

The California Consumer Privacy Act and Impact for Network Measurement and Research

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Who has responsibilities?

CCPA (California)

- “business”:
 - for profit
 - does business in California
 - collects personal information
 - determines the purposes and means of processing of personal information
 - is large:
 - >\$25M gross revenues, or
 - buys or sells personal information for >50k consumers

GDPR (Europe)

- “controller”:
 - determines the purposes and means of processing of personal information
 - of consumers in Europe



What constitutes an identifier?

CCPA (California)

- a persistent identifier that can be used to recognize
 - a consumer
 - a device that is linked to a consumer
- includes
 - device identifier
 - IP address
 - cookie
 - ad identifier
 - customer number
 - telephone number
 - email address
- also includes
 - a combination of personal data that probabilistically identifies an individual or device

GDPR (Europe)

- (*similar*)

What constitutes personal information?

CCPA (California)

- information that
 - is linked (via an identifier) with a particular consumer, or
 - is reasonably linkable (via a join with other data) with a particular consumer
- includes:
 - identifiers themselves
 - Internet activity information
 - browsing history
 - search history
 - interaction with a website or app
 - geolocation
 - inferences to create a consumer profile

GDPR (Europe)

- (*similar*)



Notice requirements

CCPA (California)

- collection / use:
 - categories of personal information
 - purposes
 - categories of sources
- sharing:
 - categories of personal information
 - purposes
 - categories of parties with whom shared

GDPR (Europe)

- (*similar*)



Data minimization requirements

CCPA (California)

- collection and use limited to that provided in notice

GDPR (Europe)

- *(similar)*
- +
- limited to what is necessary in relation to stated purposes

Consent requirements

CCPA (California)

- No consent requirements for collection & use.
- Consent requirements for sharing:
 - terms & conditions for business purposes
 - reasonably necessary and proportionate to achieve the operational purpose:
 - transient use, auditing, customer service, billing, order fulfilment, ...
 - security, debugging
 - internal R&D
 - opt-out consent for personal information of adults
 - opt-in consent for personal information of minors

GDPR (Europe)

- Consent requirements for collection, use, & sharing:
 - terms & conditions for user-contracted services
 - opt-in consent for anything else



Deletion requirements

CCPA (California)

- upon verifiable request, a business shall delete the consumer's personal information and direct any service providers to similarly do so
- Exceptions:
 - when needed to complete a transaction, provide service requested by consumer
 - security, debugging
 - free speech
 - research

GDPR (Europe)

- erasure of personal data if no longer necessary for purpose collected or consent withdrawn

Who qualifies as a Researcher?

- academic?
- within a company?
- for profit?

What qualifies as Research?

For what purpose?

- network security?
- networking?
- R&D?
- other?

CCPA:

- scientific, systematic study and observation, including basic research or applied research that is in the public interest
- compatible with the business purpose for which the personal information was collected
- used solely for research purposes that are compatible with the context in which the personal information was collected
- not be used for any commercial purpose

GDPR:

- archiving purposes in the public interest, scientific or historical research purposes, or statistical purposes

Protections: De-identified / Anonymous

CCPA (California)

- De-identified if and only if:
 - not linked (via an identifier) with a particular consumer, and
 - not reasonably linkable (via a join with other data) with a particular consumer
 - “subsequently pseudonymized and deidentified, or deidentified and in the aggregate”

GDPR (Europe)

- Pseudonymisation:
 - not linked
 - linkable, but requires additional safeguarded information

Protections: re-identification

Re-identification:

- technical safeguards
- protected from any reidentification attempts
- business processes that specifically prohibit reidentification

Data security:

- limit access to the research data
- prevent inadvertent release

Protections: IRB

CCPA:

- adheres to all other applicable ethics laws

Current bills

- IRB



Research exception (to what?)

CCPA (California)

- Research exempt from deletion requirements
- De-identified data exempt from collection, use, and consent requirements

GDPR (Europe)

- Research exempt from deletion requirements
- Non-PII exempt from all requirements?



WHOIS

GDPR

- ICANN and Registrars are likely joint controllers
- Personal information includes information linked to consumers
- Notice includes purposes
- Consent from domain name holders required:
 - terms & conditions for user-contracted services, or
 - opt-in consent

ICANN response

- Trying to figure out the WHOIS purpose ...
- Response to query will only contain:
 - sponsoring Registrar, status, and creation and expiration dates
 - no personal data
- Registrars not required by ICANN to obtain consent
 - Pushes the issue down to Registrars:
 - Is the personal data required for the Registrar provided service?



DNS

Comcast

- Privacy Policy:
 - Collection:
 - network traffic data
 - Use:
 - marketing and advertising.
 - Sharing:
 - Opt-in consent required for sharing of personally identifiable web browsing information
 - No consent required for de-identified information
 - but de-identified not defined here ...
- Public Statement:
 - we do not track the websites you visit ...

Mozilla

- DoH Resolver Policy:
 - Collection:
 - Resolver may collect identifiable user data
 - Use:
 - Only for the purpose of operating the resolver service
 - No combining of collected data with other data to identify users
 - Sharing:
 - No sharing of personal information