

The Jisc logo consists of the word "Jisc" in white, sans-serif font, centered within a solid orange square. The background of the entire slide is a dark blue, abstract digital graphic featuring concentric, glowing circles and lines in shades of cyan, blue, and red, creating a sense of depth and data flow.

Jisc

# The ongoing cyber security challenge

Henry Hughes, security director, Jisc

**Further targeted  
ransomware attacks  
on the UK education  
sector by cyber  
criminals**

# Cost to the UK economy of cyber crime

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# £27,000,000,000

this is equivalent to the GDP of the 100<sup>th</sup> richest country in the world

Source: Cabinet Office: Cost of cyber crime.

## Alert

Version 2.0  
What's new?

Updated with new information on  
March 2021 activity

19 March 2021  
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# Who are Jisc?

Operator of the UK's NREN and an MSSP to the sector.

- Approx. 18m Users
- Over 4Tbps External Connectivity
- Over 600 Direct Peerings
- Over 50 Routed ASNs
- Over 9m IPv4 Addresses & Over 200 IPv6 Blocks
- Jisc serve over:

180	School Districts	350	Further Edu	190	Higher Edu
40	Research	160	Related Orgs		

# What have Jisc seen?

42 significant incidents & 1k DDoS attacks in 2 years

- August-December 2020: 9
  - All ransomware
- January – December 2021: 19
  - 16 ransomware
- 2022 so far: 12
  - All ransomware
  - +15 credential dumps / sale offers
- “Significant incident” means an incident with a material impact on:
  - Teaching & Learning
  - Research
  - Business Operations
- 1,105 Verified DDoS attacks
  - Longest attack 1 day 01:12:45
  - Peak bitrate 190.34 Gbps
  - Peak packet rate 42.14 Mpps

# Ransomware impact

## Disruption extends beyond direct, potentially recoverable, costs:

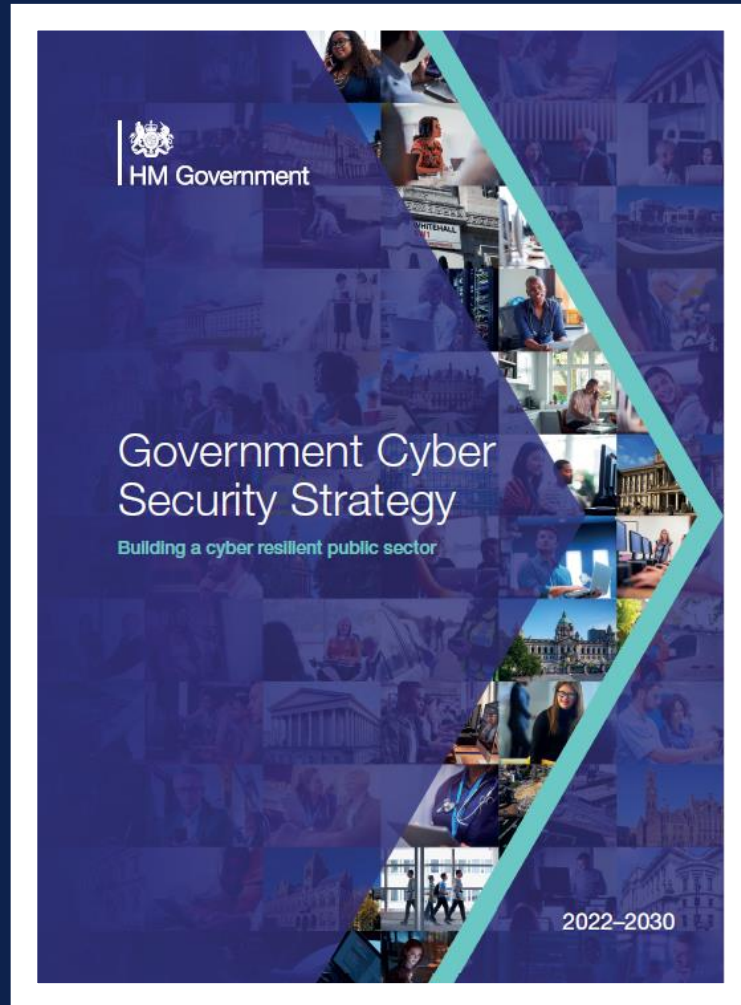
- Staff time managing the incident, recovering services and communicating with staff and students
- Staff wellbeing and mental health
- Loss of course work, assessment, teaching or research material
- Delays to income from funding bodies and third parties
- Reputational damage

# Cyber Essentials vs NCSC 10 Steps to Cyber Security

Risk management	✗
Engagement and training	✗
Asset management	✓
Architecture and configuration	✓
Vulnerability management	✓
Identity and access management	✓
Data security	✗
Logging and monitoring	✗
Incident management	✗
Supply chain security	✗



## Assurance context: Government Cyber Security Strategy



Government will adopt the ***Cyber Assessment Framework (CAF)*** as the assurance framework for government.

[gov.uk/government/publications/government-cyber-security-strategy-2022-to-2030](https://gov.uk/government/publications/government-cyber-security-strategy-2022-to-2030)

# Bring it all together - Rehearsals, exercises and tests



When people are not used to working together, establishing trust during a crisis is extremely difficult.





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