

Cybersecurity in Finland 2019–2029

Vision and objectives

The vision of the CyberSec^{FIN} cybersecurity ecosystem is to make Finland a globally recognised pioneer in cybersecurity business, research and competence as well as in the preparation for cyber threats. Cybersecurity research and teaching, business innovations and the development of related technologies will be central sources of economic growth and national competitive advantage in the future.

Comprehensive systemic solutions, in which all private and public actors carry out parallel actions, are needed to realise the vision. Finland currently has no uniform national framework programme or significant projects for the systematic development of cybersecurity business and competence, or for maintaining current competence.

The following strategic goals have been set for the activities:

1. Finland achieves international recognition as a pioneer in the cybersecurity business by developing innovative cybersecurity solutions and services.
2. A world-class cybersecurity competence cluster is created in Finland through the cooperation of research and educational institutions.
3. Finland's Cyber Security Research Centre is built through the cooperation of cybersecurity research institutes and units.
4. Cybersecurity knowledge, learning and innovation networks are created in Finland. Scientific breakthroughs, innovations, technological development, new business activities, increased productivity and national welfare are promoted with research and education.

The aim of the ecosystem is to help enterprises expand and deepen their business activities to new cybersecurity business sectors. This is achieved through cooperation among companies, research and educational institutions as well as other players. When successful, the ecosystem programme is estimated to double the number of staff working in the cybersecurity sector and to provide a turnover increase of several billion euros.

Strong background work

According to the 2018 research by the World Economic Forum (WEF) that maps 'the future of jobs', especially the progress of digitalisation will considerably change the labour market. This provides businesses with challenges as well as opportunities. When businesses update their change and labour force strategies during the research period from 2018 to 2022, they have a genuine chance to utilise new technologies. Entirely new jobs are being created in order to gain additional value.

In the Global Risks Report 2019, WEF has listed global top ten risks in terms of their likelihood and impact. A large-scale cyber-attack is ranked as the fifth most likely and its impact as the seventh most severe, which reflects a general trend of cyber risks in the digital world. Based on the estimates provided in a report by the Centre for Cybersecurity, the financial losses resulting from cybercrime will rise globally to 3,000 billion dollars by 2020.

The role of cybersecurity will grow as risks and threats increase. Both the public sector and businesses face an increasing need to invest in cyber risk preparedness. According to Forbes, the value of cybersecurity products and services was more than 114 billion dollars in 2018, in other words, 12.4% more than in the preceding year. This year the market value will be 124 billion and in 2020 even 170 billion dollars.

The cybersecurity sector is estimated to presently employ 6,000 people in Finland, its turnover being about a billion euros. Many of the businesses operating in Finland are relatively small, but some large international cybersecurity enterprises also operate here.