and Response Group)	Ongoing and productive dialogue with EC-RRG
External interdependencies, especially SPOFS and pinch points in physical infrastructure	Lead an industry activity to review the reasons why SPOFs are frequently difficult to identify on a systematic basis, and explore the scope for improving our understanding and awareness of SPOFs in our digital infrastructure.	Core activity not yet defined.	
Regulatory pressures.	Initiate dialogue with relevant regulators to highlight areas in which regulatory requirements could hamper adaptation and resilience.	These apply primarily to comms. There are some potential regulatory pressures on generator activity that might affect reliability but productive dialogue with the EA and DEFRA is addressing this.	Continue to report regulatory pressures that may compromise climate change resilience.