

Subject Access Request and Proof of Ownership

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Laws on Personal Data

in France and EU

- ▶ 1976: Loi Informatique et Liberté.
- ▶ 1995: Directive 95/46/EC.
- ▶ 2002: Directive 2002/22/EC.
- ▶ 2016: EU-US Privacy Shield and Umbrella.
- ▶ 2016: Regulation (EU) 2016/679 or GDPR.
- ▶ But what are personal data?

Personal data

GDPR definition

‘personal data’ means any information relating to an identified or identifiable natural person (‘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;

What is a personal data?

- ▶ A personal data can be **anything**. The definition is intended to be very broad. It has lot of consequences.
- ▶ A personal data can be a objective or subjective (comments or evaluations).
- ▶ Notice that the information can be true or not. Subjectivity is a source of false/incorrect data but poor data quality or errors also.

What is the relation between data and person?

- ▶ An information can be bind to a person by its **content** or **purpose** or **result**.
 - ▷ **Content:** the information is given directly about the person.
 - ▷ **Purpose:** the information is used to evaluate the behavior of a person.
 - ▷ **Result:** the exploitation of the information has an impact on the person.

How does the data identify the person?

- ▶ An identified person can be **distinguished** from a group of persons.
- ▶ **Direct identification** provides the true identity of a person: his/her real name and any additional information that can remove any ambiguity (possible namesake).
- ▶ **Indirect identification** is related to the concept of **identifier**.

Identifiers

- ▶ An identifier is a value that identifies an element within an identification scheme. **Uniqueness** is an important question.
- ▶ **Absolute uniqueness:** an identifier is assigned only to one element.
- ▶ **Relative uniqueness:** at a given time t , an identifier is assigned only to one element.
(re-allocation is authorized)

Quasi-identifiers

- ▶ A **quasi-identifier** is well correlated with an element but several elements can share it.
- ▶ A quasi-identifier can identify uniquely an element in a small group (no collision).
- ▶ Several quasi-identifiers can create a **profile** which is considered as a (absolute) unique identifier!

Who is concerned?

- ▶ It applies to a **natural person**: adults or children.
- ▶ It does not apply to the data of dead persons neither legal persons.
- ▶ Now you know how to define personal data!

Example

Data	Perso. or not ?
My tax number	✓
INRIA Logo	✗
Color of my tshirt	✓
URL of my webpage	✓
IP address	?

► What is the status of an IP address?

Are IP addresses personal data or not?

Address type	Perso or not ?
Static IP address	✓ (??)
VPN IP address	✗
Free Proxy IP address	✗
Dynamic IP address	✗ or ✓

- ▶ What is the opinion of the CJEU?
 - Case C-131/12 – Google Spain SL and Google Inc. v Agencia Española de Protección de Datos (AEPD)
 - Case C-582/14 – Breyer v Bundesrepublik Deutschland

Can we create a test?

- ▶ **Solution 1:** ask the CNIL.
Too long. . .
- ▶ **Solution 2:** ask the CJEU.
Even longer. . .
- ▶ **Solution 3:** do it yourself!
Collect data from a sample. . . (INSEE)
- ▶ **Solution 4:** Personal data ↔ rights
Try to exercise your rights! (Lauradoux)

Rights of the data subject (I)

Article 15-22

- ▶ **To be informed:** know what's going on.
- ▶ **Access:** get your data.
- ▶ **Rectification:** correct your data.
- ▶ **Opposition:** stop any processing on your data.
- ▶ **Right to be forgotten:** bury results of search engines.

Rights of the data subject (II)

- ▶ **Portability:** get your data in readable format.
- ▶ **Objection against:**
 - Marketing
 - Profiling
 - Automated decision making
- ▶ **Class actions for reparations**

Right to be informed

- ▶ **A data controller must inform you:**
 - what data?
 - how?
 - why?
 - for how long. . .

- ▶ In this before the data collection/processing starts!

Right to access

- ▶ You can request your data and how they have been used to any data controller.
- ▶ The controller has 1 month* to answer your request.
- ▶ Charter of Fundamental Rights of The European Union (Article 8).
- ▶ It can be direct or indirect.

Subject Access Request (SAR)

Hello,

I have visited the website XXX using the IP address 194.199.28.40.

I want a copy of the data you collected during my visit of XXX according to Articles 15-21 of the GDPR.

Thank you

Cedric Lauradoux

Are IP addresses personal data or not?

- ▶ I contacted 20 random websites. . .
- ▶ I was denied 20 times!
Really 20 times. . .
- ▶ IP addresses are **not personal data!**
It is a bit more complicated than that. . .
- ▶ I became addicted to SAR. . .

Decathlon

July 2018

- ▶ I needed data so I submit a SAR at Decathlon.
I was preparing a quiz for my MOOC on Privacy.
- ▶ Email to vosdonneespersonnelles@decathlon.com

Bonjour,

Je souhaiterai faire valoir mon droit d'accès aux données me concernant via la carte Decathlon numéro XZYZZZYVWZW et cela en respect des Articles 15-21 du RGPD.

Merci

Answer 1

- ▶ **First answer of the DPO:** I am on vacation!
- ▶ But I know I was dealing with a professional:
Privacy Is Good For Business (link in his signature)
<https://sites.google.com/a/decathlon.com/personal-data-protection-quality/>
- ▶ **Second answer of somebody else (named Marie).**

Answer II

- ▶ *Bonjour,*
Afin que je puisse la traiter au mieux, j'ai besoin de savoir que c'est bien vous qui êtes à l'origine de la demande.

Pourriez-vous me faire parvenir une copie de votre pièce d'identité ?

- ▶ Do you also want one kidney and my blood with it ?

Why I was mad!

- ▶ I never gave Decathlon my true identity for the fidelity program and I always pay with banknotes!
- ▶ There is **no reason** to give Decathlon my true identity to exercise my rights!
- ▶ **Their request is:**
 - abusive,
 - irrelevant!

Can we achieve something useful out of this?

- ▶ **What are the consequences for SAR?**
- ▶ **Why data controllers enforce bad policy?**
DPAs are to blame for that. . .
- ▶ **What are doing others data controllers?**
 - We submit SARs to Top 50 Alexa websites
 - We submit SARs to 30 popular third parties
- ▶ **Can we do better?**
We need real proof of data ownership!

What are the consequences for SAR?

- ▶ **Data Breach:** anybody can get your data.
Impersonation or Incorrect disclosure.
- ▶ **Privacy Invasion:** you have to expose yourself.
Abusive identity check.
- ▶ **Denial of Access:** you cannot get your data.
Impossibility to authenticate.

Why data controllers enforce bad policy?

- ▶ **We are lazy!** We often obey to their request.
- ▶ Data controllers are used to receive copies of ID.
Why?
- ▶ Data Protection Authorities (DPAs like CNIL) provides template to write SAR!
Providing copies of ID is recommended by DPAs?

Investigations on DPAs

Methodology

- ▶ In December 2018, we review the websites of 28 DPAs in EU with the help of our colleagues.
- ▶ **Step 1:** we explain them the access right, and what the DPA of their home country.
- ▶ **Step 2:** they got 30 min to find some guidelines to write a SAR on the DPA website.

Investigations on DPAs

Results

- ▶ 17/28 DPAs provide guidelines/templates for SAR
- ▶ 4 require to provide systematically ID copy.
6 are safe recommendations.
- ▶ About CNIL:
 - provide ID copy (before September 2018)
 - proportionality must apply! (after September 2018)

Investigations on Top 50 Alexa

- ▶ **We benchmark websites with SAR:**
 - to check if they respect proportionality,
 - to measure data accessibility.

- ▶ **We observe:**
 - 7 sites do abusive identity check
 - 7 sites uses emails to process SAR.
 - The GAFAM have the best procedures

Investigations on third parties

Results

- ▶ Same methodology for third parties.
- ▶ **We observe:**
 - 4 no answer at all,
 - 3 denials of access,
 - 4 incorrect disclosures,
 - 8 abusive identity check.

Can we do better?

▶ **Common misconception:**

- Personal data → identity,
- SAR → copy of an ID.

▶ GDPR applies when I use the **pseudonym "doudou"**.

- What if controller asks for my ID?
- Cédric Lauradoux = doudou or,
- Nataliia Bielova = doudou.
- **True identity is irrelevant here!**

Who is doudou? or. . .

- ▶ **Bad question:** *Who are you?*
Not relevant and abusive in this case.
- ▶ **Good question:** *Can you prove you are doudou?*
We need to establish **ownership**.

How to prove ownership

- ▶ The proof must be **proportional** to the knowledge of the controller on the subject.
- ▶ **The proof can be:**
 - the success to an authentication protocol,
 - an element provided by a trusted third party
 - ◇ verifiable attestation,
 - ◇ the copy of an ID.
 - anything else. . .
- ▶ The request must identify uniquely the subject in the information system (**unambiguity**).

Why do my IP-based SAR fail?

- ▶ The controllers often say that they cannot verify if an IP address is associated to my identity.
- ▶ I try to contact ISPs or IP providers (VPN and free proxy) to get an attestation. . . no answer at all.
- ▶ IP addresses are believed to be personal data but you cannot exercise your rights on them because you cannot claim ownership.

What about cookies?

- ▶ You cannot claim ownership on your cookies!
Cookie not personal data. . . IAB is so happy!
- ▶ Industrial cookies are bad for you! (too much sugar!)
privacy-unfriendly by finality and by design.
- ▶ How do you get a cookie on your browser? (RFC 6265)
 - Subject ← Controller
 - Set-Cookie: ID=1234
 - ID=1234

How to make homemade cookie?

- ▶ **Use a commitment scheme:**
 - Subject \leftarrow Controller
 - `Set-Cookie: ID=1234`
 - Subject \rightarrow Controller
 - `ID=Commit(value)`
- ▶ **Subject Access Request:** Open the commitment!
- ▶ GDPR is an obligation of mean.
- ▶ GDPR need to be an **obligation of result**.

Want more details. . .

Results

- ▶ **Security Analysis of Subject Access Request Procedures.** C. Boniface , I. Fouad , N. Bielova , C. Lauradoux and C. Santos. Rome, Annual Privacy Forum 2019.
- ▶ **IP addresses are not personal data! (but they should be).** C. Lauradoux. Submitted at IMC 2020.
- ▶ **Designing GDPR compliant identifiers.** N. Bielova, C. Castelluccia and C. Lauradoux. In preparation.