

Sweden aims to pioneer responsible development and use of future technologies

Today's rapid technological advances create major opportunities in individualised care, artificial intelligence, self-driving vehicles and smart climate solutions. However, these opportunities also create challenges with respect to ethics, privacy and regulatory barriers. The Government is therefore appointing a Committee to address the challenges of technological development and create conditions to accelerate the use of new technologies.

“I want Sweden to become a testbed for new solutions. For this to happen, it would be good if we can be faster at dealing with the ethical, legal and regulatory challenges triggered by artificial intelligence, self-driving cars and other technologies,” says Minister for Enterprise and Innovation Mikael Damberg.

There are new technologies, for example, to detect and treat people at increased risk of disease, or fully developed diseases. Individualised care using tailored treatments – precision medicine – is advancing rapidly, offering completely new possibilities to prevent and cure both rare hereditary diseases and common public health diseases. This will increase the treatment accuracy for e.g. certain forms of cancer.

Rapid pace of development

The pace of development is accelerating in other domains as well. Self-driving vehicles and vessels, both on land and in the air, have the potential to improve traffic flows, benefitting both people and the environment. The fifth generation of wireless systems (5G) means everything can be connected, from machines and buildings to everyday objects, and new innovative services are expected to gain major traction. Access to enormous amounts of data, advanced algorithms and powerful computational capacities are prerequisites for further advances. However, important issues such as liability, privacy and security must be clarified.

The Committee's task is to highlight any conflicting goals, regulatory challenges and barriers to the responsible use of new technologies, and propose how to deal with them. We must be able to fully harness the benefits of technological development and innovation. Outdated regulatory frameworks and sluggish systems risk preventing new applications from being put to good use in society. This fact has been highlighted in the Government's innovation partnership programmes and discussed in the National Innovation Council. Technological development is global, and it is very important to find joint solutions. The Committee will therefore collaborate with international stakeholders such as the World Economic Forum and countries that Sweden has innovation partnerships with.

Facts about the Committee

The Committee will help the Government to identify policy challenges, contribute to reducing uncertainty surrounding existing regulations, and accelerate policy development linked to fourth industrial revolution technologies. The Committee will initially focus its

efforts on the application domains of precision medicine, connected industry, and connected and autonomous vehicles, vessels and systems.

The Committee will continuously present policy-development proposals to the Government and, where relevant, also survey the need to adapt regulatory frameworks. A reference group, including representatives from government agencies, business and organisations experienced in policy development, will be linked to the Committee.

The final report is due by 31 December 2021. The Committee is to submit annual interim reports on its work to date by 31 December 2019 and 2020.