

How do the European Court of Human Rights rulings in environment-related cases affect the future of Environmental Informatics?

Agata Majchrowska ¹, Robert Majchrowski²

Abstract: The United Nations, in 2021, decided to appoint the right to live in a healthy environment as a Human Right. Consequently, the Council of Europe issued their updated instruction on Article 46 of the Convention in 2022. Furthermore, in April 2023, the President of the ECHR claimed the issues in the Tribunal, mainly related to implementation and the execution of judgements, from two different perspectives. Substantially, the importance of the existence of the Rule of Law, and more operationally - the necessity to deal with already clarified issues or these so evident that should not raise doubts or concerns. Next, the Council of Europe released a dedicated announcement to underline the occurrence of Human Rights related to the environment. In addition, the climate change combating-based claims are already taken into consideration by the Great Chamber of the Tribunal and go more profound than the regular Human rights-based case as the potential judgement actually may be regarded as being related to the possibility of claiming the range or/and speed of measures that are taken by the states to combat climate change. Hence, the final goal of this research is to deliver the summary of the existing potential of both Environmental Informatics and the concept of ESG reporting in order to provide predictions of the consequences of accepting the ECHR Great Chamber's case on the fair and justified conditions for prioritizing climate actions and their costs. Hence, some prioritization matrices have been considered to be used by software architects and developers in achieving the desired aim of optimized balancing climate goals with business-related development goals.

This ongoing research has been meant to provide a thorough study to uncover and highlight the general importance of Fundamental Rights and the ways of employing Environmental Informatics that may support this comprehensive set of Climate-Action-related efforts for the sake of humans and their health and safety. The observed instances have met the concept mentioned within the discussion about the Right to Safety as the Human Right (and, accordingly, avoiding harm and its following costs). The research has been meant and designed to answer the question of how to implement these elements into software and where there are potential red lines to be considered from the perspective of various stakeholders (including developers and regulators). A multidisciplinary character of the research has been consciously projected to go slightly beyond the typical findings. It has been founded on the initial research-native assumption that some requirements

¹ Research Lab CODR.PL, WWSIS Faculty of Applied Informatics, SEIHLE Programme, Poland, Wroclaw, seihleprogramme@codr.pl, <https://codr.pl/seihleprogramme>

² University of Leeds, Faculty of Economics, SEIHLE Programme, England, Leeds, seihleprogramme@codr.pl

should be mandatory as if they may be qualified from the perspective of the equally important and sensitive dilemma of automated decision-making processes, that should and can support decision-makers in both unveiling the potential of aggregated data in optimizing decision-making process and accompanying proceedings. The additional point of the discussion remains the currently open question for the ongoing discussions of the sociologically accepted limits of users' responsibility or irresponsibility that should be noted as the outcome of using the software.

The hypothesis that is placed on the ground of the research is supposed to answer the questions posed hereof, presumably indicating Einstein's approach about the role of responsibility as a primer and the regularities and irregularities of acts of the authorities based on the rule of law and justified exceptions that are capable of covering the cases when minority comes to be more imperative than globality. Consequently, it seeks the answer to how to deploy the soft obligation to impose the regular use of software-based solutions to make reasonable and justified exceptions only consciously. The sub-hypothesis is based on the assumption that Environmental Informatics meets the same kind of challenges, concerns and remarks as typically addressed in the generally regarded Artificial Intelligence area of concerns, especially in the field of ethics. The study - methodologically concerning binary logic notation and vector databases model - is supposed to answer whether Fundamental Rights are to be considered True or False and how the vector databases model may be a supportive cast to resolve the conflict between two different, even almost essential priorities. Finally, despite the general goal of foreseeing the scenarios that may speed up the specific change, the final results are meant to gain interim conclusions, whether Environmental Informatics may be considered the gatekeeper or a watchdog in order to respect and enforce Human Rights.