The use of algorithmic systems raises challenges not only for the specific sector in which they are operated, but also for society as a whole. The right to life, the right to fair trial, the presumption of innocence, the right to privacy and freedom of expression, workers’ rights, the right to free elections, and the rule of law itself, all may be all impacted.

The impact of ‘algorithms’ used by the public and private sector, in particular by internet platforms, on the exercise of human rights and the possible regulatory implications has become one of the most hotly debated questions today.
ALGORITHMS AND HUMAN RIGHTS

ASSESSING THE CHALLENGE
There is a wide range of types and applications of algorithmic systems. The extent of their impact on human rights depends on the specific purpose for which they are used, their possible knock-on effects, the way they function, their accuracy, complexity and scale. A system that does not create an adverse human rights impact at individual level may nevertheless have a collective, negative impact on specific groups or the population at large which States should consider. The expert study on the human rights dimensions of automated data processing techniques (in particular algorithms) and possible regulatory implications (DGI(2017)12) of December 2017 concludes that all human rights are potentially impacted by the growing use of algorithmic systems.

RESPONDING TO THE CHALLENGE
The Council of Europe Recommendation on the Human Rights Impacts of Algorithmic Systems proposes a horizontal set of guidelines for both States and public and private sector actors. It aims to promote an environment of legal certainty in which both human rights and innovation can thrive. The guidelines cover multiple aspects of the deployment of algorithmic systems: data management, modelling and analysis, transparency, accountability and effective remedies, as well as precautionary measures, research, innovation and public awareness.

Precautionary approach
The speed and scale of socio-technical developments require constant monitoring and adaptation of applicable governance frameworks to protect human rights effectively. A precautionary approach is obligatory, not least because algorithmic systems interlock and become interdependent when operating in the same environment, which can generate serious and often unexpected consequences. Human rights impact assessments should be conducted at regular intervals prior to and throughout the lifecycle of an algorithm. Certification and auditing mechanisms for automated data processing and decision-making techniques should be developed to ensure their compliance with human rights.

Data management
States should carefully assess what human rights and non-discrimination rules may be affected as a result of the quality of the data that are being put into and extracted from an algorithmic system. Datasets often contain bias and may stand in as a proxy for classifiers such as gender, race, religion, political opinion or social origin. The provenance and possible shortcomings of the dataset must also be considered, as must be the possibility of its inappropriate or decontextualised use. Particular attention should be paid to inherent risks, such as the possible identification of individuals from data that were previously processed based on anonymity or pseudonymity, and the generation of new, inferred, potentially sensitive data and forms of categorisation through automated means. Based on these assessments, States should take appropriate action to prevent and effectively minimise adverse effects.

Public accountability
Public entities should be held accountable for the decisions they take based on algorithmic processes. Impacts should be considered ‘high risk’ as they often carry significant legal weight for individuals and opting-out is either impossible or associated with negative consequences. Effective mechanisms must be in place that enable redress for individuals that are negatively impacted by algorithmically informed decisions.

Awareness-raising
Enhanced public awareness and discourse are crucially important. All available means should be used to empower the general public to critically understand and deal with the logic and operation of algorithms. This can include, but is not limited to, information and media literacy campaigns. The Council of Europe Declaration on the manipulative capabilities of algorithmic processes calls on member States to pay attention to the capacity of algorithmic systems to use personal and non-personal data to sort and micro-target people, identify individual vulnerabilities and exploit accurate predictive knowledge, thereby reconfiguring social environments in order to meet specific goals and vested interests.

Considering the complexity of the field, there is a clear need for additional institutions, networks and spaces where different forms of algorithmic decision-making are analysed and assessed in a trans-disciplinary, problem-oriented and evidence-based approach.