

Government states data centres essential as NHS, power grid.

Description

Data centres in the United Kingdom have been designated as critical national infrastructure, elevating them to the same level of importance as emergency services, finance, healthcare systems, and energy and water supplies. This classification means that in the event of a major incident such as a cyber attack, IT outage, or extreme weather event, data centres will receive additional government support to minimize disruptions.

These colossal warehouses house vast arrays of computers that power essential services like artificial intelligence applications, data processing, and streaming. Despite criticism over their substantial energy and water consumption, the new Labour government staunchly supports the sector, with Technology Secretary Peter Kyle hailing data centres as "the engines of modern life."

In a move reflecting the evolving landscape of threats, a team of officials will be dedicated to monitoring and responding to potential risks against data centres. Although no new regulations are planned, the decision underscores the critical role these facilities play in powering vital online services.

The exponential growth of Al-based services necessitates increased data centre capacity. Big players like Amazon Web Services, Microsoft, and Google are investing billions in constructing and operating data centres in the UK, underscoring the sector's importance in the digital age.

Yet, environmental concerns loom large. Data centres are notorious for their high energy consumption and water usage for cooling. The forecasted six-fold increase in data centre power usage in the UK over the next decade raises questions about sustainability and resource management.

Local opposition to data centre developments also poses challenges, as seen in the rejection of a proposed project in Buckinghamshire due to its impact on the green belt. As these critical infrastructure hubs continue to evolve, finding a balance between technological advancement and environmental responsibility remains a pressing issue.

Vocabulary List:

- 1. **Infrastructure** /'ɪn.fə.strʌk.tʃər/ (noun): The basic physical systems of a business or nation including transportation communication and utilities.
- 2. **Designation** /,dez.ɪg'neɪ.ʃən/ (noun): The act of choosing someone or something for a particular purpose.
- 3. Criticism /ˈkrɪt.ɪ.sɪ.zəm/ (noun): The expression of disapproval based on perceived faults or mistakes.
- 4. Capacity /kəˈpæs.ɪ.ti/ (noun): The maximum amount that something can contain or produce.
- 5. **Sustainability** /sə,steɪnə'bɪl.ɪ.ti/ (noun): The ability to be maintained at a certain rate or level particularly concerning environmental health.
- 6. **Opposition** /,pp.ə'zɪʃ.ən/ (noun): Resistance or dissent expressed in action or argument.



Comprehension Questions

Multiple Choice

1. Which of the following sectors are data centres in the UK considered to be as important as?

Option: Emergency services

Option: Finance

Option: Healthcare systems

Option: Energy and water supplies

2. What major incidents would qualify data centres for additional government support according to the text?

Option: Cyber attack Option: IT outage

Option: Extreme weather event

Option: All of the above

3. Who hailed data centres as "the engines of modern life"?

Option: Peter Kyle

Option: Ratan Naval Tata Option: Mark Zuckerberg

Option: Elon Musk

4. Which big players are mentioned as investing in constructing and operating data centres in the UK?

Option: Amazon Web Services

Option: Microsoft Option: Google

Option: All of the above

5. What is a notable environmental concern associated with data centres?

Option: High energy consumption

Option: Excessive water usage for cooling

Option: Both A and B

Option: None of the above

6. In what region did a proposed data centre project face rejection due to its impact on the green belt?

Option: Buckinghamshire

Option: London



Option: Manchester Option: Liverpool

Answer

Multiple Choice: 1. Emergency services, Finance, Healthcare systems, Energy and water supplies 2. All of the above 3. Peter Kyle 5. Both A and B 6. Buckinghamshire

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)

1. What term is used to describe the outer limit of knowledge or achievement in a particular area?

Option: A) Boundary 2. What does the word "peril" generally mean?

Option: A) Safety
Option: B) Comfort Option: B) Challenge

Option: C) Threat Option: D) Joy

3. Which of the following best defines the term "designation"?

Option: A) Removal Option: B) Appointment Option: C) Rejection Option: D) Isolation

4. What are "anomalies" in a system or process?

Option: A) Errors

Option: B) Improvements Option: C) Regularities Option: D) Anomalies

5. What term refers to the ability to be maintained at a certain rate or level?

Option: A) Growth

Option: B) Sustainability Option: C) Depletion



	Option: D) Expansion	
6.	What does "collaboration" entail in a working environment? Option: A) Competition Option: B) Isolation Option: C) Cooperation Option: D) Disturbance	
7.	Which term describes the process of increasing the population density in urban areas?	
	Option: A) Ruralization Option: B) Urbanization Option: C) Migration Option: D) Suburbanization	
8. What does "augmentation" usually involve?		
	Option: A) Reduction Option: B) Growth Option: C) Maintenance Option: D) Stability What is typically associated with the term "opposition"? Option: A) Support Option: B) Agreement	
9. What is typically associated with the term "opposition"?		
	Option: A) Support Option: B) Agreement Option: C) Resistance Option: D) Autorization	
10	. What relates to the organic processes or functions in living organisms?	
	Option: A) Biological Option: B) Chemical Option: C) Physical Option: D) Physiological	
Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)		
11	. The project needs to be assessed for its before proceeding with further	
inv	vestments.	
12	. The factory will be expanded to increase its production	
13	. The authorities the illegal drugs hidden in the container.	



14. Access to the sensitive information was blocked for	users.		
15. The recent policy changes have led to a	in customer satisfaction.		
16. The dangers of the job are	and cannot be eliminated completely.		
17. The lost data was of critical importance and its	poses a significant challenge.		
18. The forecast predicts heavy	_ in the region over the next few days.		
19. The repeated delays caused a sense of	among the passengers waiting for their		
flight.			
20. The new software includes improved security	to prevent unauthorized access.		
Matching Sentences (Match each definition to the correct word from the vocabulary list.)			
21. Astronauts often perform activities outside their spacecraft during missions.			
22. Understanding the historical of events is crucial for accurate analysis.			
23. Adequate is essential for the smooth functioning of any modern society.			
24. Constructive can help individuals and organizations improve their performance.			
25. Law enforcement agencies are working to apprehend the of the crime.			
26. The global economy is made up of markets and industries.			
27. The team their capabilities by leveraging new technologies.			
28. The risks associated with the project are in its nature.			
29. The concept was still and required further clarification.			
30. Customs officials the smuggled goods at the border.			

Answer

Multiple Choice: 1. C) Frontier 2. C) Threat 3. B) Appointment 4. A) Errors 5. B) Sustainability 6. C) Cooperation





7. B) Urbanization 8. B) Growth 9. C) Resistance 10. D) Physiological

Gap-Fill: 11. viability 12. capacity 13. seized 14. unauthorized 15. diminution 16. inherent 17. irretrievability 18. precipitation 19. frustration 20. mechanisms

Matching sentence: 1. Extravehicular 2. Significance 3. Infrastructure 4. Criticism 5. Perpetrators

6. Interconnected 7. Augmented 8. Inherent 9. Nebulous 10. Seized

CATEGORY

1. Sci/Tech - LEVEL6

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