



Artificial Intelligence, Big Data and Fundamental Rights

Country Research Finland 2020

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¹ Report prepared by Ecorys and the University of Turku. While every effort has been made by the FRA contractor to refer to relevant national institutions, policy developments and law relating to the field of AI and fundamental rights, given the wide reach of AI developments and the quickly evolving nature of the field there may be omissions or recent developments at national level that are not referred to in this country research.

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Abbreviations

ADM	Automated Decision Making
AI	Artificial Intelligence
CEPIS	The Council of European Professional Informatics Societies
EC	European Commission
ECHR	European Convention of Human Rights
ETAİROS	Algorithmic Agencies and Law and Legal Tech Lab
EU	European Union
FCAI	Finnish Center of AI is
FRA	European Union Agency for Fundamental Rights
GDPR	General Data Protection Regulation
ICT	Information Communication Technology
IFIP	International Federation for Information Processing
JHA	Justice and Home Affairs
KELA	Finnish Social Insurance Institution
MIGRI	Finnish Immigration Services
NNDETF	National Non-Discrimination and Equality Tribunal
OECD	Organisation for Economic Co-operation and Development
OSCE	Organization for Security and Co-operation in Europe
TEK	Academic Engineers and Architects in Finland
TIVIA	Finnish Information Processing Association
VERO	Tax Office of Finland
VTT	Technical Research Centre of Finland

1 Constitutional and institutional context

1.1 Map of the major stakeholders

1.1.1 Parliament and government

Finland has a centralized constitutional system. Laws are adopted by [the parliament](#) (*Eduskunta*) and prepared by various [ministries](#) (*Ministeriö*) for [the government](#) (*Hallitus*) based on the wishes of the current government. Citizens can suggest laws either directly to their representatives or via a [citizens' initiative](#) (*Kansalaisaloite*), which needs 50,000 registered votes to be taken into consideration in the parliament.

Primary governmental actions in the data economy and artificial intelligence are found in the Information Policy report ([Tietosuojapoliittinen selonteko](#)) and the Artificial Intelligence (AI) programme for Finland ([Tekoälyaika – AI Finland](#)), which published its final report and proposals on 14 March 2019. The major governmental development project related to AI technologies is AuroraAI, which is presented in more detail in section 1.5.1 on page 14.

The active and relevant ministries that are developing AI technologies are the Ministry of Finance (responsible for the national AI project AuroraAI), the Ministry of Economic Affairs and Employment (responsible for the Tekoälyaika – AI Finland project), the Ministry of Social Affairs and Health (all the applications related to healthcare and social care) and the Ministry of the Interior (the Police and Finnish customs).

1.1.2 Decentralised bodies

On a decentralised level, the 19 [regions](#) (*maakunta*) and 310 [municipalities](#) (*kunta*) execute the legislation and policies drafted at the central level. The advocate for the municipal and regional authorities is [the Association of Finnish Local and Regional Authorities](#) (*Kuntaliitto*).

Every region has their [regional council](#) (*maakuntaliitto*) operating as a statutory, joint municipal authority. Regional councils also act as the international representative of their regions, including the EU's Structural Fund programmes and the EU Committee of the Regions. Regional administration is handled by [the Regional State Administrative Agencies](#) (*Aluehallintovirastot*) and [the Centres for Economic Development, Transport and the Environment](#) (*Elinkeino-, liikenne- ja ympäristökeskus, ELY-keskus*).

Finland has six [Regional State Administrative Agencies](#). The agencies handle the implementation and supervision of the law in their own regions. The Regional State Administrative Agencies are responsible for basic public services; legal rights and permits; rescue services and preparedness; occupational safety; education and culture; and environmental permits. The Regional Agencies have not published AI pilots, but the Regional State Administrative Agency for Western and Inland Finland has briefly commented on how AI technologies may impact overall safety in the society.²

Finland has 15 Centres for Economic Development, Transport and the Environment, which are responsible for business advisory and development services, environmental protection, traffic safety and the integration of immigrants.³ These centres work under the central government as regional authorities together with the Regional State Administrative Agencies. The Centre of Southern Savonia has promoted a pilot project to use AI and chatbots in their business advisory and development services.⁴

Finland is divided into [municipalities](#). The municipalities are self-governing and have the power to collect municipal tax from their residents. They are obliged to organize a variety of services for their residents that include, for example, health care, childcare and education. Policy decisions are taken by the municipal council, who are selected through a municipal election every four years. The council elects the members for the municipal board whose duty it is to prepare and implement council decisions.

1.1.3 Public bodies and agencies

Two essential public bodies that take part in the discussion of AI from a fundamental rights perspective are the [Non-Discrimination Ombudsman Finland](#) (*Yhdenvertaisuusvaltuutettu*) and [the Data Protection Ombudsman](#) (*Tietosuojavaltuutettu*). The Non-Discrimination Ombudsman has taken an active role and stated that credit and loaning institutions should take decisions based on more than statistical factors and data. This report is discussed in more detail in section 1.5.2 on page 15 and is based on statements made by the National Non-Discrimination and Equality Tribunal of Finland (NNDETF, 2018).

Other public agencies that have relevance in the use of AI in Finnish society include Finnish Customs (*Suomen tullit*), the Financial Stability

² 'Kuinka tekoäly vaikuttaa kokonaisturvallisuuteen? (Länsi- ja Sisä-Suomi) - Tiedotteet 2019 - Aluehallintovirasto', 2019, <http://www.avi.fi/web/avi/-/kuinka-tekoaly-vaikuttaa-kokonaisturvallisuuteen-lansi-ja-sisa-suomi->.

³ More detailed information about the services, responsibilities and functions of the Centres for Economic Development, Transport and the Environment is available at Ministry of Economic Affairs and Employment of Finland, 'Työ- Ja Elinkeinoministeriö: ELY Centres', accessed 20 March 2020, <https://tem.fi/en/ely-centres>.

⁴ Valtiovarainministeriö, Finansministeriet, 'Syksyn 2018 rahoitushaku', 2018, <https://vm.fi/robhaku2018-syksy>.

Authority (*Rahoitusvakausrahasto*), the Government ICT Centre Valtori (*Valtion tieto- ja viestintätekniikkakeskus*), the VATT Institute of Economic Research (*Valtion taloudellinen tutkimuskeskus*), the Population Register Centre (*Väestörekisterikeskus*), the Finnish Digital Agency (*Digi- ja väestötietovirasto*), Statistics Finland and the Tax Administration. Many of these agencies have been mentioned in the media as having links and pilots that touch on AI technologies ([Verohallinto/Veroväki](#), [Tilastokeskus](#), [Valtori](#)), but these have not led to crucial changes in the missions of these agencies.

No governmental agency leads the development of AI or emerging information technologies, with work primarily done by state-owned and controlled non-profit limited liability company called the VTT Technical Research Centre of Finland Ltd. VTT is a part of Finland's innovation ecosystem and operates under the mandate of the Ministry of Employment and Economy. VTT works with AI technologies in many sectors including flexible manufacturing, predictive maintenance, automatized quality control and demand-based production.⁵ VTT was the responsible partner also for the report, *The overall view of artificial intelligence and Finnish competence in the area*, delivered to the Prime Minister's Office in 2019.⁶

1.1.4 Research institutions

Over the last few years, various universities and research institutions have been actively re-branding earlier technology and engineering research under the AI umbrella and launching initiatives related to emerging technologies.

The national research institution VTT, as described in the previous chapter operates also in the field of AI research and presents following core areas for the AI research and application: *industry, health & wellness, energy systems, manufacturing, remote sensing, cyber security & connectivity, machinery, and transportation*. VTT lists ethical AI as a source of competitive edge.⁷

[The Finnish Center of AI](#) is one of the Flagship Programmes by the Academy of Finland. FCAI is a nation-wide competence centre for Artificial Intelligence in Finland, initiated by Aalto University, University of Helsinki, and the VTT Technical Research Centre of Finland. FCAI communicates its mission as *"to create Real AI for Real People in the Real World—a new type of AI, which is able to operate with humans in*

⁵ VTT: Technical Research Centre of Finland, 'AI & Big Data', accessed 20 March 2020, <https://www.vttresearch.com/en/topics/ai-big-data>.

⁶ H. Ailisto et al., 'Tekoälyn Kokonaiskuva Ja Kansallinen Osaamiskartoitus-Loppuraportti (The Overall View of Artificial Intelligence and Finnish Competence in the Area).' (Prime Minister's Office, 2019).

⁷ VTT: Technical Research Centre of Finland, 'AI & Big Data'.

the complex world—and to renew the Finnish industry with the new AI." In addition to academic research, FCAI is working towards building a wider AI ecosystem including companies and public organizations using AI. The basis of FCAI comes from their technology and engineering research, as the Center was established by joining forces between the AI research in University of Helsinki and Aalto University.

The University of Helsinki also corresponds together with a technology vendor Reaktor for the online course Elements of AI, which has reached tremendous popularity with over 350,000 students. The course teaches the basics of AI technologies and will be soon available in all EU languages.⁸

From the other universities, the University of Turku has promoted a multidisciplinary approach towards AI technologies and launched a multidisciplinary minor studies programme for undergraduates.⁹ The University of Tampere (including both the University of Tampere and the Tampere University of Technology, founded on 1 January 2019) has a strong position both in technological research¹⁰ as well as an ethical and philosophical perspective towards AI.¹¹ The University of Oulu has a long history with technology and engineering, partly as a result of the strong presence of the Nokia Corporation during the last decades. The University of Oulu has various AI-related research groups.¹² Most of the other universities (13 in total), universities of applied sciences (23 in total) and other higher education institutions are also somehow involved with AI technologies.¹³

1.1.5 Judiciary

Finland has a representative democratic form of government, and it follows the tradition of the European continental civil law culture. The state is led by the principle of *rule of law* written in the constitution. The judicial system of Finland is organized under the Ministry of Justice. The system consists of the independent courts of law and administrative courts, the prosecution service, the enforcement authorities, the prison service, the probation service and the avenues of legal aid.

⁸ Elements of AI, 'A Free Online Introduction to Artificial Intelligence for Non-Experts', English, 2019, <http://www.elementsofai.com/>.

⁹ Tekoälyakatemia, University of Turku, 'Welcome to Turku AI Academy!', accessed 20 March 2020, <https://sites.utu.fi/tekoalyakatemia/en/en-frontpage/>.

¹⁰ University of Tampere, 'Tekoäly: Tampereen korkeakouluyhteisö', accessed 20 March 2020, <https://www.tuni.fi/fi/tutkimus/tekoaly>.

¹¹ Tampereen korkeakouluyhteisö, 'Kaupunkiseudun ihmiskeskeiset tekoälyratkaisut (KITE) (Human-Centered AI Solutions for the Smart City)', Kaupunkiseudun ihmiskeskeiset tekoälyratkaisut (KITE), accessed 20 March 2020, <https://projects.tuni.fi/kite/in-english/>.

¹² University of Tampere, 'ROSE – Robots and the Future of Welfare Services', accessed 20 March 2020, <https://www.tuni.fi/en/research/rose-robots-and-future-welfare-services>; University of Oulu, 'Artificial Intelligence Research', accessed 20 March 2020, <https://www.oulu.fi/university/artificial-intelligence>.

¹³ Ailisto et al., 'Tekoälyn Kokonaiskuva Ja Kansallinen Osaamiskartoitus–Loppuraportti (The Overall View of Artificial Intelligence and Finnish Competence in the Area).'

The courts are divided in two: there are general courts dealing with civil and criminal cases (District Courts, Courts of Appeal and Supreme Court) and administrative courts dealing with cases between individuals and the administration (Regional Administrative Courts and Supreme Administrative Court). The Chancellor of Justice and Parliamentary Ombudsman monitor the system of justice.

Special courts like the Market Court (*markkinaoikeus*) or the Insurance Court (*vakuutus oikeus*) are part of the independent court system and deal with cases of their specialized fields.

In Finland, no constitutional court exists. Possible constitutional issues in statutes are dealt with beforehand by the Parliament's Constitutional Committee, and breaches of constitutional rights are tried in general or administrative courts based on the priority of the constitution over secondary legislation.

1.1.6 Public-private partnerships and relations between the private and public sector

The major agency to develop public-private relationships is [Business Finland](#). Business Finland helps and funds companies within the areas of high growth and innovations. Business Finland is a public agency with 600 employees and 40 offices globally. Business Finland that it "*offers Finnish companies a unified customer journey for innovation activities, internationalization, investments and tourism promotion.*"¹⁴ Its AI programme, called [AI Business](#), is one focus area for the Business Finland's consultancy and financing.

The development work to promote the secondary use of well-being data in Finland involved extensive co-operation between the government and ministries, public organizations, universities and research institutions, and healthcare organizations.¹⁵ Already in 2015,¹⁶ The Ministry of Social Affairs and Health began its preparations for drafting the Act on the

¹⁴ Business Finland, 'About Us: A Path to Global Markets', accessed 20 March 2020, <https://www.businessfinland.fi/en/for-finnish-customers/about-us/in-brief/>.

¹⁵ Eduskunta Riksdagen, 'HE 159/2017 vp Asiantuntijalausunnot (List of Expert Opinions): Hallituksen Esitys Eduskunnalle Laiksi Sosiaali- Ja Terveystietojen Toissijaisesta Käytöstä Sekä Eräiksi Siihen Liittyviksi Laeiksi (Government Proposal to Parliament on the Secondary Use of Social and Health Information and Some Related Laws)', accessed 20 March 2020, https://www.eduskunta.fi:443/FI/vaski/KasittelytiedotValtiopaivaasia/Sivut/HE_159+2017_asiantuntijalausunnot.aspx; Sitra, 'Hyvinvointidataa yhdeltä luukulta – Isaacus-hankkeessa luotiin perustukset (One stop shop for wellbeing data - The Isaacus project laid the foundations)', 2018, <https://www.sitra.fi/artikkelit/hyvinvointidataa-yhdelta-luukulta-isaacus-hankkeessa-luotiin-perustukset/>.

¹⁶ See government proposal HE1592017 at: Ministry of Social Affairs and Health, 'Frequently Asked Questions about the Act on Secondary Use of Health and Social Data', accessed 20 March 2020, <https://stm.fi/en/frequently-asked-questions-about-the-act-on-secondary-use-of-health-and-social-data>.

Secondary Use of Health and Social Data (*Laki sosiaali- ja terveystietojen toissijaisesta käytöstä*) that finally [entered into force on 26 April 2019](#). The concrete implications of the change in the law are unclear, but the act might have a significant impact for research, public-private partnerships and innovation. Even though the GDPR was not in effect during the legislative drafting, its early versions were considered in the drafting of the act.¹⁷ The Constitutional Law Committee of the Parliament of Finland requested special attention towards data protection issues.¹⁸ The Ministry of Social Affairs and Health answers many privacy-related questions [at Frequently asked questions \(FAQ\) about the Act on Secondary Use of Health and Social Data](#).

1.1.7 Civil society

A few organizations within the civil society have also been active in the discussions related to AI technologies. [For example the Committee of 100 in Finland \(Sadankomitea\)](#) and [Peace Union of Finland \(Rauhanliitto\)](#) have promoted critical perspectives towards autonomous weapon systems and unmanned aerial vehicles, by participating in the public discussion¹⁹ and organizing events.²⁰

Technology-related associations like TIVIA ([Finnish Information Processing Association](#)) and TEK ([Academic Engineers and Architects in Finland TEK](#)) have got attention towards their ethical codes and guidelines. The Ethics Code by TIVIA and TEK's Code of Honour ([TEK:n kunniasääntö](#)) and the Guidebook to Ethics of Technology ([Tekniikka ja etiikka](#)) offer more general approaches to the ethical questions related to information technology, but as AI technologies have been seen as a source for emergent and urgent ethical concerns, these guidelines have been given new emphasis in the general discourse on AI and ethics.

Various national institutions and research organizations have been active in organizing events and briefings for the civil society. Close collaboration with the third sector and civil society has been noted also [in the national AI Finland Programme's final report](#).²¹

¹⁷ See government proposal HE1592017 at: Ministry of Social Affairs and Health, 'Frequently Asked Questions about the Act on Secondary Use of Health and Social Data'.

¹⁸ Constitutional Law Committee, 'Valiokunnan lausunto (Opinion of the Committee) PeVL 1/2018 vp Perustuslakivaliokunta Hallituksen esitys eduskunnalle laiksi sosiaali- ja terveystietojen toissijaisesta käytöstä sekä eräksi siihen liittyviksi laeiksi Sosiaali- ja terveysvaliokunnalle (The Constitutional Law Committee Government proposal to Parliament on the Secondary Use of Social and Health Information and some related laws For the Committee on Social Affairs and Health)', 2018, https://www.eduskunta.fi:443/FI/vaski/Lausunto/Sivut/PeVL_1+2018.aspx.

¹⁹ Sadankomitea, 'Autonomiset asejärjestelmät', 4 November 2018, <https://www.sadankomitea.fi/teema/autonomiset-asejarjestelmat/>.

²⁰ Rauhanliitto, 'Tekoälyn etiikka sodankäynnissä 26.11.', 16 November 2018, <https://rauhanliitto.fi/ajankohtaista/tapahtumat/tekoalyn-etiikka-sodankaynnissa-26-11>.

²¹ Ministry of Economic Affairs and Employment of Finland, 'Leading the Way into the Era of Artificial Intelligence: Final Report of Finland's Artificial Intelligence

1.2 International relations

1.2.1 General strategy

[The Government Report on Finnish Foreign and Security Policy](#) states that Finland's foreign and security policy is predicated on the values and rights enshrined in the constitution. The report lists shared values, democracy, accountable governance and well-functioning institutions to be the essential building blocks for a stable, secure and flourishing society. Trust is emphasized as an integral part of successful foreign and security policy.

Being part of the European and Nordic communities is highlighted throughout the foreign policy report. Finland wants to promote pragmatic and result-oriented approach in its communities. In addition to the European Union, Finland wants to bear its responsibility in the international organizations and institutions. The safeguarding of peace, security and the rule of law are integral affairs for Finland's participation in the European and international communities.²²

The Government Report is based on Finland's long-term vision which states that "In 2025, Finland is an inventive, caring and safe country where we all can feel important. Our society is based on trust." According to the vision "Finland is open and international, rich in languages and cultures. Finland's competitiveness is built on high expertise, sustainable development and open-minded innovations based on experimentation and digitalisation."²³

1.2.2 European linkages – Council of Europe and OECD

The Ministry of Foreign Affairs notes that Finland wants to act as an active party in developing the Council of Europe to be an assembling organization for Europe and a close collaborator to the European Union and the Organization for Security and Co-operation in Europe (OSCE).²⁴ Finland supports the Council of Europe's vision and operation in promotion of democracy, human rights and the rule of law. A more detailed presentation is available at the website of [the Ministry of Foreign Affairs](#).

Programme 2019' (Helsinki, 18 June 2019), <https://tem.fi/en/publication?pubid=URN:ISBN:978-952-327-437-2>.

²² Prime Minister's Office, 'Government Report on Finnish Foreign and Security Policy', September 2016.

²³ Prime Minister's Office, 'Government Report on Finnish Foreign and Security Policy'.

²⁴ Ministry of Foreign Affairs of Finland, 'Foreign and Security Policy in International Organisations', Ministry for Foreign Affairs, accessed 20 March 2020, <https://um.fi/foreign-and-security-policy-in-international-organisations>.

During the Finland's EU presidency in 2019, [Finland promoted two main targets](#), "A competitive and socially inclusive EU" and "Towards an inclusive economic union". Special attention was raised to the revolution of technologies, including AI, data economy and other related emerging information and communications technologies. These themes were discussed, for example, at a High-Level Conference '[Enhancing Sustainable Growth: Skills and Smart Work Organisation in the Digital Era](#)'. Also, the Finnish president Sauli Niinistö observed the possible societal impacts of AI in [his speech the Parliamentary Assembly of the Council of Europe](#).

In AI-related relationships, Finland has emphasized the idea of (fair) data economy.²⁵ As data is the starting point for AI applications, and the competition with other regions of the world is intensive. Finland has committed to creating the principles of fair data economy, which makes effective data sharing and utilization of different data sources possible, but still leaves space for citizens' own control.

1.2.3 International linkages

Outside the collaboration within the European Union, there is no information available about straight linkages established with other countries or regions related directly to artificial intelligence or data economy. The major themes and issues related to this technological era are linked to the earlier themes and institutions, for example, autonomous weapon systems, non-discrimination, privacy and security. An example of international linkages related to information technology is [TIVIA](#) (introduced in the part Civil Society), which operates as the Finnish representative in the IFIP ([International Federation for Information Processing](#)) and the CEPIS ([The Council of European Professional Informatics Societies](#)).

1.3 National strategies and guidelines

1.3.1 Information Policy Report (2018)

In December 2018, the Prime Minister Juha Sipilä's Government of 2015–2019 submitted to parliament [the government report on information policy and artificial intelligence](#) (*Tietopoliittinen selonteko*). In the report, information policy is studied from various perspectives including emerging technologies, values and ethical principles, and economic impacts and competence. The report constitutes the

²⁵ Government of Finland, 'Government Report on Information Policy and Artificial Intelligence: Ethical Information Policy in the Age of Artificial Intelligence', 5 December 2018.

knowledge basis and policy recommendations, upon which a roadmap with prioritised concrete actions could be built in the future. The report has a strong emphasis on ethical perspectives of the utilization of data and emerging technologies but does not include direct legislative drafting.

1.3.2 The Finnish AI Programme, Tekoälyaika - AI Finland (2019)

[The Finnish AI Programme, Tekoälyaika – AI Finland](#) was launched on 18 May 2017, commissioned by Minister of Economic Affairs Mika Lintilä. In connection with this, five tasks were specified for the Artificial Intelligence Programme:

- “To generate a snapshot of the current status and prospects for AI and robotics around the world and in Finland.
- To propose a goal state, which Finland should strive to achieve in the application of AI in collaboration with companies, research institutes, educational institutions and public organizations.
- To enter a proposal on measures the implementation of which is necessary in order to achieve the stated objectives. Special attention must be given to the field’s innovation activities, preparedness for changes to working life, increasing education and upgrading the qualifications of those in the labour market.
- To draw up a model for the implementation of the plan that will ensure the efficient realisation of the operational programme.
- To prepare a proposal for the expansion of the AI Programme’s task description and composition, so as to allow it to develop the measures necessary for the promotion of AI in the long-term and analyse the more broad-scoped societal change related to digitalisation and provide proposals for solutions to the government.”²⁶

The AI Finland Programme ended in March 2019 resulting [the final report “Finland leading the way into the age of artificial intelligence”](#). There has not been direct follow-up projects to the programme, but light linkages to the national AI project AuroraAI (chapter 1.5.1) are possible.

The AI Finland Project's ethics working group and the Ethics Challenge got high visibility and 70 organizations to commit to creating ethical guidelines for the use of AI.²⁷ Still worth noticing that the working group and the challenge had a strong emphasis on companies and self-regulation. The participants of the Ethics Challenge are listed at the end of the final report of the AI Finland Programme.

1.3.3 Other policy briefs relevant for AI and fundamental rights

²⁶ AI Finland, ‘Finland’s AI Programme - Background’, Tekoäly on uusi sähkö, accessed 20 March 2020, <https://www.tekoalyaika.fi/en/background/>.

²⁷ AI Finland, ‘Etiikkahaaste (Ethics Challenge)’, Tekoäly on uusi sähkö, accessed 20 March 2020, <https://www.tekoalyaika.fi/mista-on-kyse/etiikka/>.

[The Finnish Constitutional Law Committee](#) (*Perustuslakivaliokunta*) has given its statement on processing personal data in immigration administration (*Henkilötietojen käsittelystä maahanmuuttohallinnossa*). The statement was given to the government proposal of the act on processing of personal data in immigration administration, the target of the proposal is to update national legislation to adapt to and supplement the GDPR. From the perspective of AI technologies, the relevant part was the discussion about automated decision-making in the immigration processes. In the statement, the Constitutional Law Committee commented on flaws of the proposal including automated decision-making on children to which the GDPR paid special attention, possible shortcomings with the Finnish constitution related to [21 §](#) (Protection under the law) and [118 §](#) (Official accountability), and the ambiguity of how algorithms would be made understandable and transparent for individuals (more broadly in an earlier statement related to the law, [PeVL622018 vp](#)). The Constitutional Law Committee recommended also a more broad legislation approach or legislative update related to the questions of automatized decision-making, instead of considering the questions within individual laws.

1.4 Standards and voluntary guidelines; the role of the private sector

1.4.1 Government standards and guidelines

Sitra, the Finnish Innovation Fund, has published and promoted its [model for the secure and effective use of data](#). The publication offers guidelines and best practices for data economy, especially from the perspective of the secondary use of health and social data. The model promotes new approaches to the current permit approaches and the data integration practices. The model publication put emphasis on trust that has to be built, developed and maintained between shareholders and partners in data sharing, including individuals.

The City of Helsinki published a Data Protection Manual ([Tietosuoja käsikirja](#)) which provides basic information on data protection regulation and provides guidance on how to implement the data protection obligations in the cities. The manual is for all the personnel working with personal data in the City of Helsinki, but offers public example of data protection practices for other Finnish cities and municipalities.

TIVIA, the Finnish Information Processing Association, has created their [Code of Ethics](#) to support ICT professionals to manage and handle ethical questions in their work. As TIVIA states, "*The purpose of this code is to reinforce the ethical aspect of information technology professionalism*

and promote it by raising discussion amongst IT professionals." The Code of Ethics works for all the ICT experts, including AI specialists.

TEK "*Code of Honour for Technology Professionals*" ([TEKn kunniasääntö](#)) and "*The Guide of Ethics of Technology*" ([Tekniikan etiikan oppikirja](#)). TEK is not a governmental organization but the largest professional association of M.Sc. (Tech.) engineer and architects. The Code of Honour is a traditional professional code which state basic ethical principles programmers, developers or other ICT specialists should follow in their work. The Guide of Ethics of Technology offers a wider perspective and can be used as a reference book for the ethical issues related to technology.

1.4.2 Self-regulation in the private sector

The beginning of more concrete and visible self-regulation actions was related to the events around the Era of AI Programme. The AI Finland Programme released [the Ethics Challenge](#) which challenged various private sector organizations to create ethical guidelines for their application of AI technologies. The initiative was a start for more responsible use of AI and a tool to create attention towards the possible unethical use cases of AI.

1.5 Sample recent cases

1.5.1 AuroraAI

[AuroraAI](#) is a national AI programme run by the Finnish Ministry of Finance. Its target is to build a multivariate AI system or AI operation model to fulfil various needs of Finnish citizens, while also integrating companies and partner networks into the process. The programme has a solid emphasis on human-centred and ethical application of AI, with a descriptive slogan "Towards a Human-centric society".

The preliminary study for the AuroraAI programme was performed during 2018-2019. The website of the responsible ministry offers broad information about the high-level and strategic aims about the programme. The essential core of the programme is to help citizens to utilize different services offered by the society, to combine data from different data sources to make public services more valuable and easier-to-use, and to connect public and private service providers for more integrated and helpful service paths.

The status of AuroraAI programme is relatively unknown. The major reason for this might be that the programme was initialized and

launched by the previous government (2015-2019). As the elections in 2019 changed the structure of the government thoroughly, the new government has not yet been active in promoting the AuroraAI programme, based on the public records. Additionally, the new government was forced to change the prime minister in December 2019, which might slow down the progress of innovation development programmes like AuroraAI.

1.5.2 Algorithmic decision-making based on statistical factors: Case credit decision

The Finnish Non-Discrimination Ombudsman and other non-discrimination bodies have been active in restricting and controlling the algorithmic decision-making based on statistical factors. In addition to various public commentaries and commitments, the Non-Discrimination Ombudsman can request processing of potentially discriminative cases.

By the request of the Ombudsman, in April 2018, the National Non-Discrimination and Equality Tribunal considered the use of statistical factors in the credit decision case. A credit institution had given a negative credit decision for applicant A, and according to the Ombudsman, this decision was based on the residence of applicant A and on potentially discriminative factors like age, gender and language. The credit institution argued that even though its scoring system includes factors like age, gender and language, the process itself would not discriminate applicants and statistical estimation methods are explicitly permitted as part of the assessment of solvency.

Based on the Non-discrimination Act, Act on Equality between Women and Men and the Constitution of Finland, the National Non-Discrimination and Equality Tribunal stated that the credit institution had perpetrated faulty methods in their solvency assessments. A critical part of the Tribunal's statement was if the credit institution had analysed the applicant's application as an individual case or relied on a statistical assessment method which violates discrimination laws.

1.5.3 Automated decision-making and lawfulness

During the autumn of 2019, a heated debate about automated decision-making took place. The Finnish attorney general has stressed that it is essential to solve how the responsibility is shared when automated decisions are made: he refers to automated decision-making systems, algorithms and AI.²⁸ The attorney general wants to speed up legislation projects related to automated decision-making, both in Finland and at the European level, primarily via the Council of Europe. The attorney

²⁸ Nikula, S. (2019), 'Oikeuskansleri Pöysti kiirehtii pelisääntöjä tekoälyn käyttöön: "Kenen on vastuu, jos kone tekee virheen?', 16 November 2019, accessed from: [Oikeuskansleri Pöysti kiirehtii pelisääntöjä tekoälyn käyttöön: "Kenen on vastuu, jos kone tekee virheen?" - Kotimaa | HS.fi](#).

general required a statement from KELA, the social insurance institution of Finland, about the organization's automation practices.²⁹

The Parliamentary Deputy-Ombudsman of Finland Maija Sakslin has taken part in the discussion and stated in the decision [EOAK/3379/2018](#) that the automation used by the Finnish Tax Administration does not fulfil the requirements of the Finnish constitution. The Deputy-Ombudsman states that the automation practices do not correspond to "good governance" (*"hyvää hallintoa"*).³⁰

The Finnish Tax Administration, KELA and the Finnish Immigration Services MIGRI have argued that the automation practices are mandatory for the operations of the institutions.³¹ The institutions comment that thousands of new officials should be recruited if the organizations should manage without automation. The institutions' general directors held a joint press conference about the topic and reassured that automation is used only for the cases where no case-specific consideration is needed. KELA responded to the attorney general's requirement with similar arguments in the official statement dated [20.12.2019](#).

The Finnish Minister of Justice Anna-Maja Henriksson has [commented](#) that the Ministry of Justice prepares legislation renewals related to the challenges of automated decision-making.

1.5.4 The City of Espoo: using AI to detect and analyze the service needs of the city's residents

[The City of Espoo](#) (part of the Helsinki region, the second most populated city in Finland) has been piloting AI-based solutions to citizen services since 2018. The goal of the pilots is to make public services more accessible, integrated and adaptive for different needs of citizens. The widely noticed use case has been the AI application for child protection services. Unfortunately, there is a limited amount of public information on how these pilots are progressing.

²⁹ Chancellor of Justice ('Oikeuskansleri'), (2019), 'Oikeuskansleri Pöysti pyytää Kelalta selvitystä päätöksenteon automatisoinnista', OKV/21/50/2019, accessed from: [Ratkaisut – Oikeuskanslerinvirasto \(okv.fi\)](#)

³⁰ Parviala, A. (2019), 'Oikeusasiamies: Verottajan automaatio rikkoo lakia – Verjohtaja Ylelle: "Varsin suuri yllätys"', YLE, 25 November 2019, accessed from: [Oikeusasiamies: Verottajan automaatio rikkoo lakia – Verjohtaja Ylelle: "Varsin suuri yllätys" | Yle Uutiset | yle.fi.](#)

³¹ Parviala, A. (2019), 'Oikeusasiamies kieltäisi automaattiset viranomaispäätökset – Virastojen johtajat kauhuissaan: Tarvitaan tuhansia virkamiehiä lisää', YLE, 17 December 2019, accessed from: [Oikeusasiamies kieltäisi automaattiset viranomaispäätökset – Virastojen johtajat kauhuissaan: Tarvitaan tuhansia virkamiehiä lisää | Yle Uutiset | yle.fi](#)

2 Laws and regulations applicable to AI and big data

2.1 General

The Finnish constitutional culture builds on a strong domestic human rights tradition buttressed by Finland's accession to the EU and hence EU Charter of Fundamental Rights, the European Convention on Human Rights, and most other significant international human rights treaties.

The Finnish Constitution underwent a total revamp during the 1990s. After the final 1999 reforms, the constitution secures a comprehensive roster of fundamental or basic rights to all individuals. While Finland has no constitutional court, the Parliamentary Constitutional Law Committee, a strong constitutional actor committed to non-political constitutional review, oversees the legislature's action to ensure that all statutes are congruent with the constitution. According to the constitution, the courts may also refuse to enforce statutes that are clearly unconstitutional. According to an established rule of interpretation, statutory interpretation should result in an outcome that is congruent with the basic and fundamental rights.

Finland runs a dualist system concerning the relationship of international law and domestic law: ratification of international treaties is not sufficient to confer them the status of applicable national law. Instead, the treaties must be incorporated into the national legislation to gain legal effect. However, the EU treaties, secondary legislation, EU *acquis*, and ECHR and ECtHR's case law have, naturally, a direct and indirect effect, and also provide important guidelines when considering the interpretation and application of domestic laws in a way that respects fundamental and human rights.

There are no statutes that would explicitly target AI and use of automatic decision-making (ADM). To our knowledge, no court cases from the highest courts exist. The matter is, thus, in its infancy. The first sprouts of a legal response have, however, emerged. The Constitutional Committee has in a recent decision articulated a vision on what requirements the Finnish Constitution sets for AI use and automated decision-making within public administration. The committee, which is a *de facto* binding authority in constitutional matters, opined in its statement 7/2019 vp³² that whenever public authorities automate their decision-making processes, the automated processes must adhere to the constitutional principle of rule of law, and may not endanger the observance of rules on good administration or due process. Also, as

³² Constitutional Law Committee, 'Committee Opinion PeVL 7/2019 Vp— HE 18/2019 vp: Draft Proposal to Parliament for the Law on the Processing of Personal Data in the Immigration Administration and for Related Laws', 2019.

written in the constitution, the exercise of public powers must be based on an act of parliament, and in all public activity, the law shall be strictly observed. In particular, the committee emphasized that the constitution requires that all decisions by public authorities must be made by an official acting under both the threat of civil and criminal liability. The committee also determined that the current state of legislation was insufficient to ensure that the constitutional safeguards for good public administration are met and called for the parliament to initiate a bill drafting process to identify the justified ADM use cases, assign criminal and civil liability for the decisions to appropriate officials and specify the scope of their liability.

The recent decision of the Parliamentary Ombudsman follows similar argumentation patterns.³³ The Ombudsman stated that automated decision-making in the Tax Office of Finland (VERO) did not meet the constitutional requirements. The Ombudsman identified the current state of legislation as problematic as there was no explicit legislative basis for using ADM, the rules on allocation of public liability were ambiguous, and automation could endanger the attainment of good administration and due process rights.

The recent decisions will likely put a hold on developing automatic decision-making processes in administrative authorities, at least until the regulatory framework is clarified.

While no explicit court cases exist on the use of AI and ADM within the private sector, it is clear that constitutional rights constitute the backdrop for private AI and ADM use as well. No explicit framework, however, exists, leaving AI and ADM to be addressed by general sectoral rules. In addition to the constitution, non-discrimination and equal treatment law as well as the laws on data protection are the most relevant legislative rules here. Case law is sparse. However, the plenary session 216/2017 of the National Non-Discrimination and Equality Tribunal of Finland clarified that private actors, in that case banks, may not use automated statistical models, if such models incorporate discriminating attributes such as gender, age, language and residence, into the algorithms.

2.2 Application of fundamental rights laws to AI

2.2.1 Privacy, autonomy, data protection

³³ 'EOAK/3379/2018: The Authorised Decision-Making Procedure of the Tax Administration Does Not Fulfill the Requirement of the Constitution', 20 November 2019.

The right to privacy is explicitly secured by the Constitution of Finland. Right to privacy includes the right to data protection as well as the right to personal autonomy.

As the EU's General Data Protection Regulation (GDPR) is directly applicable, GDPR rules constitute the bedrock for Finnish data protection legislation. The national Data Protection Act (Tietosuojalaki 1050/2018) supplements the GDPR. For instance, the act regulates the appointment, organisation and powers of the supervisory authority on data protection matters (the Data Protection Ombudsman), imposes e.g. the age limit for offering information society services to children; provides detailed rules on a great number of themes including the processing of special categories of personal data; the processing of personal data for journalistic purposes or the purposes of academic, artistic or literary expression; the processing of personal identity codes; certain situations in which the public interest constitutes a legal basis for processing personal data; and restrictions on the rights of the data subject.

In addition, several specific statutes deal with data protection and processing of personal data in different fields. Those include acts on health care data banks and secondary use of health data and credit information. The specific statutes articulate details rules for data processing, or it can specify how to process the data by derogation from the GDPR.

2.2.2 Freedom (of expression, of information)

Fundamental rights protected in the ECHR as well as in the constitution provide individuals the right to express, disseminate and receive information, opinions and other communications without prior prevention by anyone. As social media has increased the possibilities for freedom of expression, it has also decreased the quality of information available for the people, and created wider possibilities to spread false news and hate speech. Algorithms and bots have changed the digital environment by creating circles of similar minded, and polarisation of society has strengthened. In the legal field, the trend has been noted, and the collision of freedom of speech and other fundamental rights such as freedom of religion and right to privacy have gained attention with multiple high-profile cases currently investigated.

A number of specific statutes provide detailed rules on the right of expression, for instance the Act on the Exercise of Freedom of Expression in Mass Media (Laki sananvapauden käyttämisestä joukkoviestinnässä 460/2003). Some speech acts have been criminalized, such as hate speech or incitement to ethnic or racial hatred.

Even though the questions of freedom of expression and the impact of algorithms in digital platforms have been noted, legal cases or statements about the topic are yet to emerge.

The right of access to information is included in the constitutional list of protected basic rights. The specific rules are contained in the Act on the Openness of Government Activities (Laki viranomaisten toiminnan julkisuudesta 621/1999). Under the act, everyone has a right to obtain information from official documents in the public domain, and official documents are in the public domain unless specifically otherwise provided for. The principle of openness has traditionally been strong in Finland, which partly explains why there has recently been some concerns about the weight imbalance between heavily guarded privacy rights and the right for access to information in the academic field.

2.2.3 Non-discrimination and equality

ECHR and EU Charter as well as the constitution provide that everyone is equal in front of the law and no one shall be treated differently from other persons on the ground of sex, age, origin, language, religion, conviction, opinion, health, disability or other reason that concerns his or her person. The Equality Act (Yhdenvertaisuuslaki 1325/2014) and the Gender Equality Act (Laki naisten ja miesten välisestä tasa-arvosta 609/1986) further specify the applicable legislation. Several other acts offer specific norms concerning, for example, discrimination in workplace or the rights of minorities. Although the discrimination is generally illegal, the legislation provides possibilities for positive discrimination to better the position of the weaker.

The aforementioned Plenary session 216/2017 of the National Non-Discrimination and Equality Tribunal of Finland shed light on the interpretation of discrimination in practice. Even though the private company has a right to choose their customers, the ADM-system or a selection process cannot base the decisions on general probability calculations of an average person of that sex, age, residence or other statistical data, but truly personal information.

The Criminal Code (Rikoslaki 39/1889) criminalizes illegal discriminatory acts (Chapter 11, 11 §). Both the Equality Act and Gender Equality Acts contain specific criminalizations.

2.2.4 Procedural rights

The procedural rights such as the right of access to an effective remedy and to a court, good administration, fair trial, judicial independence and impartiality, and equality of arms are protected by the constitution. The Constitutional Law Committee ensures that passed laws are consistent

with the constitution, and all courts have an obligation to interpret the law in consistency with constitutional rights.

The Administrative Procedure Act (Hallintolaki 434/2004) provides two remedies. Everyone subjected to decision by an authority has a right to request an administrative review of a decision. An individual may also file an administrative appeal concerning the unlawful conduct of an authority, a person employed by an authority or another entity performing a public administrative duty, or about their failure to fulfil an obligation. The Administrative Judicial Procedure Act rules on the right to appeal a decision.

The constitution (Section 118) requires that everyone exercising public authority is responsible for their official actions. Likewise, everyone who has suffered a violation of his or her rights or sustained loss through an unlawful act or omission by a civil servant or other person performing a public task shall have the right to request that the civil servant or other person in charge of a public task be sentenced to a punishment and that the public organisation, official or other person in charge of a public task be held liable for damages, as provided by an act.

Tort liability for damage constitutes an important remedy regime for AI and ADM related harms. Tort liability rules ensure that pecuniary losses are compensated. Pecuniary loss not connected to either a personal injury or property damage is, however, compensable if the loss was caused by a criminal act, in the exercise of public authority or if weighty reasons require it to be compensated. Non-pecuniary losses are primarily compensated only if caused by medically ascertainable personal injury. Under restricted circumstances, a tortfeasor is liable for suffering. Suffering is a head of loss where compensation is payable for the violation of the dignity of the aggrieved person. The tortfeasor is liable if they have caused suffering by infringing a person's freedom, honour, or peace through a criminalized act, discriminating against a person through a criminalized act, seriously infringing a person's bodily integrity, or seriously otherwise violating their dignity. The Finnish Supreme Court has ruled that the right to damages for suffering extends to cases where the state or its emanations have infringed a person's basic or human right.³⁴

2.3 Overview of laws applicable to AI and big data

All remedies described above are relevant considering the acts listed below. Depending on the case, administrative review or appeal, compensation or criminal charges can come into question.

³⁴ See: The Finnish Supreme Court precedent KKO:2016:20 of 21 March 2016, accessible at: <https://finlex.fi/fi/oikeus/kko/kko/2016/20160020>"

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Cross-sectoral	Act on Services for Electronic Communication 917/2014	Privacy	General Data Protection Regulation (EU) 2016/679	Criminal liability for breaches specified in chapter 44, including violation of data protection. Civil right to damages	Rules for collection and use of personal data for the purpose of electronic communication (audio, visual, internet, mass communication). Part VI, chapters 17-20. Chapter 40.
Cross-sectoral	Act on International Obligations on Data Protection 588/2004	Privacy	Directive 2009/81	Violation of confidentiality in Criminal Code 38:1 and 2. Criminal Code chapter 40, malfeasance. Civil right to damages	The act contains the application of international regulations for data protection measures in public domain
Cross-sectoral	Act on the Protection of Privacy in Working Life 759/2004	Privacy, data protection	General Data Protection Regulation (EU) 2016/679, Directive 2016/943	Criminal liability for breaches specified in the act or in the Criminal Code. Civil right for damages.	The act promotes the protection of privacy and other basic rights safeguarding

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					the protection of privacy in working life. It sets the limits for data gathering and surveillance in workplaces.
Cross-sectoral	Act on Public Employment and Business Service 916/2012	Privacy	General Data Protection Regulation (EU) 2016/679	Civil right to damages for breach of basic rights, criminal liability for those breaching basic rights by criminalized acts	Chapter 13 regulates registers necessary for the practice of public employment and business service, the information that can be gathered, how it shall be managed, and to whom the info can be shared.
Cross-sectoral	Personal Files Act 1010/1989	Privacy	No references to EU acts	Civil right to damages for breach of basic rights, criminal liability for	The act regulates the duties of employers and

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
				those breaching data rights by criminalized acts	public offices to keep register of certain information of their employers and officers, the storage of that information and provision of gathered information.
Cross-sectoral	The Constitution 731/1999	Equality, right to life, personal liberty and integrity, the principle of legality in criminal cases, freedom of movement, right to privacy, freedom of religion and	EU Charter of Fundamental Rights	Civil right to damages for breach of basic rights, criminal liability for those breaching basic rights by criminalized acts	The Constitution provides fundamental rules, values and principles of Finland's democracy. It sets the basis for all legislation.

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
		conscience, freedom of expression and right of Access to information ; freedom of assembly and freedom of association, electoral and participatory rights, protection of property, right to education, right to one's language and culture, right to work and freedom of commercial activity, right to			

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
		social security, responsibility for the environment right to, protection under the law.			
Cross-sectoral	Act on the Exercise of Freedom of Expression in Mass Media 460/2003	Access to information	Art 11 EU Charter of Fundamental Rights	Civil right to damages, criminal liability for cases breaching basic rights by criminalized acts	The Act contains more detailed provisions on the exercise, in the media, of the freedom of expression enshrined in the Constitution. The Act applies to publishing and broadcasting in Finland.
Cross-sectoral	Tort Liability Act 412/1974	All basic and human rights (addressed	No references to EU acts	Civil right to damages	The Act applies to liability for all damages that are not

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
		in the Constitution)			regulated under special laws. It governs damages also considering to acts violating basic and human rights Chapter 5 section 6 provides possibility for damages for those suffered from infringement of freedom, honour, privacy, personal integrity or who has been discriminated against or whose dignity has otherwise been violated.

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Cross-sectoral	Data Protection Act (1050/2018)	Privacy, data protection	General Data Protection Regulation (EU) 2016/679	Civil right to damages, criminal liability for cases breaching basic rights by criminalized acts	The Act specifies and supplements the GDPR on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and its national application.
Cross-sectoral	Equality Act (1325/2014)	Equality, non-discrimination	EUCFR, Directive 2000/43/EC, Directive 2000/78/EC	Civil right to damages, criminal liability for cases breaching basic rights by criminalized acts	The purpose of this Act is to promote equality and prevent discrimination as well as to enhance the protection provided by law to those who have been discriminated against.

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Cross-sectoral	The Gender Equality Act (609/1986)	Equality of genders, non-discrimination	Directives 79/7/EEC, 92/82/EEC, 2004/112/EC, 2006/54/EC, 2010/18/EU, 2010/41/EU	Civil right to damages, criminal liability for cases breaching basic rights by criminalized acts	The objectives of the Act are to prevent discrimination based on gender, to promote equality between women and men, and thus to improve the status of women, particularly in working life. Furthermore, it is the objective of this Act to prevent discrimination based on gender identity or gender expression.
Public administration	Enterprise Lien Act 634/1984	Access to information	Regulation (EU) 2157/2001, Regulation (EU) 1435/2003		Rules for a register of enterprise liens (chapter 3, 25)

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
			Directive 2005/56		§). The act regulates what information can be collected to the register, and how the information shall be managed. The information collected is open to everyone.
Public administration	Companies House Act 129/1979	Access to information	Directive EU 2017/1132	Civil right to damages	Rules for a register of companies. Open access to registered information.
Public administration	Act on Identification Cards 663/2016		Act amended to better align with the General Data Protection Regulation (EU) 2016/679	Public officer's criminal liability, Criminal Code chapter 40, malfeasance. Civil right to damages.	Regulations about the information collected for the ID-card register (chapter 1). The use of those

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					information is regulated in Act on personal data management in Police 11-15 §.
Public administration	Statistics Act 280/2004	Privacy, access to information	General Data Protection Regulation (EU) 2016/679, EU Directive 2016/943	Civil right to damages, criminal liability for cases breaching basic rights by criminalized acts. Violation of confidentiality in Criminal Code 38:1 and 2. Criminal Code chapter 40, malfeasance.	The act regulates the collection and use of data for statistical purposes.
Public administration	Emergency Powers Act 1552/2011	Privacy	No references to EU acts	Civil right to damages	The act governs the possible deviations from data protection and use of personal data during the times of

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					emergency (chapter 9).
Public administration	Administrative Procedure Act 434/2003		EU Charter of Fundamental Rights arts 41 and 47	Civil right to damages, criminal liability for malfeasance (Criminal Code chapter 40) and for cases breaching data rights by other criminalized acts.	The act regulates administrative procedures and states the minimum standards for good public administration. The regulations about criminal liability for public officers, guaranteed also in the Constitution, are relevant considering ADM-systems in public administration.
Public administration	Act on the Openness of Government Activities 621/1999	Access to information privacy	Directive 90/313/EEC, EU Directive 2012/13, EU Directive 2012/29, EU Directive 2016/943	Civil right to damages, criminal liability for malfeasance (Criminal Code chapter 40)	The Act contains provisions on the right of access to official

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
				and for cases breaching data rights by other criminalized acts.	documents in the public domain, officials' duty of non-disclosure, document secrecy and any other restrictions of access that are necessary for the protection of public and private interests, as well as on the duties of the authorities for the achievement of the objectives of this act.
Public administration	Act on Data Management in Public Administration 906/2019	Access to information privacy	Directive 2013/37/EU	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The aim of the act is to ensure high-quality data management and safe data

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					processing in public administration to guarantee data security while fulfilling obligations for openness of government activities; to enable efficient and safe use of information; to better interoperability of information systems.
Public administration	Act on the Population Information System and the Certificate Service of Digital and Population Data Services Agency (661/2009)	Privacy, data protection	EU Regulation 2016/1191, EU Regulation 2016/679	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The act governs the means to manage population information system, which consists of information of persons, estates, buildings,

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					apartments and areas, and regulates the duties of digital and population data services agency.
Public administration	Act on Register of Aliens 1270/1997	Privacy, data protection	EU Directive 2004/81, EU Directive 2003/9, General Data Protection Regulation (EU) 2016/679, EU Directive 2016/680	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The act regulates the purpose of the register of aliens, the data collection for that register, management of the data and data security.
Public administration	Act on Emergency Centers 692/2010	Privacy	General Data Protection Regulation (EU) 2016/679, EU Directive 2016/680	Civil right to damages	Regulations about the registers necessary for the functioning of emergency centers (chapter 4).

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Public administration	Act on Income Information System 53/2018	Privacy, access to information	Not transposing any directive or regulation	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The act provides regulations about the register of income and sets the duty to employers to provide information about the salary payments.
Public administration	Act on the Public Disclosure and Confidentiality of Tax Information 1346/1999	Privacy, access to information	Directive 2009/65, Directive 2010/43, Directive 2010/44, Directive 2010/78, Directive 2016/2258	Civil right to damages, criminal liability for cases breaching basic rights by criminalized acts. Violation of confidentiality in Criminal Code 38:1 and 2. Criminal Code chapter 40, malfeasance.	The act regulates the management and use of tax data, and the provisions to provide data of tax decisions; specifies the regulations of Act on the Openness of Government Activities and Data Protection Act.

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Public administration	Study Benefit Act 65/1994	Privacy, data protection	Directive 2003/109, Directive 2004/38, General Data Protection Regulation (EU) 2016/679	Civil right to damages	The act contains regulations about the gathering of information from different registers by KELA (The Social Insurance Institution) for the purpose of study benefit payments, and regulations about the use of the information gathered (chapter 7).
Public administration	Act on Passports 671/2006	Privacy, data protection	Passport regulation (EU) 2252/2004, General Data Protection Regulation (EU) 2016/679	Public officer's criminal liability, Criminal Code chapter 40, malfeasance.	Regulations about the information collected for the passport register (chapter 1, 5 §, 5a-c §). The

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					use of this information is regulated in Act on personal data management in Police 11-15 §.
Retail, marketing, and pricing	Act on Consumer Information System in Enterprise Services 293/2017	Data protection, privacy	General Data Protection Regulation (EU) 2016/679	Civil right to damages	Rules for collection of consumer data for the purpose of public administration. Rules for data protection can be found in Data Protection Act and other general laws.
Retail, marketing, and pricing	Enterprise and Undertaking Data Act 244/2001	Access to information	Directive 2003/58, Regulation (EC) 1435/2003 on the Statute for a European Cooperative Society, Directive 2005/56	Civil right to damages	Rules for identification keys for enterprises. Rules for data collected for a register of enterprises and open access to

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					collected information.
Retail, marketing, and pricing	Payment Services Act 290/2010	Privacy	Directive 2007/64, Directive 2009/110, Regulation (EU) 260/2012, Directive 2011/61, Regulation (EU) 751/2015, Directive 2014/92, Directive 2015/2366	Civil right to damages	Restrictions of data collection and use of data for the purpose of providing payment services. Rules for data protection. Chapter 2.
Law enforcement	Act on Processing Personal Data in the Criminal Sanction Agency 1069/2015	Data protection, privacy, access to information	General Data Protection Regulation (EU) 2016/679, Directive 2012/29, Directive 2016/680	Criminal liability for the breaches specified in the criminal code, especially data protection crime (Criminal Code 38:8 and 38:8a) and violation of confidentiality (Criminal Code 38:1 and 38:2). Criminal Code chapter 40, malfeasance. Civil right to damages.	The act governs the registers maintained for the purpose of criminal sanction system (chapter 2), and the collection, use, sharing and processing personal data necessary for the functioning of the criminal

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					sanction agency (chapter 3).
Law enforcement	Enforcement Code 705/2007	Privacy, access to information	General Data Protection Regulation (EU) 2016/679, Regulation (EU) 1257/2012, Regulation (EU) 1260/2012	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	Regulations about the enforcement register. The register consists of automatically gathered personal data. The act administers gathering, storing, processing, use and sharing of the data for and from the register. (24-35 §)
Law enforcement	Act on the Grey Economy Information Unit 1207/2010	Privacy, access to information	General Data Protection Regulation (EU) 2016/679, Directive 2014/17, Directive 2016/680, Directive 2016/680	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The act regulates the use of Tax Office's automatic information

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					system for prevention of shadow economy. Specifies the regulations of Act on the Openness of Government Activities and Data Protection Act.
Law enforcement	Criminal Code 39/1889	Relevant to all basic and human rights (addressed in the Constitution). Privacy, data protection, equality, non-discrimination, freedom of speech,	Directive 98/84, Directive 2002/90, Directive 2001/29, Council Framework Decision 2004/757/JHA, Regulation (EU) 1255/97, Regulation (EU) 1/2005, Regulation (EU) 1013/2006, Directive 2004/39, Directive 2006/73, Regulation (EU) 1907/2006,	Criminal liability for criminalized acts.	Criminal Code specifies criminalized acts such as violations of privacy rights, violations of confidentiality, data crimes, criminalized speech acts, malfeasance, personal register crimes, data breach crimes, etc.

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
		right to life and health	Regulation (EU) 1272/2008, Directive 2008/48, Directive 2009/22, Directive 2008/99, Regulation (EU) 1005/2009, Directive 51/2008, Directive 2008/99, Regulation (EU) 1102/2008, Regulation (EU) 689/2008, Directive 2009/128, Directive 2009/43, Directive 2009/13, Regulation (EU) 1099/2009, Directive 2013/40, Regulation (EU) 1257/2012, Regulation (EU) 1260/2012, Directive 2014/42, Directive 2014/57, Regulation 600/2014, Directive 2014/65, Regulation (EU) 424/2016,		

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
			Regulation (EU) 425/2016, Directive 2016/943, Regulation (EU) 2017/852, Directive 2017/541, General Data Protection Regulation (EU) 2016/679, Regulation (EU) 2017/1129, Directive 2017/1371, Directive 2015/2436, Regulation (EU) 2017/625, Regulation (EU) 2013/576		
Law enforcement	Coercive Measures Act 806/2011	Privacy, data protection, equality, non-discrimination	Directive 2010/64, Directive 2013/40, Directive 2014/41, Directive 2017/541, Directive 2016/800, Directive 2016/680	Civil right to damages, criminal liability for cases breaching protected rights by criminalized acts.	Regulates coercive measures possible during investigation of an offence. The possible measures include e.g. extended surveillance, technical

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					surveillance and coercive telecommunication measures, limited to certain, serious crimes during limited time frame.
Law enforcement	Act on the Processing of Personal Data by the Border Guard 639/2019	Equality, non-discrimination, data protection	General Data Protection Regulation (EU) 2016/679, Directive 2016/680, Directive 2004/82	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The act governs the management of personal data in Border Guard Service when the management is partly or fully automated or when the data forms a register.
Law enforcement	Act on the Processing of Personal Data by the Finnish Defence Forces 332/2019	Equality, non-discrimination, data protection	General Data Protection Regulation (EU) 2016/679	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The act governs the management of personal data in the Finnish Defence Forces

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					when the management is partly or fully automated or when the data forms a register.
Law enforcement	Act on Telecommunication Intelligence in Civilian Intelligence 582/2019	Human rights generally (addressed in the Constitution), equality	No references to EU acts	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The act begins with the requirement to respect all human rights while enacting the law. Sets rules for civil data communication intelligence gathering. Prohibition of general, unallocated data surveillance, restrictions for purpose of intelligence gathering.

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Law enforcement	Act on Military Intelligence 590/2019	Human rights generally (addressed in the Constitution)	Treaty on the Functioning of the European Union art. 222, Treaty on European Union art. 42(7)	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The 5 § sets a requirement to respect all human rights while enacting the law. The act regulates the use of military reconnaissance and the use of gathered data.
Law enforcement	The Act on the Oversight of Intelligence Gathering 121/2019	Human rights generally (addressed in the Constitution)	No references to EU acts	Civil right to damages. Public officer's criminal liability in criminal cases.	The act governs the supervision of civil and military intelligence activities. It sets the Intelligence Ombudsman as a supervisor of legality of intelligence services and realisation of human rights. Parliamentary supervision of

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					intelligence activities is regulated to be a duty of Intelligence Oversight Committee.
Law enforcement	Police Act 872/2011	All basic and human rights (addressed in the Constitution)	Directive 2013/40, Directive 2017/541, Directive 2016/680 [x]	Civil right to damages. Public officer's criminal liability in criminal cases.	Section 2 sets a requirement to respect all human rights while enacting the law. Regulates e.g. secret methods of gathering information, civil intelligence gathering and data surveillance in police force, and the use of information gathered.

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Law enforcement	Security Clearance Act 726/2014	Privacy, data protection	General Data Protection Regulation (EU) 2016/679, Directive 2016/943, Directive 2016/680, Commission Implementing Regulation 2019/103	Civil right to damages. Violation of confidentiality in Criminal Code 38:1 and 2. Criminal Code chapter 40, malfeasance.	The act governs e.g. the management of security clearance register.
Health services	Communicable Diseases Act 1227/2016	Privacy, access to information	Directive 2016/943	Criminal code 44:2, violation of health protection. Violation of confidentiality in Criminal Code 38:1 and 2. Criminal Code chapter 40, malfeasance. Civil right to damages.	The act governs the information gathered to prevent communicable diseases from spreading, and the use and sharing the information gathered. Chapter 4.
Health services	Act on the Medical Use of Human Organs, Tissues and Cells 101/2001	Privacy, Access to information	Directive 2010/53, Directive 2015/565, Directive 2015/566	Criminal liability for breaches of the register management (25 §). Criminal Code chapter 40, malfeasance.	The act regulates organ and tissue transplantation registers and provision of information

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					from the register (16-17 §).
Health services	Biobank Act 688/2012	privacy, access to information	No references to EU acts	Biobank Act 43 §: Criminalization of specified acts that compromise the protection of privacy of the donor and his or her rights: violation of provisions concerning biobanks. The penalty for a computer break-in is provided in Part 8, Chapter 38 of the Criminal Code, for a personal data offence in Part 9, Chapter 38 of the Criminal Code and for a personal data violation in Part 48 of the Personal Data Act. The penalty for violation of a	The act provides regulations about the use of human biological samples in research. It regulates biobanks' gathering of information, sample registers, personal data registers and the processing and storing of the data gathered. Samples can be stored based on consent of the donor. The

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
				<p>secrecy duty is provided in Parts 1 or 2 of Chapter 38 of the Criminal Code, unless the act is punishable under Part 5, Chapter 40 of the Criminal Code (malfeasance) or a more severe penalty is provided in another Act.</p>	<p>data must be stored in a way it fulfils the standards presented in gdpr and data protection act 32 §, and usability and availability of the information must be guaranteed (Biobank act 17 §).</p>
Health services	Act on Electronic Prescriptions 61/2007	Privacy, access to information	Commission Implementing Directive 2012/52, Directive 2011/24	<p>Criminal liability for breaches specified in the act. Criminal liability for data breaches based on Criminal Code (chapter 38). Malfeasance (Criminal Code chapter 40). Civil right to damages.</p>	<p>The act provides regulations about electronic prescriptions, sharing the prescriptions between actors, patients' rights considering the information and the duties</p>

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					of the register keeper as well as the safeguards for the software used.
Health services	Act on the Secondary Use of Social and Healthcare Services Data (552/2019)	Privacy, data protection	General Data Protection Regulation (EU) 2016/679	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The Act aims to facilitate the efficient and safe processing and combining of social and health services data
Health services	Act on the Electronic Processing of Client Data in Healthcare and Social Welfare (159/2007)	Privacy, Right of access to information	General Data Protection Regulation (EU) 2016/679	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	The aim of the Act is to further the data security of patient information processing, patients' Access to information and provision of healthcare services with better patient

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					safety and efficiency.
Health services	Act on the Personal Data Register of Occupational Safety and Health 1039/2001	Privacy, access to information	No references to EU acts	Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	Specifies the regulations of data protection act and act on openness of government activities in the case of occupational safety register.
Health services	Act on the Register of Persons Exposed to Carcinogenic Substances or Processes 717/2001	Privacy, access to information	No references to EU acts	Criminal liability for employers not fulfilling the duties provided in the act. Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	Specifies the regulations of data protection act and act on openness of government activities in the case of register of persons exposed to carcinogenic substances or processes.
Health services	Insurance Companies Act 521/2008	Equality, privacy,	Directive 2005/29, Directive 2007/44, Directive 2007/36,	Civil right to damages	Chapter 2 regulates registers of

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
		data protection	Directive 2011/61, Directive 2009/138, Directive 2011/89, Directive 2014/51, Directive 2009/138, Directive 2011/89, Directive 2013/34, Regulation (EU) 596/2014, Directive 2014/56, Regulation (EU) 537/2014, Directive 2016/97, Directive 2018/411, Directive 2016/943, Directive 2016/2341, Directive 2017/828, Directive 2014/51, Directive 2019/2177		insurance licences, chapter 30 regulates data protection in the insurance business.
Health services	Health Insurance Act 1224/2004	Privacy	Directive 2011/24, General Data Protection Regulation (EU) 2016/679	Public officer's civil and criminal liability. Civil right to damages, criminal liability for cases breaching data rights by criminalized acts.	Chapter 19 provides rights for The Social Insurance Institution of Finland (KELA) to get information from private health

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					insurance decisions when necessary for providing personal benefits, regulates the provisions for the information and management of gathered data.
Energy	Payment Services Act 290/2010	Privacy	Regulation (EU) 260/2012, Directive 2015/2366, Directive 2013/11, Directive 2011/61, Regulation (EU) 751/2015, Directive 2014/92		Restrictions of data collection and use of data for the purpose of providing payment services. Rules for data protection. Chapter 2.
Financial services	Credit Data Act 527/2007	Privacy	Directive 2008/48, Directive 2009/22	Civil right to damages, criminal liability for breaches specified in 43 § (<i>luottotietorikkomus</i>) and crimes	Rules for collection, storage and sharing of credit data, rules for data

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
				specified in criminal code (<i>henkilörekisteririkos, henkilörekisteriin kohdistuva tietomurtorikos, salassapitovelvollisuuden rikkominen</i>) and in <i>henkilötietolaki</i> (43 § <i>henkilötietorikkomus</i>).	protection in credit services. Chapter 2, chapters 4-6.
Financial services	Act on the Register of Debt Collectors 411/2018	Access to information	General Data Protection Regulation (EU) 2016/679	Civil right to damages	Rules for information collected for the register of debt collectors (5 §). Managing and sharing the information.
Financial services	Act on Offering Virtual Currency 572/2019	Access to information	Directive 2018/843, General Data Protection Regulation (EU) 2016/679	Civil right to damages	The act makes it obligatory for entrepreneurs offering virtual currency to register. Register must

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					be open and provide specified information about the actors. Personal data falls to the field of gdpr and national data protection act. (5-9 §)
Financial services	Act on Investment Services 747/2012	Privacy, data protection	Directive 2010/73, Directive 2011/61, Directive 2014/49, Directive 2014/59, Regulation (EU) 596/2014, Regulation (EU) 537/2014, Regulation (EU) 909/2014, Directive 2013/36, Regulation (EU) 600/2014, Directive 2014/65, Commission Delegated Directive 2017/593, Directive 2016/97, Directive 2018/411,	Civil right to damages, criminal liability for breaches of secrecy obligation.	Regulates algorithmic trading, ruling that there must be sufficient risk prevention systems and other efficient safe guards (Chapter 7 a). Restricts the right to use collected personal data to anything else than

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
			Directive 2016/943, Directive 2017/2399, Directive 2017/828		specified in the act. Regulates the secrecy obligation in the field (Chapter 12).
Financial services	Act on Credit Institutions 610/2014	Privacy	Directive 2013/36, Regulation (EU) 575/2013, Directive 2014/49, Directive 2014/59, Directive 2013/34, Regulation (EU) 596/2014, Directive 2014/56, Regulation (EU) 537/2014, Directive 2014/17, Directive 2014/92, Directive 2013/36, Directive 2015/2366, Directive 2014/65, Directive 2016/943, Directive 2017/2399, Regulation (EU) 2017/1129, Directive 2014/65	Civil right to damages	Chapter 15 regulates the procedures in customer business activities, including the secrecy obligations on the data collected.

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Financial services	Act on Payment Institutions 297/2010	Privacy	Directive 2009/110, Regulation (EU) 260/2012, Directive 2011/61, Directive 2013/36, Regulation (EU) 575/2013, Regulation (EU) 751/2015, Directive 2014/92, Directive 2015/2366, Directive 2016/943	Civil right to damages	Chapter 6 regulates the procedures in customer business activities, including the secrecy obligations on the data collected.
Financial services	Act on Book-entry System and Clearance Activities 348/2017	Privacy	Regulation (EU) 909/2014, Directive 2014/65, Directive 2016/943, Directive 2017/828	Civil right to damages, criminal liability for breaches of secrecy obligation.	The act regulates what information official stock market actors can collect (chapter 4) and what they must share in certain situations with officials notwithstanding the confidentiality regulations (chapter 8).

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Financial services	Act on Trading in Financial Instruments 1070/2017		Directive 2016/943, Regulation (EU) 2017/1129, Directive 2014/65, Directive 2019/2034	Civil right to damages, criminal liability for breaches of secrecy obligation.	
Transportation	Act on Transport Services 320/2017		Directive 2010/40, Directive 2016/1148, Directive 2016/943, Regulation (EU) 1071/2009		Regulations about transport services, risk management and obligatory preparations for risks in the field of transportation (Part III). Application of smart transport services regulated in Part IV, chapter 2. The act also regulates the data collected for the registers of transport matters and

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					<p>the possible and obligatory use of that information. The act governs other registers maintained for the purpose of transportation in land, sea and air.</p>
Education	Act on Early Childhood Education and Care 540/2018	Privacy, data protection, access to information	General Data Protection Regulation (EU) 2016/679		<p>The act regulates the information that can be stored to a register on private service providers, and controls supervision of and statistics on private early childhood education and care. Chapters 8-9.</p>

Sector	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Education	Act on National Study and Degree Registers 884/2017	Privacy, data protection, access to information	General Data Protection Regulation (EU) 2016/679		The act provides regulations about secure collection, management and use of data of study and degree information, and about personal registers relevant for the purpose.
Education	Act on Vocational Education 531/2017	Privacy, data protection, access to information	General Data Protection Regulation (EU) 2016/679		Chapter 11 regulates which rights can be collected and how the data shall be managed, stored and used when providing vocational education.

2.3.1 Overview of laws: Out of scope³⁵

The following table consists of information collected as a part of the research, but remain outside of the scope of this assignment. They are provided for further information/

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Real estate	Code of Real Estate 540/1995		General Data Protection Regulation (EU) 2016/679, Regulation (EU) 910/2014		The act contains regulations about necessary registers of real estates, the information gathered in those as well as management and use of the information. It also administrate the electronic systems used in real estate deals and declarations of changes in proprietary rights. Parts II and III.

³⁵ As discussed in a previous meeting, the country manager has collected laws that are outside of the scope of what we had agreed to collect. In some cases, laws were collected on sectors that Finland did not need to collect, and in other cases, on sectors that were not even mentioned in the ToR or our proposal. We have included these in a separate file, as they may be of interest for you, but they will not appear in the final report. If you feel that a law in this table has been incorrectly identified as out of scope, please do let us know.

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Real estate	Real Estate Register Act 392/1985		General Data Protection Regulation (EU) 2016/679		Act provides regulations about a Real Estate Register, which is kept of real estate and other register units in land and water areas. The Real Estate Register contains information about the characteristics of the units and their location as well as other information concerning the units, as provided in the act.
Agriculture	Act on the Information System of Agricultural Industry Governance 284/2008	Privacy, access to information	General Data Protection Regulation (EU) 2016/679		Provides specific regulations about registers necessary for governing agricultural industry.
Social security	Act on National Pension 568/2007		General Data Protection	Violation of confidentiality in Criminal	The act contains regulations about the gathering of

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
			Regulation (EU) 2016/679, Regulation (EU) 883/2004	Code 38:1 and 2. Criminal Code chapter 40, malfeasance.	information from different registers by Kela (The Social Insurance Institution) for the purpose of national pension payments, and regulations about the use of the information gathered. Chapter 13.
Social security	Act on Maternity Benefits 477/1993		General Data Protection Regulation (EU) 2016/679	Violation of confidentiality in Criminal Code 38:1 and 2. Criminal Code chapter 40, malfeasance.	The act contains regulations about the gathering of information from different registers by Kela (The Social Insurance Institution) for the purpose of maternity benefit payments, and regulations about the use of the information gathered. 14 §, 14 a §.

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Social security	Act on Child Benefits 796/1992		General Data Protection Regulation (EU) 2016/679, Directive 2016/801	Violation of confidentiality in Criminal Code 38:1 and 2. Criminal Code chapter 40, malfeasance.	The act contains regulations about the gathering of information from different registers by Kela (The Social Insurance Institution) for the purpose of child benefit payments, and regulations about the use of the information gathered. 16 §, 16 a-b §.
Social security	Act on General Housing Support 938/2014		General Data Protection Regulation (EU) 2016/679	Violation of confidentiality in Criminal Code 38:1 and 2. Criminal Code chapter 40, malfeasance.	The act contains regulations about the gathering of information from different registers by Kela (The Social Insurance Institution) for the purpose of general housing support payments, and regulations about the use of the

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					information gathered. Chapter 7.
Social security	Act on Employee's Pension 395/2006	Privacy, access to information	Regulation (EU) 883/2004, Regulation (EU) 987/2009, General Data Protection Regulation (EU) 2016/679		The act provides rules for gathering, managing and sharing information for the purpose of pension payments the act administrates. Chapter 14.
Social security	Act on Agriculture Entrepreneur's Pension 1280/2006	Privacy, access to information	General Data Protection Regulation (EU) 2016/679, Directive 2011/61, Regulation (EU) 702/2014, Directive 2013/34, Directive 2014/56, Regulation (EU) 537/2014		The act provides rules for gathering, managing and sharing information for the purpose of pension payments the act administrates. Chapter 13.
Social security	Act on Entrepreneur's Pension 1272/2006	Privacy, access to information	General Data Protection Regulation (EU) 2016/679		The act provides rules for gathering, managing and

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					sharing information for the purpose of pension payments the act administrates. Chapter 13.
Social security	Act on Seaman's Pension 1290/2006	Privacy, access to information	General Data Protection Regulation (EU) 2016/679, Directive 2011/61, Directive 2013/34, Directive 2014/54, Regulation (EU) 537/2014		The act provides rules for gathering, managing and sharing information for the purpose of pension payments the act administrates. Chapter 20.
Social security	Act on Pensions in Public Governance 81/2016	Privacy, access to information	General Data Protection Regulation (EU) 2016/67		The act provides rules for gathering, managing and sharing information for the purpose of pension payments the act administrates. 155-165 §.

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
Social security	Workers' Compensation Act 459/2015	Privacy, access to information	General Data Protection Regulation (EU) 2016/679, Directive 2016/97, Directive 2018/411		Chapter 35 regulates different parties (insurance company, employer, employee) provisions for information and what information can be shared notwithstanding the rules of confidentiality.
Social security	Act on Entrepreneur's Pension 1272/2006	Privacy, access to information	General Data Protection Regulation (EU) 2016/679, Regulation (EU) 1408/71		The act provides rules for gathering, managing and sharing information for the purpose of pension payments the act administrates. Chapter 13.
Social security	Agriculture Entrepreneur's Compensation Act 873/2015	Privacy, access to information	General Data Protection Regulation (EU) 2016/679,		Chapter 26 regulates different parties (insurance company, entrepreneur)

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
					provisions for information and what information can be shared notwithstanding the rules of confidentiality.
Social security	Act on Finnish Centre for Pensions 397/2006	Privacy	General Data Protection Regulation (EU) 2016/679, Regulation (EU) 1408/71, Directive 2016/943		The act regulates the rights of the pension centre to collect, manage, share and use data for the purpose of research, reports and development. 2 § and 4 §.
Social security	Act on Pension Appeal Board 677/2005	Privacy	No references to EU acts		The act regulates from whom and what kind of data the Pension Appeal Board can collect and use. Chapter 3.
Social security	Act on Unemployment Benefits 1290/2002	Privacy	Regulation (EU) 883/2004, General Data Protection	Violation of confidentiality in Criminal Code 38:1 and 2. Criminal	The act contains regulations about the gathering of information from different registers

	Title in English (unofficial translations)	Fundamental rights addressed	EU basis?	Remedies if rights violated	Description
			Regulation (EU) 2016/679	Code chapter 40, malfeasance.	by Kela (The Social Insurance Institution) or an unemployment fund for the purpose of unemployment benefit payments, and regulations about the use of the information gathered. Chapter 13.
Social security	Act on Multisectoral Service to Promote Employment 1369/2014	Privacy	No references to EU acts		9-11 § contain regulations about the register of unemployed persons, the data gathered for the register, the management and use of the information.

3 Future development

There are various future developments related to ethical and responsible AI in a relationship to fundamental rights. As the earlier AI Finland Programme and the active initiatives of self-regulation by companies were a good start, the prevailing atmosphere has been that Finland should remain active in taking these ideas to practice.

The governmental side has been relatively silent as the project Aurora AI (by the public notice) has not been progressing after the last elections. Governmental promises and statements for ethical AI has remained in the strategies, but practical implications are settled down. Instead of one governmental direction for AI, the responsibility might be shared more broadly by various ministries, local authorities and organizations, or research institutions already mentioned in this report.

The Attorney General of Finland is an active institution taking perspective of fundamental rights and legislative force. The Finnish Data Protection Ombudsman does not have as noticeable decisions related to AI as the case related to the usage of face recognition in a school in Sweden,³⁶ but the Finnish Ombudsman has commented on the use of automated robot callers in telemarketing purposes.³⁷ The awareness about the GDPR and data protection among the Finnish population is on the rise and corresponds to the European average.³⁸

The research institutions have been active in the area from the perspective of AI ethics. The Finnish Center of AI has centred their action around "*Real AI For Real People in the World*" and has included ethical aspects to their operations. The legal-ethical perspective is investigated by various research organizations and projects, like [ETAIROS](#), [Algorithmic Agencies and Law](#) and [Legal Tech Lab](#). Both the University of Turku and the University of Tampere have been highly active in ethics research, including through projects like [Robots and the Future of Welfare Services](#), IHAN Ethics ([IHAN Etiikka](#)), and [Human-Centered AI Solutions for the Smart City](#).

³⁶ Datainspektionen, 'Facial Recognition in School Renders Sweden's First GDPR Fine', 21 August 2019, [/nyheter/2019/facial-recognition-in-school-renders-swedens-first-gdpr-fine/](#).

³⁷ Tietosuojavaltuutetun toimisto, 'Robotti ei saa soittaa myyntipuheluita ilman kuluttajan suostumusta', 14 June 2019, https://tietosuoja.fi/artikkeli/-/asset_publisher/robotti-ei-saa-soittaa-myyntipuheluita-ilman-suostumusta.

³⁸ Tietosuojavaltuutetun toimisto, 'Vuosi EU:n yleisen tietosuoja-asetuksen soveltamista: 66 % suomalaisista kuullut tietosuoja-asetuksesta, tietoisuus tietosuojavaltuutetun toiminnasta lisääntynyt', 22 May 2019, https://tietosuoja.fi/artikkeli/-/asset_publisher/vuosi-eu-n-yleisen-tietosuoja-asetuksen-soveltamista-66-suomalaisista-kuullut-tietosuoja-asetuksesta-tietoisuus-tietosuojavaltuutetun-toiminnasta-lisa.

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