PERSONAL DATA SECURITY GUIDANCE FOR MICROENTERPRISES UNDER THE GDPR

The General Data Protection Regulation ("the GDPR") significantly increases the obligations and responsibilities of organisations and businesses with regard to how they collect, use and protect personal data.

At the heart of the new law is the requirement for organisations and businesses to be transparent about how they are obtaining, using and safeguarding personal data. This transparency requirement is outlined under article 12 of the GDPR and encompasses the provision of clear, concise information to data subjects and the facilitation of data subjects’ rights.

Additionally the principle of accountability, which is outlined under article 5 of the GDPR, will see organisations and businesses responsible for demonstrating their compliance with the new law’s principles relating to the processing of personal data.

The Office of the Data Protection Commissioner ("the DPC") has developed this guidance to assist microenterprises implement the appropriate technical and organisational security measures to safeguard personal data they are processing.

A microenterprise is defined as an organisation having fewer than 10 employees and an annual turnover (the amount of money taken in a particular period) or balance sheet (a statement of a company's assets and liabilities) below €2 million¹.

If your company is a microenterprise engaged in the processing of personal data, as either a data controller or a data processor, you will be subject to the provisions of the new law. A data controller is defined under article 4 of the GDPR as a natural or legal person that determines, alone or jointly with others, the purposes and means of the processing of personal data. The same article defines a data processor as a natural or legal person that processes personal data on a data controller’s behalf.

The GDPR is applicable to the processing of personal data by microenterprises established in and operating outside the European Union ("the EU"). If your company is established in the EU, the provisions of the GDPR are applicable to your processing of personal data in the context of the activities of your EU establishment(s).

If your company is not established in the EU, the new law is applicable to your processing of the personal data of individuals in the EU with regard to the offering of goods or services (regardless of whether payment is involved) and to the monitoring of an individual's behaviour (in so far as that behaviour takes place within the EU).

The DPC has outlined four key ways to assist microenterprises in securing their Information and Communications Technology ("ICT") systems under the GDPR. The DPC has also

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published a GDPR readiness guide to assist organisations in preparation for the GDPR that can be found at www.GDPRANDYOU.ie²

1. Know your data

Microenterprises should regularly review the personal data they process and determine what personal data and, in particular, what special categories of personal data they hold.

‘Personal data’ is defined under article 4 of the GDPR as any information relating to an identified or identifiable natural person (a “data subject”). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

Article 9 of the GDPR defines ‘special categories of personal data’, as data relating to an individual's racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data, biometric data, data concerning health, and data concerning sex life or sexual orientation.

Principles you must adhere to with regard to the processing of personal data are outlined in article 5 of the GDPR. When considering your company’s processing, questions to be asked include whether you are processing personal data:

- according to the principles of lawfulness, fairness, and transparency;
- for specified, explicit and legitimate purposes;
- with a view to data minimisation;
- with a view to ensuring accuracy and, where necessary, that data is kept up to date;
- such that data are kept in a form which permits identification of data subjects for no longer than is necessary for the purposes of processing; and
- in a manner that ensures appropriate security of the personal data.

If you outsource the processing of personal data to a data processor (including, for example, to a ‘cloud computing’ service provider), you should be able to confirm that:

- the processing is compliant with Article 28 of the GDPR;
- the processor’s security procedures are adequate; and
- you have sought and been given assurances regarding the appropriate security measures from the processor.

2. Determine the Appropriate Level of ICT Security

Article 32 of the GDPR obliges data controllers and data processors to implement the technical and organisational measures necessary to ensure an appropriate level of security in relation to the risks presented by processing. In considering what constitutes an appropriate level of security, you should take into account

1. "The state of the art";
2. "The cost of implementing and the nature of the scope";
3. "The context and purposes of processing"; and
4. "The risk of varying likelihood and severity for the rights and freedoms of natural persons".

The DPC has published best practice Data Security Guidance\(^3\) regarding the security of ICT systems. Additional information is also available from organisations such as the European Union Agency for Network and Information Security\(^4\), and the US-based National Institute of Standards and Technology\(^5\).

Security measures predominately fall under the following headings:

**Technical security**

Technical security measures protect ICT systems by ensuring that appropriate technology is implemented to secure personal data processing.

Examples of practical technical security measures are:

- ensuring that all computing devices such as PCs, mobile phones, and tablets are using an up-to-date operating system;
- ensuring all computing devices are regularly updated with manufacturer’s software and security patches;
- using antivirus software on all devices;
- implementing a strong firewall;
- reviewing vendor supplied software and updating default system, administrator, and root passwords and other security parameters to ensure defaults are not left in place;
- ensuring data backups are taken and are stored securely in a separate location;

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\(^3\) Data Security Guidance [https://www.dataprotection.ie/docs/Data-security-guidance/1091.htm](https://www.dataprotection.ie/docs/Data-security-guidance/1091.htm)


\(^5\) National Institute of Standards and Technology [https://www.nist.gov/topics/information-technology](https://www.nist.gov/topics/information-technology)
• ensuring that data backups are periodically reviewed and tested to ensure they are functioning correctly;
• ensuring that data is collected & stored securely;
• ensuring that mobile devices (such as laptops and mobile phones and tablets) are encrypted;
• ensuring that two-factor authentication is enabled for remote access;
• ensuring that websites have TLS (transport layer security) in place to securely collect personal data via webforms (such as for newsletter subscriptions) or on e-commerce websites.

Physical security

Physical ICT security measures assist organisations with the protection of ICT systems such as facilities, equipment, personnel, resources, and other properties. Examples of ICT equipment that may require protection includes any device which can store information electronically, such as:

• Computers — servers, desktop, laptop or tablet
• Photocopiers, multifunction devices and printers
• Mobile telephones
• Digital cameras
• Storage media—for example, portable hard drives, USB sticks, CDs, DVDs

The level of protection that should be applied to ICT equipment is based on the business impact level that may result from data being compromised, loss of integrity, or unavailability of the electronic information held on the device, this would also include the loss or unavailability of the device due to a failure.

Examples of practical physical security measures are:

• keeping offices and storage units locked;
• keeping server rooms or cabinets locked;
• cabling desktop machines and laptops to desks;
• implementing clean desk policies;
• ensuring that fire and burglar alarms are in place and that they are functioning correctly;
• ensuring that ICT equipment such as hard drives and old laptops, computers and mobile devices are securely disposed of at end of life.

Organisations should also assess the risk arising when devices cannot be secured when not in use. Where an organisation has determined the business impact of the data compromise, loss of integrity or unavailability regarding a device, which is not in use, organisations should ensure that such devices are stored securely.

The DPC also recommends that microenterprises design and implement an asset control policy for ICT equipment. This would include:

• recording the location and user of the device; and
• conducting periodical audits of its ICT equipment.
Organisational security

Organisational security measures protect ICT systems by ensuring that policies, procedures, training, and audit trail functions are in place.

These measures are mostly documentary in nature, however such policies need not be time consuming nor overly complicated to implement. Any documentation should be written in clear, concise language, should list the rules that apply to the processing of personal data, and should be readily accessible to employees. Such documentation should be reviewed periodically to ensure that it is accurate and up-to-date.

Examples of practical organisational security measures consist of:

- communicating the importance of company data and all the measures they can take to protect it to employees;
- conducting ongoing staff training on, but not limited to, social engineering attacks, crypto ransomware, and data protection;
- documenting data collection and retention policies;
- ensuring the use of strong passwords by having a password policy in place that is enforced;
- ensuring remote access is supported by a remote access policy;
- documenting a data breach incident response plan and testing it periodically to ensure a data breach can be effectively responded to;
- documenting CCTV policies (where appropriate);
- documenting data back-up policies;
- periodically reviewing contracts with 3rd party ICT providers to ensure the security measures documented are still appropriate and up to date.
3. Data Collection and Retention Policies

If your organisation will be holding personal data for longer periods, you should be aware of your obligations under Article 5(1)(e) as both a data controller and a data processor with regard to data retention.

The essence of the storage limitation principle under the GDPR is slightly different to the existing principle under the Data Protection Directive. In summary, personal data should not be retained in identifiable form for longer than is necessary in relation to the purposes for which such data is processed. A pragmatic approach to retention is simply to delete the data once the purpose for which it was processed has ceased.

Data collection and retention should be assessed against business needs and minimised, either by not collecting unnecessary data, by deleting data, or by rendering it anonymous. Microenterprises should:

- Define and implement a data collection policy. The policy should detail the categories of personal data collected and the purposes for collection.
- Define and implement a data retention policy. This policy should detail the retention period for personal data collected and measures taken to ensure deletion or if applicable, the techniques to render the data non-identifiable.

These policies should be communicated to all employees and periodic reviews should be conducted to ensure that personal data is handled correctly when it is no longer needed for the purposes for which it was collected.

With regard to retention policies, if you intend to further process personal data for the purposes of archiving, scientific or historical research, or statistical purposes, you should ensure appropriate safeguards are in place to ensure the rights and this processing does not impede freedoms of data subjects.

In particular, these safeguards should ensure that technical and organisational measures are in place to ensure respect for the principle of data minimisation.

A documented retention policy should offer guidance and provide a framework for employees to manage information across its lifecycle so that your company complies with the laws and regulations pertaining to data management. A retention policy should apply to both physical and digital formats.
4. Utilising Data Processors

Microenterprises, due to a lack of in-house expertise, may rely on third party data processors to process personal data on their behalf, such as e-commerce websites, cloud services such as email or online data backup solutions. Microenterprises should:

- Define the responsibilities of the data controller and data processor and ensure that processing is carried out on foot of a written agreement detailing the appropriate technical security and organisational measures to be applied by the data processor specifically in relation to the personal data processing operations.

- Obtain sufficient guarantees regarding the security measures applied by processors acting on their behalf and periodically review to ensure that the terms of the written agreement are being adhered to.

A practical way for a microenterprise to obtain sufficient guarantees and ensure compliance is to:

- Use a data processor that has vendor certification, appropriate IT qualifications and/or certification, or the appropriate certification from a relevant certifying body such as the International Organization for Standardization or the Payment Card Industry.

- Have formal project completion / change management sign off procedures in place to ensure that appropriate security measures are implemented and that changes/updates are performed.

- Have data processors provide regular reports on the management of the ICT systems and following up to ensure that work is carried out.

- Review security measures periodically to ensure they are up to date, this can be especially prevalent when utilising Cloud-Based environments. The DPC published guidance for organisations utilising Cloud Based environments which sets out further steps how an organisation can review its security measures.

This guidance can be accessed from the DPC's website at the following address