

2024
edition

Cybersecurity

GDPR: the best prevention
against cyber risks

» GDPR, A CYBERSECURITY INSTRUMENT

Information security, an obligation since 1978, a framework reinforced with the GDPR

Security is one of the fundamental principles of the French Data Protection Act. A lack of security in the processing of personal data entails the risk that data could be accessed by a malicious third party and used against the data subjects.

The GDPR increased the requirements for personal data security. It has confirmed the role of data protection authorities in supporting all companies and administrations in this particular area.

SECURITY OBLIGATIONS UNDER THE GDPR

Implement technical and organisational measures to secure data

Keep a record of data breaches

Conduct a Privacy Impact Assessment (PIA)
> For certain sensitive processing operations

Notify the CNIL of a data breach
> If there is a risk to individuals

Inform individuals of the data breach
> If there is a high risk to individuals

The GDPR is the first text to impose specific cybersecurity obligations on all organisations, which are subject to the investigatory and enforcement powers of an administrative authority such as the CNIL.

**In the event
of non-
compliance**

**Administrative fine
of 20 million euros or
4% of turnover**

The CNIL supports public and private bodies in taking cybersecurity into account.

The security principle, enshrined in the law for more than 45 years, has been strengthened by the GDPR and supplemented by new obligations and tools such as notification of data breaches, data protection impact assessment, codes of conduct or certification.

KEY FIGURES

4 668
notifications

of data breaches in 2023

1,006
notifications

of data breaches resulting from a **ransomware attack** received in 2023.
22% of the total volume.

1/3
of the sanctions

issued by the CNIL in 2023 relate to non-compliance with the security obligation.



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What is a Privacy Impact Assessment (PIA)?

The PIA is a tool used to build a processing that complies with the GDPR and respects privacy. It applies when the processing of personal data is likely to result in a high risk to the rights and freedoms of data subjects. When residual risks remain high, the GDPR provides that a data controller must consult with its supervisory authority (the CNIL in France) prior to implementing the processing operation. If it proves impossible to sufficiently reduce the risks at the end of this exchange phase, then the supervisory authority may issue an opinion stating that the planned processing is in breach of the GDPR.

[Read more](#)

cnil.fr/en/privacy-impact-assessment-pia

PERSONAL DATA BREACH NOTIFICATIONS

What is a data breach?

According to the GDPR, a personal data breach is “a breach of security resulting in the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of or access to personal data transmitted, stored or otherwise processed.”

This means any security incident, whether malicious or not, and whether intentional or not, that results in the **integrity**, the **confidentiality** or the **availability** of personal data being compromised.

Some examples:

- ▶ **accidental deletion of medical data held by a health institution and not otherwise backed up;**
- ▶ **loss of an unencrypted USB key containing a copy of a company's customer database;**
- ▶ **malicious connection to a school database and modification of pupil results obtained.**

On average, the CNIL received 13 notifications per day in 2023.

Nature and causes of notified data breaches

87% of the data breach notifications received by the CNIL in 2023 relate to a **loss of confidentiality**, i.e. penetration by a third party who could gain knowledge of the data or even copy it.

Although the GDPR considers that a personal data breach can also result from a security incident leading to a loss of integrity or availability, statistics show that data controllers are barely aware that such incident constitutes a data breach.

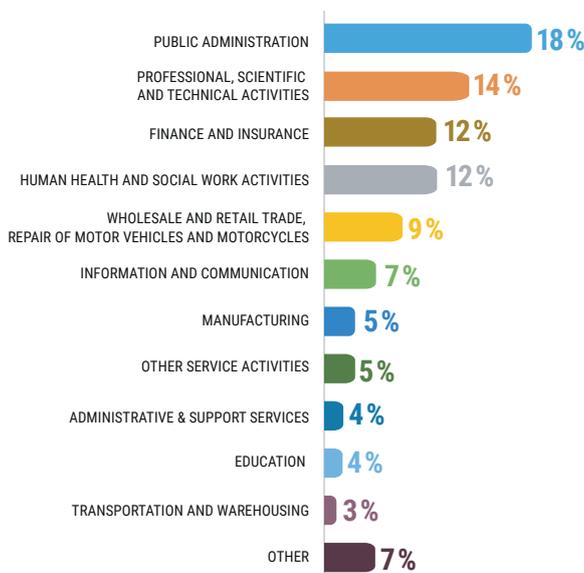
Even if negligible compared to notifications of confidentiality breaches, the CNIL observed a **clear increase in notifications related to a loss of integrity** (data modified illegitimately) and **availability** (data inaccessible for a certain period of time). This is due in particular to the increasing number of breaches caused by **ransomware attacks**.

Further, the obligation to notify the supervisory authority of a data breach relates to breaches of accidental or unlawful origin. The majority of notifications concern data breaches originating from a malicious external act (hacking, theft of physical media or fake technical support scams).

THE GDPR REQUIRES DATA CONTROLLERS TO:

- > document personal data breaches internally;
- > notify the CNIL within 72 hours when the breach presents a risk to the rights and freedoms of individuals;
- > inform the data subject where this risk is high.

Sectors most affected in 2023:



HACKING IN 2023

→ **60%** of all notifications to the CNIL, i.e. **2,700** notifications.

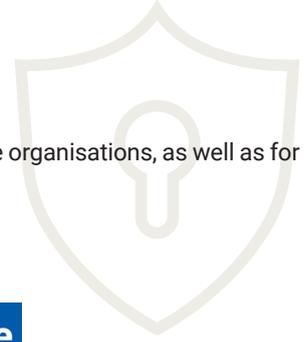
→ **22%** of notifications relate to a ransomware attack.

USEFUL RESOURCES

- ▶ Technologies to protect information assets and data subjects from breaches of their personal data: www.cnil.fr/fr/cybersecurite (in French only)
- ▶ Computer emergency response team - to be checked daily: www.cert.ssi.gouv.fr (in French only)
- ▶ ANSSI (Agence nationale de la sécurité des systèmes d'information) - French National Cybersecurity Agency: www.cyber.gouv.fr/en
- ▶ Assistance and prevention on digital security: www.cybermalveillance.gouv.fr

› THE ROLE OF THE CNIL IN CYBERSECURITY

In addition to being a legal obligation, security of personal data is a major issue for all public and private organisations, as well as for all individuals. The CNIL fully plays its role in cybersecurity, acting primarily around four areas:



Raising awareness among the general public

In order to raise public awareness on the issues of personal data security in everyday use, the CNIL has developed various resources. It provides a number of fact sheets on its website, including:

- › Data loss of theft: how to know if you are impacted and what can you do?
- › Phishing: detecting a malicious message
- › Preventing, spotting and reacting to the hacking of your social accounts
- › How to react to a webcam blackmail
- › 4 ways to better protect your identity online
- › How to react to identity theft
- › CNIL's advices for a good password
- › Private browsing to limit the risk of hacking in your online accounts
- › Cyber reflexes poster - Stay safe on the Internet

The CNIL is also setting up partnerships with relays within civil society and companies.

Read more
(French only)

cnil.fr/mon-quotidien/ma-securite-numerique

Providing guidance to professionals

In implementing an effective cybersecurity policy, all steps are essential. In order to provide professionals with the best possible guidance, the CNIL shares its expertise through a number of resources, including:

- › a recommendation on passwords updated in 2022;
- › a recommendation on event logging;
- › a general guide to data security, including a checklist;
- › resources on website and IT securisation;
- › regular publications on examples of frequent data breaches (ransomware, CEO scams, attacks on messaging, attacks on cloud configuration faults, credential stuffing, device loss, etc.)

In addition to this general advice, which is applicable in most cases, the CNIL also publishes reminders and best practices for different sectors of activity in its various guides (SMEs, associations, local authorities, etc.). The issue of data security also plays an important role in projects that benefit from intensive support from the CNIL as part of its "sandbox" program, which launched in 2021 with the theme of digital health, and a second one on EdTech in 2022.

Read more
(French only)

cnil.fr/cybersecurite

Specific support for SMEs

Many of CNIL's tools available on its website are designed for SMEs, such as the guide to GDPR awareness co-edited with Bpifrance, a GDPR checklist, benchmarks, the guide for data retentions periods, a simplified template for processing records and also fact sheets.

To maximise its impact, the CNIL indirectly reaches all players through associations or professional networks and organisations. The latter also produce, with the assistance of the CNIL, practical guides and assessments tools based on the specific activities of their members.

Data breaches: the assessment 5 years after the GDPR entered into application

Between May 2018 and May 2023, CNIL received 17,483 notifications of data breaches. By grouping together notifications linked to the same same origin, it appears that the number of data breaches notified to CNIL has increased over the years.

The private sector accounts for around two-thirds of data breach to CNIL, including 39% from SMEs.

The public sector is also involved, accounting for 22% of notifications. The vast majority of breaches are the result of a malicious external act.

25%

Other

20%

Human error

55%

External - Malicious acts

Investigations and sanctions on a regular basis

Information security is systematically covered in the 300 formal inspection procedures conducted by the CNIL each year. For instance, compliance with basic principles is checked (passwords, database and network security, etc.), as well as the existence of a breach register, a new obligation under the GDPR.

The most frequent infringements:

- ▶ **data freely accessible by modifying a URL** (lack of authentication, predictable URL), e.g. simply modifying a number in the address bar enables access to other people's documents;
- ▶ **a password policy that does not comply with the CNIL's password recommendation;**
- ▶ **the transmission of passwords in clear text**, for example when creating an online account;
- ▶ **the transmission of data over unencrypted channels (HTTP)**, e.g. in the case of an online form used to send personal data;
- ▶ **the absence of automatic locking of workstation sessions**, enabling a third party to access an information system containing personal data;
- ▶ **insufficient testing to verify the absence of vulnerabilities before rolling out a new system.** This is the case when an organisation develops a new tool (application, website, form) that processes personal data, without providing for a test phase to identify possible vulnerabilities.

Two major trends are showing:

- ▶ **intentional hacking and theft** by malicious third parties;
- ▶ **unintentional errors** made by one or more individuals acting on behalf of the data controller.

In other cases, the causes are usually unknown or undetermined by the organisation which has to notify the data breach.

Half of all notifications are made within the mandatory delay of 72 hours. As a reminder, a La moitié des notifications sont effectuées dans le délai obligatoire de 72 h.

As a reminder, an out-of-delay notification constitutes a breach of the GDPR which can be sanctioned by the CNIL.

Participation in the cyber ecosystem

The CNIL has developed numerous partnerships with key players in cybersecurity, in particular with the French National Cyber Security

Agency (ANSSI). Awareness guide published by ANSSI with contributions from the CNIL "Ransomware attacks, all concerned".

In 2023, the CNIL also gave more than twenty presentations on cybersecurity at events for businesses and local authorities throughout France.

The CNIL is also a member of Cybermalveillance.gouv.fr and of Campus Cyber, ainsi que d'associations telles que le Club EBIOS ou le CESIN.

Ransomware attacks



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Ransomware, or cryptolockers, are malicious programs that prevent victims from accessing their data, by encrypting it and then demanding payment of a ransom in exchange for the decryption key. Ransomware is often transmitted through an email attachment or links that download software or content.

Once present in the host computer system, this program will encrypt all accessible files, making them unreadable. In the case of a corporate network, the software will seek to propagate on all accessible resources.

Ransomware is widespread because it is very profitable for attackers. While this type of attack is sometimes opportunistic, with ransoms generally corresponding to a few hundred euros, larger entities are increasingly targeted for amounts up to several million euros.

Some ransomware attacks use known security flaws in order to propagate through corporate networks and multiply the damage. In particular, by making their victims servers, software and data inaccessible, ransomware attacks make critical services (website, user or internal services) unavailable, very often leading to alteration and/or loss of availability of personal data, which may constitute a personal data breach.

**Commission nationale
de l'informatique
et des libertés**

3 place de Fontenoy
TSA 80715
75334 PARIS CEDEX 07
01 53 73 22 22

www.cnil.fr
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