

Appendix 9 – Part A: Checklist of what to include in a security incident response policy.

- A. A data breach of any size is a crisis management situation, which could put an entire council at risk. Data security is not an IT issue, it is an organisational risk, and breach response should involve people from a number of roles across the council.

Planning for a breach is therefore essential; every council should have in place a breach response plan, and should designate, in advance, a breach response team which can be convened at short notice to deal with the crisis.

Understanding the issues that arise in a breach situation, and practising managing a breach, are essential to effective breach response. Failure to plan and practise increases the regulatory, litigation and reputation risk to the entire council.

The checklist below sets out the key issues which a council should consider in preparing for a data breach.

1. The breach response plan

Do you know who should be notified within the council if there is a data breach?

What happens if one of your team in (a) above is away on holiday or otherwise absent. Is there a back-up plan?

Do you have clear reporting lines and decision-making responsibility?

Do you understand what external assistance you might need, with providers in place in advance?

Do you have designated person(s) responsible for managing breaches, with full decision making authority?

Do you have processes for triaging incidents, identifying actual breaches and activating the breach response team?

Is your breach response plan up to date?

Have you tested your breach response plan?

Legal issues

Do you have a process for maintaining legal privilege and confidentiality?

Can you pause document destruction processes?

Do you have appropriate evidence gathering capability so you can collect information about the breach?

Do you know who your specialist external lawyers who can manage the investigation and give legal advice are?

Do you have a process for managing and logging steps taken in the investigation?

Do you understand your contractual rights and obligations with third parties?

Can you quickly identify third parties you may need to notify?

Do you have appropriate contractual rights to be notified of breaches by third parties?

Do you know how to contact the Information Commissioners Office ("ICO") and with law enforcement who you can involve quickly if necessary?

If you hold credit/ debit card data, do you need to notify your payment processor?

Do you need advice on the legal options available to quickly gather evidence from third parties?

Do you understand your potential liabilities to third parties?

Can you gather information about the breach including taking statements from staff members or councillors who might have seen unusual activity?

Do you understand when you should consider notifying data subjects and / or regulators?

Forensic IT

Do you have access to qualified forensic IT capability, either internally or externally?

Do you understand the basic IT do's and don'ts of responding to data breaches?

Do you have an asset inventory to help you identify potentially compromised devices, where those devices are and in whose possession?

Do you understand how data flows in your council, in practice?

Can you quickly secure and isolate potentially compromised devices and data, without destroying evidence?

Can you quickly ensure physical security of premises?

Cyber breach insurance

Do you have cyber breach insurance, or other insurance which may cover a data breach?

Do you understand the process for (a) notifying breaches and (b) obtaining consent for actions from insurers?

Do you have emergency contact details for your brokers?

Data

Do you know what data you hold (and what you shouldn't hold)?

Is your data appropriately classified?

Do you have, and apply, data destruction policies?

Do you know what data is encrypted, how it is encrypted, and when it may be unencrypted on your systems?

Do you have regularly check you are complying with your retention policy to ensure you are storing only the data you should be?

Do you have appropriate additional protection for sensitive data?

Do you have data loss prevention or similar tools?

Do you understand your logs, how long you retain them for and what they can (or cannot) tell you?

Do you have appropriate logging of staff/ councillor access to data?

Data subjects

Do you understand when you should consider notifying data subjects?

Do you understand the contractual and legal rights of data subjects?

Can you quickly prepare appropriately worded notifications to data subjects?

Do you understand the potential harm to data subjects of loss of the different types of data that you hold?

Do you have the ability to appropriately triage and deal with a breach?

Are councillors and staff appropriately trained as to how to deal with data subjects in a breach scenario?

Public Relations ("PR")

Do you have access to PR capability experienced in dealing with data breaches?

Do you have template pro-active and re-active press statements?

Can you actively monitor social media after a breach?

Appendix 9 – Part B: Cybersecurity checklist

Data security is an ever-increasing risk for most organisations including councils. However, the number of breaches which are the result of highly sophisticated attacks from hackers is still very limited; most breaches are still the result of human error or relatively unsophisticated phishing attacks.

Many of the steps that councils can take to limit the risk and impact of a personal data breach are relatively simple to implement, but require effective policies and controls to implement. Good information security crosses over a number of policies – it is not just a matter of putting in place an information security policy. The checklist below sets out the key issues that a council should deal with, and which should be implemented where appropriate across the entire suite of internal policies.

1. Glossary

“Acceptable use policy” or fair use policy is a set of rules applied by the owner, creator or administrator of a network, website, or service, which restrict the ways in which the network, website or system may be used and sets guidelines as to how it should be used.

“Bring Your Own Device” (“BYOD”) policy is useful where staff are permitted to use their own tablets, mobile devices and other IT equipment and deals with appropriate security measures that they should comply with.

“Cyber security” is the body of technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access.

“Firewall” is a network security device that monitors incoming and outgoing network traffic and decides whether to allow or block specific traffic based on a defined set of security rules.

“Multifactor authentication” is a security system that requires more than one method of authentication from independent categories of credentials to verify the user's identity for a login or other transaction for example using a password and a separate delivered pin number (sometimes described as “2 step” authentication).

“Network security policy” is a generic document that outlines rules for computer network access, determines how policies are enforced and lays out some of the basic architecture of the security/ network security environment.

“Penetration testing” (also called pen testing) is the practice of testing a computer system, network or Web application to find vulnerabilities that an attacker could exploit.

“Red teaming” using consultants to test your physical and systems security.

“Remote access policy” is a document which outlines and defines acceptable methods of remotely connecting to the internal network.

“Remote access” is the ability to get access to a computer or a network from a remote distance.

“Wifi” a facility allowing computers, smartphones, or other devices to connect to the Internet or communicate with one another wirelessly within a particular area.

2. Do you have appropriate policies in place?

Information security policy

Privacy policy

“Bring Your Own Device” (“BYOD”)policy

Remote access policy

Network security policy

Acceptable use/internet access policy

Email and communication policy

Depending on how your policies are structured, the issues below may appear in one or more of these policies.

- Are your policies checked and updated on a regular basis and enforced?
- Is there a council member with responsibility for cyber security?
- Do you have clear responsibility for cyber security, with clear reporting lines and decision-making authority?
- Do you ensure physical security of premises?
- Do you allocate sufficient budget to cyber security?
- Do you subscribe to cyber security updates so that you are aware of threats?
- Do you have an effective breach response plan, and do you test and update it regularly?
- Do you have cyber breach insurance in place?

People

- Do you have appropriate mechanisms for staff and councillors to be able to report suspicious emails quickly and effectively?
- Do you train staff and councillors on cyber security regularly?
- Do you test staff and councillors, for example by sending spoof phishing emails?
- Do councillors and staff undertake reviews to ensure that they understand cyber security risks, and are results checked to ensure improvement?
- Do you have proper processes for when staff or councillors join or leave the council, and are they applied in practice?
- Do staff and councillors understand the risks of using public wifi?
- Do you conduct appropriate checks on new staff and councillors to understand if they are a potential security risk?

Hardware, data, encryption and technology

- Is backup personal data encrypted?
- Do you have appropriate mechanisms for securely sending files?
- Do you have a list of servers, and individuals who are responsible for ensuring that they are up to date?
- Do you have appropriate firewalls and intrusion detection software?
- Are your wireless networks appropriately secured?
- Do you regularly check the operating systems, data and software against a 'good known state' baseline?
- Do you review unsuccessful attacks and probes / scans?
- Do you have an inventory (or list of) hardware and software you use?
- Do you appropriately limit access to data on a 'need to know' basis?
- Do you back-up personal data on a regular basis?
- Do you apply regular IT updates to your computer hardware and software?
- Do you ensure that staff and councillors have anti-virus software loaded and active on their devices at all times?
- Do you have appropriate policies regarding use of external hard drives or USB drives?

Do you conduct regular penetration tests and / or red teaming, with appropriate analysis of results?

Third parties

Do you properly understand risks arising from third party service providers?

Do you undertake due diligence before engaging third party service providers?

Do you assess third parties for cyber security or data protection risks?

Do you have obligations in your contracts with third parties requiring them to take steps to keep data secure?

If you use cloud storage, do you have contractual rights to be notified quickly of potential security issues?

Remote access/BYOD

Do you require multifactor authentication where appropriate?

Do you allow remote access?

If so, do you have the right software and controls in place to ensure it is secure?

Do you have policies to secure mobile devices?

Is data encrypted on mobile devices?

Can mobile devices be remotely wiped?

If you use BYOD, do you apply restrictions to maintain security?

User accounts / passwords

Do you require unique user accounts?

Do you require multifactor authentication where appropriate?

Do you restrict administrator accounts to the minimum necessary?

Do you require strong, hard to guess, passwords?

Do you automatically prevent use