Stadt Ulm

ulm

Data Ethics Concept for the City of Ulm

PREAMBLE

The data ethics concept contains ethical guidelines for the design, programming and operation as well as for the use of data, applications and IT systems by the City of Ulm. The concept determines ethical principles and value propositions for Ulm's city administration to optimize the handling of the city's data. With this concept, the City of Ulm is pursuing the goal of using digitalization to further the common good with applicable means. Negative excesses must be prevented through ethical guidelines. In the center of attention are the citizens of Ulm, the concept of citizen orientation and the goal of added value for the city, the region, and the society.

The City of Ulm is aware that a data ethics concept alone does not guarantee public welfare-orientation or the inclusion and protection of vulnerable groups. It can only be a guideline and a principle for further action and requires constant reflection by all stakeholders upon their goals.

Digital technologies have the potential to make the city's provision of administrative services more efficient and citizen oriented. However, it is important that technology is not an objective in itself, but a means to achieve public tasks.

The data ethics concept applies to all actions of the city administration. The City of Ulm is working towards an adoption of the data ethics concept by the entire city group including all holdings. As part of its involvement in committees, associations and companies, the City of Ulm commits that all these bodies respect the contents of the data ethics concept, too. The ethical regulatory framework for this action is recorded in the German constitution, in particular in the fundamental rights, and in the European legal requirements, namely the GDPR. In addition, the relevant legislation and procedural rules relating to the use of data apply.

1. SECURING PRIVACY

The privacy of citizens is of the highest priority and will be respected. Personal data must be protected. Privacy by Design ensures that only necessary data is collected and processed and that it is securely protected. The right of citizens to access the personal data collected about them by the city within the meaning of the GDPR is safeguarded.

When collecting, processing and publishing data, data protection must be taken into account from the beginning. Personal data is subject to the individual's right to informational self-determination guaranteed by the constitution and the established jurisdiction. The collection and, if necessary, transfer of personal data is not carried out for the purpose of selling or obtaining any payment in return.

2. OPENING DATA

Open data are all data sets which are made freely accessible to society in the interest of the general public without any restrictions for free use, further distribution and free further reuse. Open urban data is a necessary element of technological sovereignty. The aim of urban action must be to make this data available in a transparent, barrier-free, complete, machine-accessible and sustainable manner. Innovations and improvements in urban cohabitation are promoted by the open provision of all collected, non-personal urban data.

The aim is to benefit from using existing data to create transparency, make knowledge accessible, involve citizens, improve already existing government services, generate new knowledge through a scientific debate and enable new business models.

3. ENSURING THE TRANSFER AND FURTHER USE OF OPEN DATA

The City of Ulm is counting on the binding adoption of open standards, document and data formats as well as communication protocols to improve transparency, coordination between its institutions and the cooperation with civil society, business and science.

The city, society, science and business should benefit from a high level of dissemination and the use of the data and creations, which are collected and created by the City of Ulm and its holdings or on its behalf. Everything beyond is to be regulated in a statute. The city administration of Ulm will respect these principles when passing on data.

4. AVOIDING DEPENDENCIES AND STRENGTHENING SOVEREIGNTY

The city of Ulm strives for the greatest possible technological sovereignty. All third-party services and products used should be developed based on commonly agreed and open standards.

The use of previously established and widely recognized standards ensures that services and products can be continuously developed so the city will get the most value out of it. Any strong dependence on individual companies is to be avoided. The independence cannot be guaranteed with proprietary interfaces and exchange formats. In justified cases, however, proprietary software can be used. Open interfaces and exchange formats should always be used for the possibility of a later exchange of individual components.

5. SECURING DEMOCRATIC CONTROL

Digital democracy enables greater citizen participation in the design and management of cities and urban services. Within the limits set by the municipal regulations and the main statutes of the City of Ulm, the municipal council and its committees advise and decide on the objectives, development, implementation and use of digitization projects.

6. TRANSPARENT USAGE OF DATA, ALGORITHMS AND AUTOMATED SYSTEMS

The responsibility of democratically elected bodies for decisions made by the city must be maintained. Automated procedures must not replace them. The criteria of automated administrative decisions must be disclosed. In communications of the city with the citizens, it must be clear from the beginning if a machine is used or decisions are solely made by means of technical systems without any involvement of an employee.

Tools, data and algorithms should be transparent and open. A procedure practiced in this way enables the City of Ulm and all others to keep results and work processes transparent, comprehensible and reproducible for third parties.

In all data-related decision-making mechanisms, the origin of the underlying data and the inherent distortion effects must be reflected.

7. ENSURING THE SAFETY OF THE SYSTEMS BEEING USED

The technical systems being used are protected against cyberattacks, manipulation and unauthorized access according to the latest state of the art and in all conscience.

8. EMBEDING PUBLIC SERVICE OBLIGATIONS, SUSTAINABILITY AND SOCIAL RESPONSIBILITY

The development and testing of new technologies and the combining, aggregating and interpreting of different data sets can produce unexpected and possibly unwanted side effects. The digitalization process must therefore be committed to the public interest at all times, without marginalizing room for experimentation.

The goal of digital transformation must always be a process-related, social, economic and/or ecological improvement of urban administrative services and offerings, both for present and future generations. This should be done as economically and cost efficient as possible.

9. EVALUATION AND SANCTIONS

As soon as the existing legal framework, laws and municipal statutes are overtaken by new, superior technologies, ethical consequences must be in all conscience. The rules must be further developed by and with the democratically legitimized bodies.

The data ethics concept and its compliance will be regularly reviewed and revised if necessary. This includes an external evaluation.

The form of possible sanctions will be worked out in a trial phase and will then be implemented.

This is the English translation of the Data Ethics Concept of the City of Ulm. Please note that the German version is considered as valid due to its approval by the City Council in October 2020.

For further reading

Bundesministerium für Wirtschaft und Energie. (2019): *Europäische Datenschutz-Grundverordnung*. Online: https://www.bmwi.de/Redaktion/DE/Artikel/Digitale-Welt/europaeische-datenschutzgrundverordnung.html [accessed 05.10.2019]

City of Barcelona (2019): *Manifesto in favour of technological sovereignty and digital rights for cities*. Online: https://www.barcelona.cat/digitalstandards/manifesto/0.2/ [accessed 08.10.2019]

City of Darmstadt (2019): *Ethische Leitplanken für die Entwicklung Darmstadts zur Digitalstadt*. Online: https://www.digitalstadt-darmstadt.de/digitalstadt-darmstadt/beiraete/ [accessed 08.10.2019]

City of Eindhoven (2017): *Smart Society Charter—IoT Architecture principles & guidelines*. Online: https://data.eindhoven.nl/explore/dataset/eindhoven-smart-society-iot-charter/information/ [accessed 08.10.2019]

City of Friedrichshafen and KoRiS – Kommunikative Stadt- & Regionalentwicklung (2018): *Integriertes Stadtentwicklungskonzept (ISEK)*. City of Friedrichshafen.

Data Ethics Commission (2019): *Opinion of the Data Ethics Commission*. Online: https://www.bmi.bund.de/SharedDocs/downloads/EN/themen/it-digital-policy/datenethikkommission-abschlussgutachten-kurz.pdf [accessed 08.10.2020]

Erling, J. (2018): *Sozial unangepasst? Das wird Folgen haben*. Online: https://www.welt.de/politik/ausland/article174746362/Ueberwachungsstaat-China-Sozial-unangepasst-Das-wird-Folgen-haben.html [accessed 23.10.2019]

European Union: *Regulation (EU) 2016/679 of the European Parliament and of the Council 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) (2016)*. Official Journal of the European Union.

Lix, B., & Stüben, J. (2013): *Big Data – Bedeutung Nutzen Mehrwert*. Online: https://www.pwc.de/de/prozessoptimierung/assets/pwc-big-data-bedeutung-nutzen-mehrwert.pdf [accessed 01.10.2019]

Plattform Innovative Digitalisierung der Wirtschaft (2015): *Stakeholder Peer Review Deutschland: Intelligent vernetzt - Status- und Fortschrittsbericht 2015*. Nationaler IT-Gipfel; Plattform Innovative Digitalisierung der Wirtschaft; Fokusgruppe Intelligente Vernetzung.

Raffl, C.; Lucke, J. von; Müller, O.; Zimmermann, H.-D., & Vom Brocke, J. (Hrsg.) (2014): *TosiT: The open societal innovation toolbox - Werkzeuge für offene gesellschaftliche Innovation* (3. Aufl). Berlin: Epubli.

Schieferdecker, I.; Bruns, L.; Cuno, S.; Flügge, M., & Isakovic, K. (2018): *Urbane Datenräume—Möglichkeiten von Datenaustausch und Zusammenarbeit im urbanen Raum*. Fraunhofer FOKUS. Online: https://cdn0.scrvt.com/fokus/774af17bdc0a18cd/69f7a401c168/UDR_Studie_062018.pdf [accessed 08.10.2019]

UK Government (2018): Data Ethics Framework, Department for Digital, Culture, Media & Sport, London. Online: https://www.gov.uk/government/publications/data-ethics-framework/data-ethics-framework [accessed 08.10.2019]