

COVID-19 DATA CENTRE OPERATIONS: PROTOCOLS FOR THE NEW NORMAL

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DATA CENTRE GUIDANCE

INTRODUCTION

Now more than ever, data centres are central to the functioning of our economy and society as a whole. From remote working and distance learning to medical care and business transactions, data centres power vital functions necessary for individuals, families and communities to thrive and survive in today's environment.

The teams operating these critical environments have been put to the test, forging ahead in the face of many challenges while meeting increased demand. Qualified as essential workforce, many data centre technicians and engineers have special dispensation to travel to and from work, even during stay at home orders.

It is no surprise that throughout the pandemic, aspects of data centre management and operations have changed. For example, our business has seen the following trends:

- Some non-essential maintenance, be it for the data centre plant or IT systems, has been deferred
- Many projects have been put on hold
- Staffing levels have been reduced and/or interaction between the teams have been restricted
- Access to white space and plant areas have been more tightly controlled, allowing essential visits only
- Many non-essential application and system software changes have been deferred

Some sites have made advanced plans to sequester in place with temporary accommodation and supplies ready, allowing them to shut the gates and remain on-site for prolonged periods of time, isolating from the rest of the world.

Considerations have been made about how to de-contaminate a data centre without damaging sensitive technology assets and even how to operate with no staff on-site.

As the world starts to function as the 'new normal' and businesses reopen and people return to work, the many changes we have experienced will continue to influence how we move forward. Below are some approaches for site leadership to consider as they manage facilities, staff and suppliers in the coming months.



MAINTAIN NEW BEST PRACTICES

New best practices have been introduced to prevent the spread of COVID-19 and mitigate site contamination at data centres. The following measures should continue:

Government and public health organization guidelines

- Adhere to guidance from public health organizations (e.g., the World Health Organization, various global Centres for Disease Control & Prevention) and governmental agencies. This should be core to any operations plans going forward.
- Stay aware of geographic variations and requirements as these will change over time

Practical PPE and personal hygiene guidelines

- Consider face coverings, gloves and other PPE, taking into account how these materials can impact technical work (i.e., restricting visibility)
- Continue to wash hands thoroughly, or with hand sanitizer when soap and hot water is not available

Guidelines for social distancing

- Maintain social distancing, and where possible, consider if tasks can be done remotely
- Maintain protocols for safe entry/exit/circulation; consider using different access routes
- Limit people on-site to essential workers and visitors only
- Consider limiting to one subcontractor on-site per day
- Consider marking frequently used areas to indicate safe distances
- Restrict white space access for essential maintenance only
- **Respect an individual's right to feel safe:** Allow people to make their own choices even if these are above and beyond specific requirements

Paperless, contactless process and procedures

- Deploy contactless shift handovers
- Implement electronic document management including logbooks
- Access work orders and job tickets on mobile devices

Cleaning

- Maintain an increased frequency cleaning regime
- Reduce touchpoints where possible
- Continue to sanitize shared tools, eyewear and equipment before and after use



MANAGE RISK

Certain site activities may have been scaled back or stopped. As work ramps up, ensure that all necessary risk management processes are followed to ensure uptime:

“Safety Before Service” measures

- The safety of employees, visitors, contractors, and the general public is core to risk mitigation and must guide all strategic and tactical actions
- Adhere to all relevant critical work planning and approval processes
- Prioritise critical and statutory maintenance
- Maintain two-person switching
- Walk through and review operating procedures as necessary

Pay close attention to change management

- As both the critical services and IT worlds return to normal, anticipate an increased rate of changes being implemented. Ensure the fully approved changes are in place before starting any work.
- Be vigilant for possible conflicts between Critical Engineering planned works and IT changes; where possible planning for these events should be coordinated
- Consider the potential increase in project activity and the increased risk that this could pose



ENGAGE SUPPLIERS

Suppliers will continue to be critical for maintaining reliable data centre operations. Companies will be at different phases of readiness to resume operations; many will have been impacted with extreme changes in demand, and most will have had to deal with staff absences. Some will be dealing with furloughed staff.

Work with the supply chain to understand their business resumption plans and safe work considerations.

Scheduling

Expect suppliers to have a higher than usual demand, and where possible, allow extra time to schedule activities.

PPE

Ask: does the supplier have reliable and sustainable access to PPE required to fulfil their obligations? Is the PPE appropriate to ensure they are keeping themselves and others safe?

Stock and spares

- Ask: does the supplier still have access to the same levels of stocks and spares as they did previously? Will there be any increase to their lead times?
- Ensure necessary subcontractors have the people and spares needed
- Consider mandating on-site spares or even procuring your own critical spares (i.e., generator oil filters)

Synergies

Consider whether existing on-site staff can be used to carry out local tasks for suppliers to minimise people on site



PEOPLE CONSIDERATIONS

'Lockdown' has caused significant changes in working patterns which may endure for some time. Although restrictions may be lifted for data centre personnel, their immediate family may not be able to return to work or school until later dates.

Remote working

Continue with some staff working from home if possible to reduce on-site traffic. A remote monitoring solution will allow for improved risk management during reduced physical site presence.

Leave management

Implement a process to ensure that planned absence is staggered in a manageable way.

Continued support

Consider support for parents and caretakers who may not easily be able to resume their normal working patterns.



PREPARE FOR ANOTHER WAVE

Although restrictions are starting to be lifted in certain countries and states, it is not possible to rule out a second wave of infections as reported in [The Lancet](#). Lessons learned should be considered and actioned to ensure preparedness in case the situation worsens.

Adhere to Federal, local government and work guidelines. There may only be a short window in which to take action. *Note that CBRE is not the expert on infectious diseases – please see our disclaimer at the end of the document.*

Cloud and CoLo strategies

Carry out migration plans or implement more robust disaster recovery strategies and solutions.

Emergency scenario readiness

- Mock drills should be developed and practiced with on-site staff to ensure a timely, coordinated response in the event of a local outbreak or other emergency
- Establish the ability to remotely monitor and possibly control the site should a full evacuation be necessary

Sequester in Place Preparations

Circumstances may require the on-site staff to be sequestered for a period of time; planning and provisions should be made to ensure site preparedness as well as minimal disruption to people's lives at home.

Prepare for potential 'dark site' operations

- Be prepared to deploy remote assistance capability
- Implement remote document access (including EOPs, MOPs, logbooks) where possible
- Check all necessary contact details and escalation paths are available to staff working remotely; consider creating physical or electronic 'grab packs'



RESUME NORMAL OPERATIONS

As new normal operations resume, it is important to consider the impact of operating the site through COVID-19; many projects may have been put on hold, deliveries may have been stopped or delayed, stock usage likely will have increased. A thorough review will ensure minimal disruption and help return to normal business rhythms.

Uncertainty may prevail for months to come. Data centre operators and their staff must practice sustained safety and risk management measures to promote the health and security of everyone on-site, with the goal of delivering maximum reliability and uptime for critical infrastructure.

Restarting projects

Consider integrating plans across both Critical Services and Technology / IT.

Review stock levels

- Consider any perishable or time-bound stocks that may need reviewing before expiration
- If regular generator testing has been paused, consider fuel polishing and refreshing day tanks
- Consider PPE usage levels as on-site traffic increases

Lessons Learned

- Consider if there should be any modifications and updates to Business Continuity Plans, Communication Plans or Incident Escalation Plans
- Consider if any temporary processes or procedures should be maintained for go-forward operations to ensure more safe and reliable service
- Consider areas and responses that were positive (and not-so-positive), and if lessons learned and best practices can be shared to other sites in the portfolio



HERE TO HELP

As the largest data centre operator in the world, CBRE Data Centre Solutions looks forward to addressing your challenges. If your data centre plan needs assistance, please contact CBRE Global Chief Reliability Officer Mike Doolan at mike.doolan@cbre.com or any of our client solutions team leadership.

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