# POSTER: A Model to Support Usability Evaluations of Privacy⋆

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The poster presents a new perspective on the evaluation of privacy where usability criteria, rights of the data subjects, and privacy principles are intertwined. These are visually represented as the three variability axes of a cube. As the evaluation is done in respect to a context of use, for each such specific context a cube is created (see Fig. 1). The proposed model is accompanied by examples of intersection points between the three axes, taken from legislation.
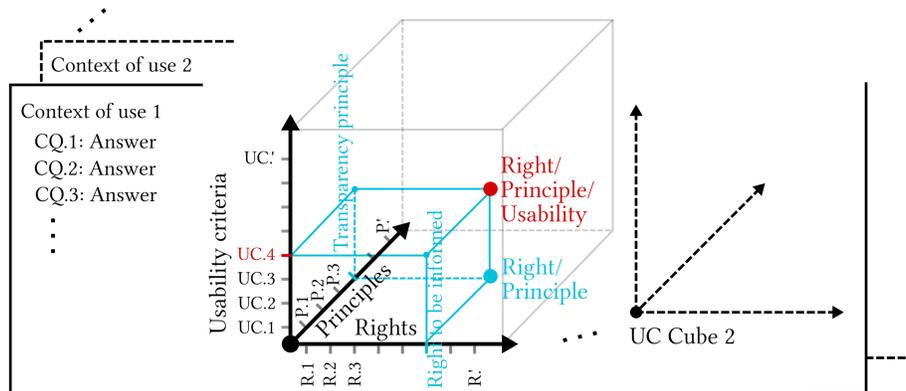
We extend the methodology proposed by the EuroPriSe[1] certification scheme by adding usability criteria. The poster shows how the criteria of EuroPriSe are reorganized to fit with the cube model. The set of the proposed usability criteria are thought to produce measurable evaluations of the effectiviness, efficiency, and satisfaction with which privacy goals of the data protection are reached. Examples of such measurements are included in the poster.

The methodology comprises of:

- *30 usability goals* identified from the GDPR text;
- *23 usability criteria* defined based on the goals; grouped in one of the following categories:
  (i) information and communication addressed to the public or to the data

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[1] EuroPriSe Criteria for the certification of IT products and IT-based services – v201701, 2017, https://www.european-privacy-seal.eu

subject, *(ii)* consent, *(iii)* data subject rights, *(iv)* purpose of processing, and *(v)* legitimate interest of either the processor or the data subject.

- *10 context eliciting questions*;
- *three use cases* employed for testing and exemplifying the proposed methodology; taken from the pilots done in the ongoing European project SCOTT involving cyber-physical systems technologies on:
  (i) Assisted Living and Community Care System, *(ii)* Air Quality Monitoring, *(iii)* Car-as-a-sensor in industrial facilities.

Keywords: Usable privacy · Personal data protection · GDPR · Usability criteria · HCI · Usable privacy evaluation · Certification · Visualization · Methodology.