"Uncovering the Relationship Between Standards and Emerging Digital Technologies"
by **Marion Ho-Dac**
Professor of Private Law at Artois University,
Member of the Research Centre Law Ethics and Procedures (CDEP, UR 2471), France
Member of the French Commission on Artificial Intelligence Standardisation (CNIA, AFNOR)
& Fellow at Academy of International Affairs NRW, Germany
marion.hodac@univ-artois.fr

Call for inputs: "The relationship between human rights and technical standard-setting processes for new and emerging digital technologies (2023)", *Report of the High Commissioner for Human Rights*, *Issued by Office of the High Commissioner for Human Rights*

To be sent to: ohchr-technical-standards@un.org and registry@ohchr.org
Email subject line: *Input for Report on technical standards and human rights*

Note: This contribution is based on two draft papers (forthcoming publication)
-M. Ho-Dac, "Considering Fundamental Rights in the European Standardisation of Artificial Intelligence: Nonsense or Strategic Alliance?" (*under review*)
-M. Ho-Dac, "La normalisation, clé de voûte de la règlementation européenne de l'intelligence artificielle (AI Act)" (*accepted for publication in* Dalloz IP/IT, April-May 2023)

Response to the questionnaire

- *How do technical standards for new and emerging digital technologies impact the enjoyment of human rights; what are related risks and opportunities?*

1. General considerations: Technical standards and fundamental rights are interrelated

Standards are voluntary technical or quality requirements with which products, manufacturing processes or services may comply. They generally come to support a legislative action but they can also support government policy beyond legislation.[1] Standardisation bodies mission is to perform, at least in part, a "public interest function".[2] This is particularly true in Europe.[3] Pursuant to Regulation (EU) No 1025/2012 on European standardization, when the European Commission requests "one or several European standardisation organisations to draft a European standard or European standardisation deliverable", the latter "shall be market-driven, *take into account the public interest* as well as the policy objectives clearly stated in the Commission's request".[4] At the international level, IEC and ISO also state that they "encourage the development of products, systems and services that are *safe, efficient and environmentally friendly*".[5] Both safety and the protection of the environment are a good illustration of public interests that States aim to promote through legislation and supporting standards.

---

[1] See "Using and referencing ISO and IEC standards to support public policy", esp. p. 16. https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100358.pdf
[2] OECD/ISO (2016), "International Regulatory Co-operation and International Organisations: The Case of the International Organization for Standardization (ISO)", OECD and ISO, by Jeanne Dupendant, esp. p. 22.
[3] See recently Communication of the European Commission titled "An EU Strategy on Standardisation - Setting global standards in support of a resilient, green and digital EU single market", COM(2022)31, 1 February 2022,
[4] Article 10 (1), Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, OJ L 316, 14 November 2012, p. 12-33 (our emphasis).
[5] Using and referencing ISO and IEC standards to support public policy, op. cit.,

Against this background, I argue that fundamental rights considerations are part of this concept of "public interest"; they even constitute an important component of these public interests that States intend to uphold depending on the regulatory context. Hence, technical standards may be intended to support fundamental rights considerations as components of public interests, in the area of emerging digital technologies.

2. Opportunities of the impact of technical standards on the enjoyment of human rights

Technical standards have a close relationship with fundamental rights in the field of digital technologies. They are not – and should not be – separate and considered as unrelated fields of expertise/action. Indeed, emerging digital technologies give rise to new, greater and larger risks for individuals, their human rights, and the society, including its political core values such as democratic regime and the rule of law. The protection of fundamental rights shall be equally guaranteed in the analogue world and online, based on a human-centred approach of emerging digital technologies and their regulation.[6] The use of those technologies is by nature immaterial and connected to the use of the Internet or other connectivity capabilities. While it is primarily the responsibility of States to ensure this "equivalent protection" between the analogue world and the digital environment, tech organisations must also be made accountable. This implies a balanced and fair multi-stakeholder governance, including fundamental rights consideration, of the digital ecosystem, via national, regional and/or international (mandatory) regulation and (national, regional and/or international) standardisation.

This does not mean that standards should have per se to implement or balance fundamental rights – that task is indeed the one of States and public authorities – but rather that their content should reflect fundamental rights considerations and impacts. Therefore, the practical implementation of such (fundamental rights-oriented) standards by organisations should make it possible to limit the potential risks inherent in (emerging technologies-enhanced) products or services, starting with the risks of fundamental rights' violation.

3. Risks of the impact of technical standards on the enjoyment of human rights

The very fact that standardisation is interconnected with fundamental rights could raise questions and valid criticisms. Indeed, the traditional function of standards is rather to reflect the state of the art in a given field. Beyond technical aspects, the societal impact of standards may be a factor in their making-process. But this is less far-reaching than the integration of fundamental rights considerations into a standard. On the one hand, one may have the impression that States and national lawmakers are delegating their competence to private standardisation bodies to deal with the constitutional issue of fundamental rights. It echoes, more broadly, the criticism of "democratic deficit" that surrounds the adoption of standards, at least in Europe within the European Standardisation Organisations.[7] On the other hand, certain standards are given a strong scope, in particular in the European normative context, almost

---

[6] In that sense, see European Commission, "Declaration on European Digital Rights and Principles", COM(2022)28 final, 26 January 2022.

[7] See M. Eliantonio & C. Cauffman (dir.), *The Legitimacy of Standardisation as a Regulatory Technique in the EU*, Elgar, 2020; H-W. Micklitz, R. van Gestel, "European integration through standardization: How judicial review is breaking down the club house of private standardization bodies", (2013), 50, *Common Market Law Review*, Issue 1, pp. 145-181. In the context of the EU regulation of artificial intelligence, see M. Ebers, "Standardizing AI – The Case of the European Commission's Proposal for an Artificial Intelligence Act", *DiMatteo, L., Poncibò, C., & Cannarsa, M. (Eds.). (2022), The Cambridge Handbook of Artificial Intelligence: Global Perspectives on Law and Ethics, Cambridge University Press;* M. Veale & F. Zuiderveen Borgesius, "Demystifying the Draft EU Artificial Intelligence Act", *Computer Law Review International*, 4/2021, p. 97-112.

equivalent to the law. Based on this "law-like dimension" of standards, the question of their "non-constitutional making-process" and subsequent closed access (no open publication contrary to "state" law) should be addressed urgently.

However, I argue that those significant "constitutional" weaknesses have to be treated as such and should not prevent from exploring fundamental rights considerations that are essential in standardisation of emerging technologies such as artificial intelligence.

- ***What are examples that best illustrate the relationship between technical standards for new and emerging digital technologies and human rights?***

A first example is ISO 26000:2010 "Guidance on social responsibility". It provides guidance for "assessing an organisation's commitment to sustainability and its overall performance",[8] including the respect for society and the environment based on fundamental rights.[9] The United Nations has also proposed a transposition of CSR regulatory framework to the digital ecosystem for tech multinational companies.[10] But this ISO standard does not provide for requirements and consequently cannot give rise to certification.

A second example is ISO/IEC 27701:2019 on Privacy Information Management System (PIMS). This is an international standard providing for governance and security measures to be put in place for the processing of personal data, extending two well-known IT security standards (ISO/IEC 27001 and ISO/IEC 27002). Its implementation should participate in upholding the protection of personal data as a fundamental right (as it is the case in particular under EU Law). A third example is ISO/IEC 23894:2023 on Information technology, Artificial intelligence, Guidance on risk management. Its scope's description reads as follows: "This document provides guidance on how organizations that develop, produce, deploy or use products, systems and services that utilize artificial intelligence (AI) can manage risk specifically related to AI. The guidance also aims to assist organizations to integrate risk management into their AI-related activities and functions. It moreover describes processes for the effective implementation and integration of AI risk management."

Finally, it may be noted that based on the proposal of the European Commission for a Regulation on Artificial Intelligence (so-called "AI Act" proposal), a European standardization process on AI is ongoing in Europe under the CEN-CENLEC JTC 21. The draft standardisation request (SR) on AI (based on the future Article 40 of the AI Act) explicitly mentions the "importance" of future standards "to ensure a high level of protection of safety and *fundamental rights* for EU citizens".[11] It also refers more concretely to "the *fundamental rights implications* of the European standards and European standardisation deliverables requested".[12] Following the SR, European Standardisation Organisations will have the task to monitor that these orientations, based on EU legal provisions, are met.

---

[8] https://www.iso.org/iso-26000-social-responsibility.html
[9] One of the principles of social responsibility developed by ISO 26000 is the respect of human rights (esp. §4.8 of the said standard).
[10] See Human Rights Council Resolution 47/23 on "New and emerging digital technologies and human rights", 16 July 2021.
[11] Recital 2, draft Standardisation Request on AI, December 2022 (our emphasis).
[12] Recital 14, *op. cit.* (our emphasis).

- ***What are the duties and responsibilities of standard setting organizations and their stakeholders in effectively integrating human rights considerations in technical standard-setting processes for new and emerging digital technologies?***

In the European context, duties and responsibilities of European Standardisation Organisations (ESOs) are laid down in Regulation (EU) No 1025/2012 on European standardization (*op. cit.*) and, in case of "harmonised standards" (i.e. characterised by the possible publication of their references in the Official Journal of the European Union, providing then a presumption of conformity with the EU law provisions concerned to the organisations which implement the said harmonised standard), in the standardisation request of the European Commission (Article 10, Reg. 1025/2012, *op. cit.*).

Based on this latter Regulation, ESOs "shall encourage and facilitate an appropriate representation and effective participation of all relevant stakeholders, including SMEs, consumer organisations and environmental and social stakeholders in their standardisation activities." (Article 5). This obligation indirectly implies that societal and individual interests must be fairly taken into account during the European standard-setting process and ultimately protected by the standards, depending on the area of intervention of the latter. This is particularly true in the case of standards that have a strong impact on human life and thus on fundamental rights, such as emerging digital technologies. It can therefore be deduced from this provision of secondary EU law, in our opinion, that legal experts, scholars and NGOs in the field of fundamental rights protection must participate in the drafting of standards in the field of digital technologies. According to Article 7 of the same Regulation, this is also true for the participation of public authorities in European standardisation. Most of the EU Member States, as well as the EU its self, have public bodies supporting fundamental rights in general and in digital context, such as regulatory authorities for the protection of privacy and personal data.

As regards European Commission standardisation request, a good example is provided with the above-mentioned draft standardisation request (SR) on AI, based on the future Article 40 of the AI Act proposal. The SR explicitly mentions the "importance" of future standards "to ensure a high level of protection of safety and *fundamental rights* for EU citizens".[13] The ESOs - CEN and CENELEC - will have the task to monitor that these orientations, based on EU legal provisions, are met. More precisely, pursuant to Article 2 of the SR, they "shall prepare a work programme indicating all the standards listed in Annex I […] including the actions to be undertaken to ensure effective participation of EU small and medium enterprises and civil society organisations, and *to gather relevant expertise in the area of fundamental rights*."[14]

- ***What are common obstacles to effectively integrating human rights considerations in technical standard-setting processes for new and emerging digital technologies?***
- ***Which standard-setting processes and organizations are particularly relevant for safeguarding and promoting human rights in the context of new and emerging digital technologies?***
- ***What are the challenges faced by various stakeholders in their meaningful and sustainable participation in technical standard-setting processes for new and emerging digital technologies?***
- ***What are good practices, mechanisms or models for effective integration of human rights considerations in technical standard-setting processes? Are there particular***

---

[13] Recital 2, draft Standardisation Request on AI, December 2022 (our emphasis).
[14] Our emphasis.

General context: Challenges of fundamental rights consideration in standards-setting processes

In terms of processes, the integration of fundamental rights considerations is not easy. The main reason is that it is primarily large private organisations, the ones most affected by future standards, which are expert and very active (i.e. financially supported by their organisation) in the preparation of standards. Their private interest – primarily economic and oriented towards growth and innovation – is not, understandably, that of the protection of fundamental rights which has no direct economic or innovation implications.

This explains why the major tech operators are inclined to promote ethical guidelines and charters for emerging technologies such as AI. This is a way to move towards the respect of a certain human-centred moral duty without legal constraints. While standards are not binding either, they have a stronger impact thanks to their regional or global uniformity and their genuine support for the public interest. This supports the idea that standards on the digital sector should consider fundamental rights.

By contrast, NGOs and academic (or independent) experts representing civil society and the protection of fundamental rights are generally not represented, due to lack of information, time and resources (at least, based on my practical experience, at the European level).

What can be done about this? This is a difficult question. It is first and foremost a question of political will, which must come from States and public authorities but also from private organisations. In my opinion, there is (at least and among other options) three main key-words and key-actions: information; dialogue; counter-expertise.

1. Information

Firstly, information is needed. It is the standardisation organisations, with the support of States and private organisations, that should reach out to representatives of civil society, academics and experts specialising in the governance of emerging technologies and the crucial issues of protecting fundamental rights in this context. International and regional intergovernmental organisations, such as the UN, the OECD or the Council of Europe could also support the momentum. The aim is to create awareness among these actors that their action in the field of standardisation would be valuable.

2. Dialogue

Second, a multidisciplinary dialogue is needed. Exchanges between, on the one side, technical-oriented experts in standardisation driven by "the state of the art" and specialised in technical/engineering aspects of emerging technologies and, on the other side, civil society representatives, including NGOs, academics, independent activists, specialised in digital technologies should be institutionalised. To this end, dedicated workshops and working meetings should be organised in the generic context of the defence of fundamental rights through standards applicable to emerging technologies, but also within the specific framework of the committees currently working on the issue (e.g., SC42 within ISO and JTC21 within CEN-CENELEC).

3. Counter-expertise

Thirdly, we need to provide a humanities and social sciences counter-expertise. Draft standards for digital emerging technologies with a high societal impact should be critically reviewed by independent experts representing in particular the humanities and social sciences disciplines

(such as law, sociology, media literacy and philosophy). This "non-technical" (i.e. outside computer science and engineering domains) expertise, in response and dialogue with the predominant technical expertise in ICT standards-setting process would guarantee a dimension oriented towards the protection of individuals, society and the planet in their most crucial aspects (which corresponds to the role of the protection of fundamental rights).

- ***How accessible are standard-setting processes and processes for new and emerging digital technologies for a broad range of stakeholders, in particular for civil society organizations and human rights experts? By which metrics is "access" measured in this context?***

In Europe, it is possible for a researcher or professor attached to a European university to participate in ESOs standardisation work free of charge. This requires an agreement between the university and the relevant national standards body. This is my case as a professor of law in a French university; I joined AFNOR and its AI standardisation commission. But it is true that, in practice, the path is not so easy to follow.