# CYBERSECURITY GUIDELINES

Cybersecurity refers to every aspect of protecting critical systems, devices, and sensitive data against cyberattacks. From individual users to organizations, having effective cybersecurity practices in place is essential for safeguarding sensitive personal and financial information. The following cybersecurity guidelines are a set of best practices and recommendations covering various aspects to ensure cybersecurity, offering essential steps to mitigate the risk of cyber threats and safeguard sensitive information.

## Data protection

Data protection aims to thwart breaches and data leaks resulting from cyberattacks, which steal valuable and sensitive information from individuals and organizations. Its primary goal is to prevent data theft, averting the potentially costly aftermath of a successful compromise.

Optimal strategies for data protection include:

- 1. Regularly backing up critical data to external drives or authentic cloud storage to mitigate data loss from ransomware or hardware malfunctions.
- 2. Encrypting devices and other media housing sensitive personal information, encompassing laptops, tablets, smartphones, removable drives, backup tapes, and cloud storage solutions.
- 3. Safeguarding all devices, such as laptops, tablets, and smartphones, with passwords.
- 4. Storing sensitive information exclusively on legitimate and secure websites.

## **Password Management**

Passwords are the keys to the digital world, granting access to sensitive data. Therefore, it is crucial to follow best practices in password management.

Key factors to consider in password management:

- 1. Ensure passwords are at least 12 characters long and include a mix of letters, numbers, and special characters.
- 2. Use different passwords for different accounts to minimize risk.
- 3. Change passwords regularly to enhance security.
- 4. Whenever possible, enable 2FA to require a second form of verification, such as a text message code or an authentication app, in addition to a password.

## Internet/Online Security

Online security is necessary for a multitude of reasons, primarily revolving around safeguarding personal information, financial assets, and digital activities from various threats. Implementing best practices for online security is essential to protect sensitive information from cyber threats.

Key practices to ensure Online Security:

- 1. Use Strong Unique passwords for Online Accounts.
- 2. Implement Multi-Factor Authentication (MFA) as an extra layer of protection beyond just a password, which requires to provide two or more forms of verification before granting access to an account or system.
- 3. Avoid accessing sensitive information while connected to public Wi-Fi networks as they can expose your data to interception. Consider using a VPN for an extra layer of protection when using public Wi-Fi. A VPN encrypts your internet connection, making it difficult for cybercriminals to access the data you're transmitting.
- 4. Beware of Phishing, a prevalent online scam which targets individuals through various channels like email, text messages, and phone calls to steal financial information or login credentials.

To prevent falling victim to phishing:

- Employ Anti-virus/Anti-spam software to scan for and remove malware introduced through phishing attempts, and to filter phishing emails into your junk folder automatically.
- Keep your browser and software updated to mitigate potential vulnerabilities.
- Refrain from responding to suspicious emails.
- Implement multi-factor authentication (MFA) to bolster the security of sensitive accounts.

### Malware/Virus Protection

Malware refers to a variety of harmful software designed to damage, exploit, or otherwise compromise data or systems on a computer or network. Understanding malware and implementing effective security measures is crucial for safeguarding digital assets. Protecting against malware is an ongoing process that requires a combination of technical measures, user awareness, and regular system maintenance.

Security Measures to Prevent Malware Attacks Include:

- 1. Using reputable antivirus software to detect and mitigate malware threats.
- 2. Performing regular antivirus scans to identify and remove malicious software.
- 3. Scanning all files and contents downloaded from websites, emails, or USBs.
- 4. Ensuring the operating system, applications, and antivirus software are up to date to protect against the latest threats.
- 5. Turning on automatic updates for the operating system.
- 6. Using web browsers like Chrome or Firefox that receive frequent, automatic security updates.