

## **(Responsible) Standardisation of Disruptive Digital Technologies**

Today, technical standards for the digital domain are developed mostly by engineers and computer scientists, typically employed by large manufacturers. As a result, technical expertise and economic interests guide standardisation and thus technical development. Societal issues are mostly considered outside technical working groups (WGs; as e.g. in ETSI's Smart City Task Force), if at all. ANEC, the European consumer voice in standardisation, can be active only in a handful of relevant WG, despite funding by the EU. The same holds for other such groups, e.g. the EU's 'Annex III organisations'. Plus, they all represent their respective 'constituencies' (consumers, workers, the environment, SMEs) as opposed to society at large.

This is an untenable situation in general, but even more so in the case of technologies that have the potential to change society – for better or worse. According to the MIT, examples of such disruptive technologies include e.g. Artificial Intelligence and Machine Learning (aspects of which are under standardisation by e.g. ISO, IEC, IEEE and ETSI), the Internet of Things and Cyber-security, all of which are components of, or utilised by, smart systems (which are also under standardisation in many different bodies).

Some things just don't change: “*The shaping process [of a technology] begins with the earliest stages of research and development*” (this is, of course, a bi-direction process - earlier experiences with technology also shape expectations and requirements)<sup>1</sup>. Standardisation represents such an early stage; it is also typically the first stage to which societal stakeholders may contribute (as opposed to e.g. corporate Research and Innovation; at least in theory). This suggests to exploit the standards setting process to contribute broader, non-technical (e.g. societal, environmental, legal and ethical) expertise to the development of disruptive technologies. This, in turn, requires active contributions from an additional broad range of stakeholders including citizens, NGOs, unions, (local) administrations as well as e.g. lawyers, sociologists and philosophers.

This session solicits contributions that discuss aspects of such a ‘Responsible Standardisation’ from both a practical and a theoretical perspective. Potential topics include but are by no means limited to:

- The roles and representation of societal stakeholders in standardisation.
- Contributions of societal stakeholders to standards development.
- Ways to enable participation of societal stakeholders on an equal footing..
- Legitimacy and influence of the different stakeholders in standards development.
- Societal norms and their impact on standardisation.
- Potential ethical and legal issues.

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<sup>1</sup> Williams, R.; Edge, D. (1996). The Social Shaping of Technology. Research Policy, 25, 856-899. DOI: 10.1016/0048-7333(96)00885-2.

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