Technologies and solutions for compliance, privacy preservation, green and responsible data operations (AI, Data and Robotics Partnership) (RIA)

Digital technologies, methods, architectures and processes for user-friendly, safe, trustworthy, compliant, fair, transparent, accountable and environmentally sustainable collection, storage, processing, querying, analytics and delivery of data. The technologies should facilitate sharing and manipulation of data in compliance with prevailing and emerging legislation (e.g. GDPR) for data processors and data subjects/rightholders and other stakeholders. The technologies and solutions should enable safe and secure data handling, sharing and re-use in the context of common European data spaces in various situations and application areas. The scope also includes the combination of technological and social innovation, technologies and solutions that enable environmentally sustainable data operations (e.g. by optimising/minimising/de-centralising processing, transfer and storage of data and avoiding unnecessary data manipulations, using energy-harvesting sensors/devices etc.), as well as technologies and solutions for ensuring human, fair and ethically sound collection, processing and manipulation of data, in line with the principles of responsible/trustworthy AI.

The actions under this topic should liaise with relevant cyber-security actions under Cluster 3. The actions are expected to build on Horizon 2020 actions on privacy-preserving technologies and liaise with appropriate actions from Horizon 2020 topic ICT-13-2018-19, as well as with data-centric H2020 European Research Infrastructures. They should also liaise with the Data Spaces Support Centre (to be set up under the Digital Europe programme), in order to provide methods and solutions for the emerging common European data spaces (to be deployed under the
Digital Europe programme). Likewise, they should liaise with other relevant national, regional and trans-national initiatives such as Gaia-X and EOSC, especially to ensure interoperability and reasonable re-use of common reference models, processes and building blocks for a pan-European data infrastructure.

In this topic the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

This topic implements the co-programmed European Partnership on Artificial Intelligence, Data and Robotics.

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