Policies for the processing of personal data

Authentication and Authorisation for Research and Collaboration

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Disclaimer

- We’re NOT lawyers (in AARC)
- This is NOT a legal advice
- However, we did and are communicating with lawyers

Data protection in research and education
Processing of personal data

- Accessing services requires information about the users:
  - Computing instances
  - Storage
  - Processing applications
- Providing services involves processing of personal data for:
  - Accounting
  - Monitoring
  - Collaboration
  - Security
  - Incident response
- Research activities are, by default, collaborative
- Data, personal or not, may cross the borders (administrative, national..):
  - Within Europe
  - Outside of Europe

Scope

- Collection of usage data in research infrastructures (RI) and e-infrastructures
- Correlating resource usage to people and groups (accounting and monitoring)
- Accumulation of usage data across countries (and continents)
- Collection and processing of personal data for incident response

NOT in scope

- Policies regarding processing of personal data in research data sets
  - E.g. medical data
- Attribute release:
  - E.g. (which) attributes are provided by the IdP to an SP
- However, if attributes do contain Personally Identifiable Information (PII), data protection policies still apply

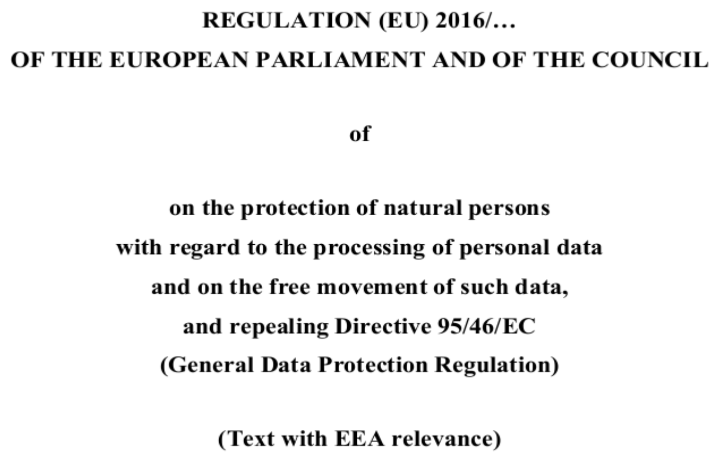
Assumptions:

- All activities undertaken on the infrastructures are assumed as “professional” work, i.e. everything researcher employed by a “legal entity” (university, institute, etc.) does, binds the organisation in it (maybe even implicitly)

Background

- Initial framework overview is described in “Requirements on data to protect from AAI, community, resource providers and e-infrastructure”:
    - Current data protection policies
    - Types of personal data
    - Current national legal framework
    - https://aarc-project.eu/wp-content/uploads/2015/11/MNA3.2-AccountingDataProt-20151130.pdf

- General Data Protection Regulation (GDPR)
    - Adopted 14th April 2016, goes into force 25th May 2018
    - Legally binding for all Member States, without the need for parliament ratification
    - Data Protection Directive 94/46/EC – still valid



REGULATION (EU) 2016/...

OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of

on the protection of natural persons
with regard to the processing of personal data
and on the free movement of such data,
and repealing Directive 95/46/EC
(General Data Protection Regulation)

(Text with EEA relevance)

GDPR changes

- Apply to the processing of personal data by controllers and processors in the EU, regardless where it takes place
- Penalties – up to 4% of annual global turnover or 20M€ (whichever is greater)
- Consent – conditions are strengthened (clear and plain language, explicitly related to the processing, easy to withdraw)
- Breach notification
- Privacy by design
- Right to be forgotten
- Data Protection Officers
- Right to access

Info: www.eugdpr.org

Legal terms and definitions

- Personal data
  - Article 4(1) - Any information relating to an identified or identifiable natural person (‘data subject’), i.e name, IP address, email, geolocation, identifier to physical, gender, mental, economic etc. identity
- Processing
  - Article 4(2) – any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, i.e. collection, recording, organisation, structuring, storage, etc.
- Data Controllers and Data Processing
  - Article 4(7) – Data controller is any person (natural or legal) or entity that decides for which purpose personal data is processed
  - Article 4(8) – Data processor is any person (natural or legal) who process the data on behalf of the controller
  - Data controller is the responsible party that must ensure that all processing of personal data complies with the GDPR
- In the case of research communities, data controllers are most common
- Joint controllers – Article 26(1): “two or more controllers jointly determine the purposes and means of processing”

Rules for data processing, ensured by data controller

- Personal data must be processed legally and fairly
- It must be collected for explicit and legitimate purposes and used accordingly
- It must be adequate, relevant and not excessive, updated when necessary
- Data controllers must ensure that data subjects can rectify, remove or block incorrect data about themselves
- Data that identifies individuals (personal data) must not be kept any longer than strictly necessary
- Data controllers must protect personal data against accidental or unlawful destruction, loss, alteration and disclosure, particularly when processing involves data transmission over networks. They shall implement the appropriate security measures
- These protection measures must ensure a level of protection appropriate to the data

Real life examples

- VO manager (organisation to which VO belongs is a data controller)
  - If VO designates more people that decides which and how data are processed, they're joint controllers
- Identity Providers (IdPs) providing identity information data to Service Providers (SPs)
  - Organisation to which IdP belongs is a data controller
  - However, SPs are also data controllers (in most cases)
- Hub-and-spoke and mesh federations:
  - Mesh federations – no entity between IdP and SP
  - Hub-and-spoke – Proxy that acts both as an SP and an IdP, so it is both a data controller and a data processor

Purpose of processing

- Controller decides the purpose (Article 5(b))
  - Information security
  - Monitoring
  - Capacity planning
  - Security, incident response
  - Invoicing

- All previously mentioned rules apply
  - Informing the user
  - Data minimisation
  - Data integrity

Legal ground for the processing of personal data

- Six distinct grounds for processing (Article 6), with two most relevant for research use cases
  - Article 6.1(a) - User consent: “the data subject has given consent to the processing of his or her personal data for on or more specific purposes”
  - Article 6.1(f) – Legitimate interest: “processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.”
- GDPR has strict requirements for user consent
  - Data protection by design and by default (Article 25), data minimisation
  - Freely and clearly given, revocation at any time, given for a limited purpose
  - However, if a researcher needs access to services to perform their job, is the consent really “freely given, specific, informed and unambiguous indication of the data subject’s wishes” (from Article 4(11))

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⇒ Legitimate interest may be a better option

Release of personal data to third parties

- Any sharing of personal data within the infrastructure must be considered “release” of personal data to a third party (this makes almost all entities data controllers)
  - Log files, accounting records, community membership information
- Consent is a viable option, with caveats (already mentioned)
- Legitimate interest - Article 6.1(f) “in effect requires a balancing of the legitimate interests of the controller, or any third parties to whom the data are disclosed, against the interests or fundamental rights of the data subject” (Opinion 06/2014, Article 29 Data Protection Working Party)
- Release of personal data is permitted (using legitimate interest), under certain safeguards:
  - Informing the user
  - Performing a balancing test, i.e. the stronger the legitimate interest and the less harm the processing does to the interest of the data subject, the greater the likelihood the activity will be lawful
  - Examples: attribute release has a positive impact on a user (accessing the service); security incidents are legitimate interests for a service provider
  - User may object to processing, however, with “compelling legitimate grounds” processing may continue
  - Legitimate interest should NOT be treated as a last resort, nor be automatically applied

Release of personal data outside the EU

- Infrastructure operation almost invariably involves transfer of personal data outside EU
- Recognized countries (Andorra, Isle of Man, Argentina, etc.) – not many, US is not recognized
- Several possible conditions for transfer:
  - User needs to be informed of the safeguards
  - Custom exchange model needs an explicit approval from a data protection authority
  - “Binding Corporate Rules” (BCR)
  - “Standard Data Protection Clauses”
  - “Approved Codes of Conduct”
- Explicit user consent – an option, user needs to be informed of the risks, potential issues
- “Safe Harbor” – invalidated by ECJ in 2015, no adequate protection
- “EU-US Privacy Shield” – not applicable to research environment, potential similar issues as with the “Safe Harbor”

Standard data protection clauses (Model Contracts - MC)

- Controller-to-Controller or Controller-to-Processor
- Needs a signed agreement, legally binding
- Use and application is standard
- Hard to implement for infrastructures
  - Legal entity to legal entity, many independent entities in infrastructures
  - Hard to scale
  - Contracts "by proxy" not legally acceptable
- It is suitable in certain contexts
  - Procurement of commercial cloud services
- If the structure permits, perfectly adequate solution

Binding Corporate Rules

- Drafted by the organisation, unlike MC
- Legally binding
- Approved by the appropriate data protection authority (DPA)
- Must contain the following elements:
  - Privacy principles including transparency, data quality, security of the data, etc.
  - Tools to measure the effectiveness, for example, audits, training, complaint handling, etc.
  - Clear statement that the BCRs are binding
- Adopting procedure:
  - Organisation communicates with a lead data protection authority only
  - Organisation drafts the BCR addressing WP29 criteria
  - Lead authority consults relevant DPAs, i.e. DPAs not covered by EU law
  - EU cooperation closes
  - Once BCR is considered final, organisation may start using it
- BCR is drafted by and applicable to a legal organisation → which most infrastructures are not

BCR-like model

- Infrastructures are not legal organisations → “real” BCR not applicable
- Following the model and guidance of the BCR may be still applicable
- Drafting the Use Policy, following the eight principles and WP29 guidance
- Relatively lightweight framework
- Of course, assignment of risk between participants not legally enforceable, nor governed by legal documents
- Risk assessment
  - Potential harm to the user is very low
  - Processed personal data are not sensitive (usually email, name, affiliation)
  - Such personal data are already public (publications, grants, etc)
  - Accounting data may already be open to consultation by persons with (legitimate) interest
- “Balancing test” should be used, cost vs risk vs feasibility
- “Say what we do, and do what we say”
- Providing a complete set of rules, limiting exchange of data to “inside” entities

Codes of conduct

- Both Directive and GDPR provides Codes of Conduct (CoCo); GDPR specifically permits transfer of data outside of EU (Rec.108; Art.40, 41, 46(2)(e))
- Potentially viable
- Very specific, and has to be approved by the DPA → ongoing effort in REFEDS and GÉANT
- CoCo has to posses binding and enforceable commitments for safeguards
- Transfers based on CoCo do not have to be approved by DPA
- Potential difficulties in using it for distributed infrastructures
- However, if structured in way that the new Code of Conduct model is applicable, may be “safer” to use than other models → further work ongoing
- Cloud Select Industry Group (C-SIG)

DPCoCo v2

- New version addresses:
  - Data protection authorities' (Article 29 WP) comments on the CoCo ver 1.0
  - the upcoming General Data Protection Regulation
  - attribute release from EU/EEA to countries who don't provide adequate data protection
  - attribute release to international organisations
- It may apply to any SP in EU or third countries that offers an adequate level of data protection
- "Attributes necessary for Enabling access to Service"
- Investigation under way whether this could be used for other use-cases, e.g. SP-Proxy and community behind
- Open to public comments:
  - Consultation period is ongoing, ends April 22nd
  - http://tinyurl.com/hv8vo44

Further grounds for transfer of data outside of EU

- Consent (Rec. 111, Art. 49(1)(a), (3))
  - “Explicit consent” (vs “informed consent” – difference not yet clear, possibly no practical difference)
  - User have to be informed of all the risks and safeguards
  - In case of dispute, organisation needs to prove that the user was informed
- Certification
  - Introduced by the GDRP, similar to CoCo, limited duration after which re-certification is needed
- Ad hoc clauses
  - Between data exporter and data importer, preapproved by the DPA
- Controllers’ compelling legitimate interest
  - If none of the others apply
  - Transfer is not repetitive, limited number of data subjects (for infrastructures, this probably won’t work)
  - Informing the DPA (possibly per each transfer?)
  - Limited in scope, unclear practical use
- Public interest, public registers, etc.

Conclusion

- Exchange of personal data within EU – framework is already present
- Model contracts, BCR, code of conduct – release of data to non EU countries
- Probably all may have their role, with modifications/caveats
- NOT BCR, but BCR-like approach
- One possible solution – Code of Conduct, Article 46.2(e) “an approved code of conduct … with binding and enforceable commitments of the controller … in the third country to apply the appropriate safeguards …” without requiring any specific authorisation from a supervisory authority
  - Work ongoing for providing framework for accessing services outside EU
- More info:
  - https://aarc-project.eu/
  - https://aarc-project.eu/wp-content/uploads/2016/12/AARC-DNA3.5_Recommendations-for-Processing-Personal-Data_2016_11_07_v4_DG.pdf

Thank you

Any Questions?

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https://aarc-project.eu

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