

# STI Studies

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## Editorial

### Decision Making in Modern Societies

Driven by the emergence of new technologies, modern societies are confronted with the necessity of making decisions which often turn out to be extremely difficult. Although modern technology is created in order to make life easier – and often does so – decisions at the individual, the organisational or the institutional/societal level are morally more complicated than before. Given this complexity, traditional decision-making patterns are no longer appropriate and new procedures and institutional settings are required.

Certain factors, which have driven this development, can be identified: First, the internationalisation and globalisation of technology, which requires efficient and legitimate global standards of interaction and communication (see the contribution of *Raymund Werle* and *Eric J. Iversen*). Second, the emergence of new forms of cross-border coordination, e.g. in international networks, which go beyond traditional governmental practices and sometimes counteract national policies (see *Petra Ahrweiler*, *Nigel Gilbert* and *Andreas Pyka*). Third, the compelling force of new technological opportunities and practices such as prenatal diagnostics which invalidates common patterns of decision making in the boundary area of life and death (see *Bernhard Wieser*). Last but not least the increasing autonomy of smart technology which gives rise to technological systems that replace human decision making by automated procedures of tiny, invisible, sensor-equipped computers (or networks of computers, see *Kerstin von Locquenghien*).

In all these cases, human decision making is assisted or even replaced by new technological devices and procedures or by new socio-technical settings in the first place. But rather than eliminating the need for decisions these developments increase the complexity of decision making. As a consequence, the implications concerning opportunities and risks are not adequately considered or remain unknown.

Modern societies need time to cope with the opportunities and the risks of new technology. Social practices and societal institutions change more slowly than technology. And often, the social adoption of new technologies results in unanticipated socio-technical settings. This issue of *STI-Studies* contributes to the reflection about socio-technical transformations which currently take place in different sectors of society.

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