## Exploring the Intersection Between the General Data Protection Regulation and the Artificial Intelligence Act

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Abstract : The European legal reality is on the eve of significant change. In European Union law, there is talk of a "fourth industrial revolution", which is driven by massive data resources linked to powerful algorithms and powerful computing capacity. The above is closely linked to technological developments in the area of artificial intelligence, which has prompted an analysis covering both the legal environment as well as the economic and social impact, also from an ethical perspective. The discussion on the regulation of artificial intelligence is one of the most serious yet widely held at both European Union and Member State level. The literature expects legal solutions to guarantee security for fundamental rights, including privacy, in artificial intelligence systems. There is no doubt that personal data have been increasingly processed in recent years. It would be impossible for artificial intelligence to function without processing large amounts of data (both personal and non-personal). The main driving force behind the current development of artificial intelligence is advances in computing, but also the increasing availability of data. High-quality data are crucial to the effectiveness of many artificial intelligence systems, particularly when using techniques involving model training. The use of computers and artificial intelligence technology allows for an increase in the speed and efficiency of the actions taken, but also creates security risks for the data processed of an unprecedented magnitude. The proposed regulation in the field of artificial intelligence requires analysis in terms of its impact on the regulation on personal data protection. It is necessary to determine what the mutual relationship between these regulations is and what areas are particularly important in the personal data protection regulation for processing personal data in artificial intelligence systems. The adopted axis of considerations is a preliminary assessment of two issues: 1) what principles of data protection should be applied in particular during processing personal data in artificial intelligence systems, 2) what regulation on liability for personal data breaches is in such systems. The need to change the regulations regarding the rights and obligations of data subjects and entities processing personal data cannot be excluded. It is possible that changes will be required in the provisions regarding the assignment of liability for a breach of personal data protection processed in artificial intelligence systems. The research process in this case concerns the identification of areas in the field of personal data protection that are particularly important (and may require re-regulation) due to the introduction of the proposed legal regulation regarding artificial intelligence. The main guestion that the authors want to answer is how the European Union regulation against data protection breaches in artificial intelligence systems is shaping up. The answer to this question will include examples to illustrate the practical implications of these legal regulations.

Keywords : data protection law, personal data, AI law, personal data breach

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