

# Work today and in the future

Part two: A synthesis of recommendations by and for the Nordic Labour Inspectorates





#### **✓** Vinnueftirlitið



Norwegian Labour Inspection Authority



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# **Executive summary**

This report is part two in the publication series "Work today and in the future" from the Nordic Future of Work group. The current report is commissioned by the Directors at Nordic Labour Inspections with the aim of acquiring advice on how to better prepare the Nordic Labour Inspectorates for the future of work. The mandate from the Nordic Directors requested that the Future of Work group gain input from the Nordic Labour Inspectors on occupational safety and health issues vis-a-vis Future of Work. Thus, the following objectives were formulated:

- Identify preliminary occupational safety and health challenges for the purpose of data collection based on the previous work of the Future of Work group;
- Investigate the occupational safety and health challenges the Labor inspectors prioritise and their recommendations for addressing those challenges; and
- Analyse the empirical findings from the Nordic labour inspectors to synthesise and consolidate the recommendations.

The current report pursued a mixed-methods approach to identify prioritised areas vis-a-vis Future of Work and provide recommendations for these areas from labour inspectors across the Nordic countries. The data collection was performed in two stages: stage I comprised quantitative surveys and qualitative focus groups of labour inspectors in each of the Nordic countries, based on 11 occupational safety and health challenges identified in the previous work of the Future of Work group. As a result of stage I, a summary of the mixed-method findings was performed, for which the 11 topics were reduced to five prioritised topics, namely: *Homeworking, Artificial Intelligence and Robotics, Platform Economy, Digital Surveillance and Undeclared work.* These topics were the basis for the trans-Nordic focus group discussions of labour inspectors in stage II. A synthesis of the findings was performed that resulted in 20 practical recommendations, including suggested stakeholders, interventions and a time frame for implementation.

In addition, potential challenges that may shape the future of work in the Nordic countries that were not identified through the empirical data of the labour inspectors are also addressed in the following report: Climate change and Sustainable development, Chemical and Biological exposures, Healthcare workers, Precarious work and Occupational health inequalities, Large language models, and Emerging technologies. Looking forward into the future of work, the 20 recommendations and the potential challenges addressed in the current report give the Nordic Labour Inspectorates a concrete path for further action in the coming years.

# Sammendrag på norsk

Denne rapporten er del to i rapportserien «Work today and in the future» fra den nordiske Future of Work gruppa. Rapporten er et oppdrag fra den direktørgruppen for de nordiske arbeidstilsynene med mål om å tilegne råd om hvordan å tilsynene kan forberede seg og ruste seg for arbeidslivet i fremtiden. Mandatet fra den nordiske direktørgruppen til Future of Work gruppen var å tilegne innsikt og kunnskap fra inspektørene på arbeidsmiljøutfordringer knyttet til fremtiden arbeidsliv. For å kunne gjøre dette, ble følgende målsetninger utarbeidet:

- Identifisere preliminære arbeidsmiljøutfordringer basert på tidligere arbeid i Future of Work gruppen for å kunne gjennomføre datainnsamling
- Utforske hvilke arbeidsmiljøutfordringer inspektørene prioriterer og deres anbefalinger for å adressere disse utfordringene.
- Analysere empirisk funn fra de nordiske inspektørene for å utarbeide anbefalinger til de nordiske arbeidstilsynene

Rapporten hadde en mixed-methods tilnærming for å identifisere prioriterte områder og utfordringsområder for fremtiden arbeidsliv og for å kunne utarbeide praktiske anbefalinger for disse områdene. Datainnsamlingen ble gjennomført i to trinn, hvor første trinnet var spørreundersøkelser og fokusgrupper i hvert av de nordiske landene basert på elleve arbeidsmiljøutfordringer og tema fra den tidligere rapporten i fra Future of Work gruppen. Første trinnet resulterte i fem identifiserte arbeidsmiljøutfordringer som var prioritert høyt hos alle de nordiske landene, som ble grunnlaget for datainnsamlingen i trinn to. De fem temaene var: *Hjemmekontor, Kunstig intelligens og robotikk, plattformøkonomi, digital overvåkning, og arbeidslivskriminalitet.* Disse temaene ble tatt med inn i trinn to, hvor det ble gjennomført fokusgrupper bestående av inspektører fra alle de nordiske landene i samme fokusgrupper. Som et resultat av dette, ble det gjennomført en syntese av funnene som ga 20 praktiske anbefalinger til de nordiske arbeidstilsynene som også foreslår relevante aktører, virkemidler og tidsperspektiv for anbefalingene.

I tillegg til anbefalingene som kommer fra den empirien fra inspektørene, så har Future of Work gruppa identifisert andre mulige utfordringer som kan være med å forme fremtidens arbeidslivs, som ikke har blitt nevnt av inspektørene: Klimaendringer og bærekraft, kjemiske og biologiske eksponeringer, helsepersonell, atypiske ansettelsesformer, KI språkmodeller, og nye teknologier. På veien inn i fremtidens arbeidsliv, så gir denne rapporten 20 praktiske anbefalinger og en redegjørelse for andre potensielle utfordringer som bistå de nordiske arbeidstilsynene sine valg i årene som kommer.

# List of abbreviations

ACSH Advisory Committee for Safety and Health at Work

AI Artificial Intelligence

AOSH Administration for Occupational Safety and Health in Iceland

**EU** European Union

**EU-OSHA** European Agency for Safety and Health at Work

**EUROFOUND** European Foundation for the Improvement of Living

and Working Conditions

FOW Future of work

IALI International Association of Labour Inspections

ICOH International Commission on Occupational Health

ILO International Labour Organization

Labour Inspection

**LLM** Large Language Models

NIVA The Nordic Institute for Advanced Education in

Occupational Health

NLIA The Norwegian Labour Inspection Authority

**OECD** The Organisation for Economic Co-operation and

Development

OSH Occupational Safety and Health

SLIC Senior Labour Inspectors Committee

WHO World Health Organization

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# 1 Nordic Collaboration and Working Life

Nordic collaboration has a long history dating back to the Viking Age. The Nordic countries have a shared history, culture and language, which has led to a strong sense of cooperation.

The first formal Nordic cooperation organisation was the Nordic Council, founded in 1952. The Nordic Council is a forum for cooperation between the parliaments of the Nordic countries. It has been responsible for a number of important initiatives such as the Nordic Passport Union and the Nordic Common Labour Market.

Nordic collaboration is a model for cooperation between neighbouring countries and is an important example of how countries can work together to achieve common goals.

In 1970, the Nordic Council of Ministers was established, an intergovernmental organisation responsible for implementing the decisions of the Nordic Council. It has been responsible for a wide range of cooperation initiatives, such as the Nordic Environmental Action Plan and the Nordic Centre for Gender Equality.

Nordic collaboration has continued to grow and develop in recent years. In 2001, the Nordic countries signed the Helsinki Treaty, which established a framework for further cooperation and has been used to launch a number of new initiatives, such

as the Nordic Centre for Welfare and Social Issues and the Nordic Centre for ICT in Education.

Today, Nordic collaboration is thriving. The Nordic countries are working together on a wide range of issues, including climate change, education and the economy. Nordic collaboration is a model for cooperation between neighbouring countries and is an important example of how countries can work together to achieve common goals.

Nordic collaboration in Occupational Health is also a strong tradition and unites Nordic Labour Inspectorates, Occupational Health Research Institutes, Occupational Health Training and social partners.

Nordic collaboration in Occupational Health has a rich tradition of being based on sound science while simultaneously resolving challenges in a tripartite collaboration where employers, labour unions and government representatives develop creative, consensus-based solutions. The Nordic tripartite model has been successful in achieving a high standard of living, low poverty rates and strong social cohesion.

At the core of the Nordic working life model is social dialogue. Regular tripartite

negotiations help address occupational health, labour market and economic challenges. However, it is essential to note that no model is without its challenges, and the sustainability of this model has been a subject of ongoing debate, especially in the face of new technologies, global economic changes and demographic shifts.

Despite these challenges, Nordic collaboration and the Nordic model of working life remains a vibrant and dynamic process. It is a testament to the shared values and interests of the Nordic countries and also an important example of how countries can work together to achieve common goals for safe, healthy, decent and sustainable working conditions.

# 2 The Nordic Future of Work group

The Future of Work group (FOW group) was founded by the Nordic Labour Inspection Authorities in 2016 with the purpose of providing the Nordic Labour Inspectorates with sound advice on emerging challenges regarding the topics of Future of Work (FOW). In particular, the mandate provided a basis for engaging with national and international occupational health institutions, research communities, Occupational Safety and Health (OSH) specialists and labour inspectors to build a link between OSH research, knowledge and the practice of frontline OSH experts, such as labour inspectors. Furthermore, this group engages in producing briefs and recommendations that help the labour inspectorates to be better prepared for work–life challenges such as digitalisation, artificial intelligence (AI), climate change, migration and non-communicable diseases.

The FOW group has an interdisciplinary character with wide arrays of competence pertaining to work—life and occupational health with academic, policy and practitioner backgrounds. The work of the group is ongoing, and new issues are reviewed based on guidance from the Nordic director generals.

In line with the new global findings concerning the cause of work-related deaths attributed to non-communicable diseases<sup>7</sup>, the Directors requested the FOW group to commission a study on work-related deaths in Nordic countries, which will be published by early 2024.

The Directors also requested the FOW group to supplement the international perspectives and the academic perspectives on FOW with input and validation from the Nordic Labour inspectors. The work presented in this document aims to provide the Nordic Labour inspectors' perspectives on challenges vis-a-vis FOW. This is a novel effort wherein the perspectives of frontline Labour Inspectors from five different countries were included to address the issues as they pertain to FOW.

<sup>7 2021.</sup> Global monitoring report. WHO/ILO joint estimates of the Work-related burden of disease and injury, 2000-2016. WHO/ILO joint estimates of the work-related burden of disease and injury, 2000-2016: global monitoring report

To our knowledge, this remains a unique method for OSH regulators to approach OSH challenges.

The FOW group is a dynamic conclave of OSH professionals who have shown agility and adapted to changes in the work-life, providing necessary impetus to policy, research and practice at Nordic Labour Inspections and perhaps even beyond. Currently, the work of the group can be described in three phases, based on a continuum since 2016. These phases at first may seem independent, but they are incremental in their scope, substance and ambition. Importantly, each phase draws inspiration from and builds upon the previous phase of work.

# 2.1 Phase 1: Development and horizon scanning 2016–2018

In this phase, the FOW group collected information and established contacts with institutions and colleagues in Nordic countries, the European Union (EU) and globally that dealt with FOW and OSH. This was a developmental phase for the group wherein relevant information was scanned, retrieved and archived. This phase also included developing active relationships with the European Foundation for the Improvement of Living and Working Conditions (EUROFOUND), The European Agency for Safety and Health at Work (EU OSHA), the International Labour Organization (ILO), the International Association of Labour Inspections (IALI), the Senior Labour Inspectors Committee (SLIC), the Advisory Committee for Safety and Health at Work (ACSH) and the World Health Organization (WHO), including the European Commission and OSH research entities. This first phase included, among other, sessions at ICOH Congress, an SLIC meeting in Helsinki and internal briefs to the leadership at the Nordic Labour Inspections that concerned immediate and future challenges to labour inspections. Moreover, the group developed briefs on certain areas such as platform economy, 3D-printing and robotisation, etc. based on the collated information, which served as groundwork for Phase 2.

# 2.2 Phase 2: International engagement and developing Seventy-Two recommendations 2019–2020

This was an active phase for the FOW group for which a report titled "Work today and in the future: Perspectives on Occupational Safety and Health challenges and opportunities for the Nordic labour inspectorates" was published, which provided practical recommendations to the Labour Inspectorates, which were developed based on research data, academic input and engagement with international policy makers. The report yielded 72 unique recommendations for Nordic Labour Inspections to address the challenges emanating from the drivers of FOW, namely Globalisation, Technology, Climate change and Demographics. Some of these recommen-

<sup>8 2020.</sup> Work today and in the future: Perspectives on Occupational Safety and Health challenges and opportunities for the Nordic labour inspectorates. <a href="https://julkaisut.valtioneuvosto.fi/handle/10024/162419">https://julkaisut.valtioneuvosto.fi/handle/10024/162419</a>

dations have either been implemented or are in the process of being evaluated or adapted for further action by the Nordic Labour Inspectorates. This period also included a workshop at the Working on Safety Congress in Vienna in 2019 and the online launch of the Future of Work report at the 2020 ILO Safety and Health Congress (Digital). Moreover, a joint session with our international collaborators was held at ICOH 2021<sup>9</sup>.

## 2.3 Phase 3: Synthesis of recommendations 2021–2024

The current phase commenced with focus group interviews of the frontline inspectors from the Nordic countries to validate the recommendations provided in phase 2, but also to identify current practical challenges and potential solutions in OSH vis-a-vis FOW. Furthermore, this process helped to synthesise the recommendations provided by the FOW group based on supplemental empirical evidence from frontline inspectors. The current report, where the outcome is a synthesis and consolidation of recommendations from the inspectors, is part two of the publication series, Work Today and in the Future.

Parallel to the validation and synthesis of recommendations, the Directors at Nordic Labour Inspectorates requested that the FOW group provide novel insights into the post-pandemic period and how it impacted occupational safety and health. The FOW group has also produced briefs on platform economy, hybrid work, AI and robotics in this period thus far providing some practical recommendations. The work of the group is aligned and also inspired by the EU Commission's Strategic Framework for Occupational Safety and Health 2021–2027, including strategies drawn up by other international agencies and OSH congregations such as the ILO, the Organisation for Economic Cooperation and Development (OECD), the International Commission on Occupational Health (ICOH), WHO and IALI<sup>10</sup>. In the current period, the mandate of the group is, among others, to utilise the knowledge from previous phases of the work to identify a set of problems in close collaboration with Nordic labour inspectors. In the current period, the mandate of the group is, among others, to utilise the knowledge from previous phases of the work to identify a set of problems in close collaboration with Nordic labour inspectors.

# 3 Aims of the report

This report is commissioned by the Nordic Directors at Labour Inspections with the aim of acquiring advice on how to better prepare the Nordic Labour Inspectorates

<sup>9 2022.</sup> Work today and in the future: Perspectives on Occupational Safety and Health challenges and opportunities for the Nordic labour inspectorates. <a href="https://doi.org/10.1016/j.shaw.2021.12.973">https://doi.org/10.1016/j.shaw.2021.12.973</a>

European Commission 2021. EU strategic framework on health and safety at work 2021-2027 Occupational safety and health in a changing world of work. <u>EUR-Lex - 52021DC0323 - EN - EUR-Lex (europa.eu)</u>

for FOW<sup>11,12</sup>. The mandate from the Nordic Directors requested that the FOW group gain input from the Nordic Labour Inspectors on OSH issues vis-a-vis FOW<sup>13</sup>. The report was authored by the FOW group, an interdisciplinary team of OSH professionals and analysts at the Nordic Labour inspectorates.

The FOW group aimed to identify prioritised challenges vis-a-vis FOW and OSH. Furthermore, to provide recommendations for these challenges from labour inspectors across the Nordic countries, differences and similarities both in and between the Nordic countries were considered effective and of interest when synthesising the final recommendations. To get the necessary input as requested in the mandate and to synthesise the recommendations, the following objectives were formulated:

- Identify preliminary OSH challenges for data collection based on previous work in the FOW group;
- Investigate OSH challenges the Nordic Labor inspectors prioritise and their recommendations for addressing those challenges; and
- Analyse empirical findings from the Nordic inspectors to synthesise practical recommendations for the Nordic Labour Inspectorates.

## 4 Methods

The current report had a two-staged mixed-methods approach to identify prioritised areas vis-a-vis FOW and provide recommendations for these areas from labour inspectors across the Nordic countries. The current report has taken the perspectives, information and recommendations from the previous phases in the report series and validated and synthesised these into recommendations for the Nordic Labour inspectorates. In the subsequent methods chapters, methods are presented for stage I for each country, followed by methods for stage II.

In stage I, national data were collected quantitatively and qualitatively in each country to first identify prioritised common Nordic challenges based on the topics from the FOW report from 2020<sup>14</sup>. Data were collected in all the Nordic countries in the first stage based on a Norwegian template that included quantitative and qualitative methods. We describe the Norwegian data collection approach in detail

<sup>11</sup> Nordic Future of Work Group: Diversity of the future workforce and work tasks - challenges to OSH. 2016

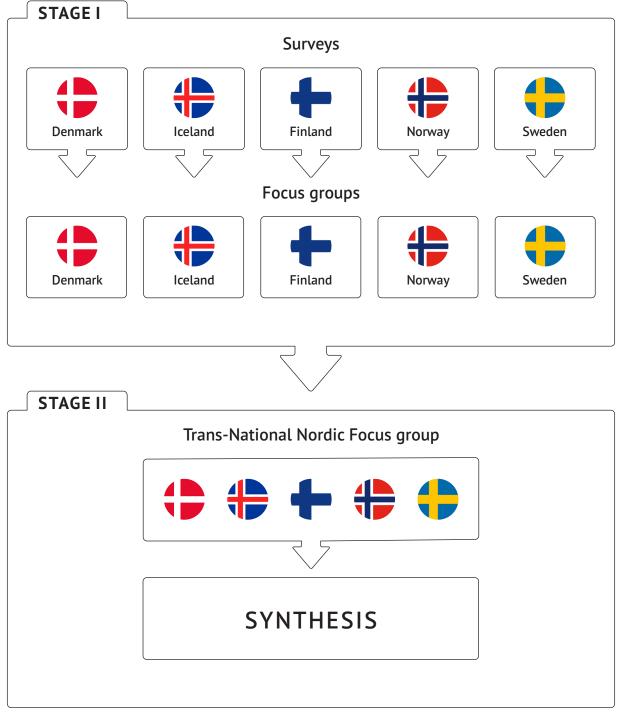
Work today and in the future: Perspectives on Occupational Safety and Health challenges and opportunities for the Nordic labour inspectorates. 2020

Disclaimer: The recommendations provided in the current report are presented as proposals to the leadership at the Nordic Labour Inspectorates with the aim of fostering discussions on creating safe, sustainable, and healthy workplaces now and in the future. These recommendations are non-binding and not intended to be prescriptive or mandatory. The implementation of any suggestion is at the discretion of the respective leadership, authorities and organizations.

Work today and in the future: Perspectives on Occupational Safety and Health challenges and opportunities for the Nordic labour inspectorates. 2020

first as the same approach was replicated fully or partially across the other Nordic countries to obtain the necessary information from the inspectors in their respective countries.

In stage II, the prioritised challenges identified across the Nordic countries were applied as the basis for focus group discussions among the group of Nordic labour inspectors. Stage I data concerned only national responses, whereas Stage II is the trans-national Nordic response. Both the stages are elaborated on in the following sections. Lastly, a synthesis of the findings was performed and this resulted in practical recommendations for the Nordic Labour Inspectorates.



**Figure 1:** Flowchart showing the process of data collection in a two-staged mixed methods approach with subsequent synthesis of recommendations.

## 4.1 Stage I – The national data collection

Based on the challenges discussed in the FOW report from 2020, a survey was developed<sup>15</sup>. The FOW group chose a total of 11 topics (plus one open-ended, self-selected topic) to distribute in a survey to the labour inspectors. The inspectors were asked to prioritise these topics and to provide potential solutions to these FOW challenges. The topics were:

- Platform work;
- Al, robot-technology and automation;
- Digital monitoring/surveillance;
- Younger workers;
- Elderly workers;
- Migrant labour;
- Contagious infections and pandemics;
- Consequences of homeworking<sup>16</sup>;
- Climate and environmental changes;
- Consequences of sitting at work; and
- Work-related crime / Undeclared work

The inspectors were asked to assess the most suitable recommendation for each topic and also asked to elaborate their choices in open text boxes.

#### 4.1.1 The Norwegian data collection approach

The Norwegian Labour Inspection Authority (NLIA) chose inspectors based on suggestions by inspections managers. The criteria proposed for including inspectors was a certain level of diversity regarding professional background and experience in the agency. A total of 26 inspectors were chosen based on the criteria and an email explaining the background and chosen topics was distributed to the group of inspectors one day ahead of the questionnaire. A reminder was sent out to the group a few days later. The quantitative data were collected using an online survey platform called Questback and exported into Excel. There, the data were arranged and made into a table (Table 1) to show the number of inspectors who chose each of the topics and the inspectors' assessment of the best solutions for these challenges.

Following the quantitative data collection, two focus groups were conducted with 10 of the 26 inspectors who had participated in the survey to obtain qualitative information from the inspectors and validate the quantitative findings. Each of the two focus groups consisted of five inspectors with two moderators from the NLIA, with a duration of approximately two hours each. The focus groups had a

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Homeworking (i.e. working from home, homework) can be understood as voluntarily working from home a few times a week as a hybrid solution. The term homeworking either relates, overlaps or includes (but is not limited to) concepts such as hybrid work, remote work and teleworking in the current report.

semi-structured conversation style whereby the inspectors were asked to reflect and discuss on the topics from the survey. The moderators first asked about topics with higher scores from the survey, whereas possible new topics or lower ranked topics were last. At the end of each focus group, the need and the opportunity for a Nordic cooperation was discussed. The focus groups were recorded, and a written summary of the key points and subsequent discussions are presented in the current report as stage I qualitative findings.

# 4.1.2 Nordic data collection – brief summary

The following sections present brief country-wise summaries of how the other Nordic countries adapted to the Norwegian approach regarding selecting themes, recruitment and data collection.

#### Denmark

The Danish Working Environment Authority considered FOW to be of interest for all inspectors and decided to have focus groups in all of its 12 inspection centres. Ten out of twelve inspection groups provided feedback on the same 11 topics as Norway, including priorities and suggestions for action.

The following topics were chosen by the inspectors as the most important challenges to manage in the future working environment. The percentages are based on the responses by the inspectors at the different centres.

- GIG economy, online platform work (80%)
- Homework (80%)
- Migrant workers (70%)
- Al, robotics and automation (60%)
- Elderly workers (50%)
- Social dumping (40%)
- Digital surveillance (40%)
- Health consequences of sedentary work (40%)

#### Finland

The Finnish Occupational Safety and Health Administration developed a questionnaire for all inspectors, based on nine topics derived from the original report (mainly in line with the Norwegian selection), including open-ended text boxes. The topics were:

- Change in the employer-employee relationship (including platform work);
- New risks (rapidly evolving technology and industry);
- Digital monitoring/surveillance;
- Vulnerable groups (young, old, partially disabled);
- Migrant labour;
- Changes in the society;
- Remote management;

- Work-related sickness; and
- Work-related crime

The participating inspectors were asked to choose the five most important topics for the Finnish Labour Inspection Authority's future work. They were also asked to elaborate on their choices in open text boxes.

The questionnaire was open for everyone to answer. A summary of the report "Work today and in the future" was added in the Intranet page of the agency, together with a link to the questionnaire. In addition, an email was sent to a selected group of inspectors reminding them to answer. A total of 19 replies were received.

#### Iceland

The Administration for Occupational Safety and Health (AOSH) in Iceland created a group consisting of all the AOSH inspectors (N=25); they were divided into four focus groups and asked to prioritise and discuss five or six challenges out of the following topics (based on the Norwegian survey):

- The sharing economy / gig economy;
- Al / robots / automation;
- Digital monitoring;
- Elderly employees;
- Young workers;
- The old wave;
- Occupation of low-wage jobs;
- Epidemic / coronary heart disease;
- Home Office;
- Climate change; and
- Health consequences of sedentary work

The four focus groups were then asked to narrow their discussion and suggested solutions on the topics in two main areas. The theme distribution among the group was as follows:

- All groups: How do you envision the AOSH fulfilling its role in the future in this changed work environment?
- **Group 1:** How do you envision that occupational safety will be best handled by companies and institutions with increased home working and gig work in this country?
- **Group 2:** Which groups of employees need special attention with regard to changed jobs in the future?
- **Group 3:** What effect does automation / AI have on staff, their safety, workload and facilities?
- **Group 4:** What impact will environmental impact and climate change have on the work environment and occupational safety?

#### Sweden

The Swedish Work Environment sent out a questionnaire to a sample of 15 inspectors divided equally amongst the different regions. All inspectors answered within the set time frame. The questionnaire was largely based on the one compiled by Norway, with questions focusing on what the inspectors perceived as the most important trends and which tools/measures should be in place to address the challenges stemming from these trends.

# 4.2 Stage II – The trans-Nordic data collection

In stage II, the prioritised challenges across the Nordic countries applying qualitative and quantitative findings were identified, validated within the FOW group and merged into a comparative table (see table 3: Summary table of stage I findings)

This summary yielded a set of the five most prioritised challenges that concern FOW and OSH across the Nordic countries. The validation summary was then circulated to the FOW group to assess if the findings were consistent with their understanding of the most critical issues within each of the respective Nordic Labour Inspectorates. All the Nordic FOW group members who were engaged in implementing the survey at each of the Nordic Labour Inspections Authorities confirmed that the prioritised themes in the validation summary were indeed an approximation of their inspectors' views on the prioritised challenges vis-a-vis FOW.

The five challenges that were identified and provided a basis for the focus groups were:

- 1. Al and Robotics:
- 2. Homeworking;
- 3. Platform economy:
- 4. Digital surveillance; and
- 5. Undeclared work

These challenges were the theme of five focus groups at the Nordic Labour Inspections Conference in Copenhagen, 2022. Each focus group discussed one of the five topics and consisted of 20 inspectors and other OSH specialists at the inspectorates, mixed and equally distributed from the Nordic countries. These focus groups were conducted by five members of the FOW group who also recorded the key points from the discussions.

First, the inspectors were provided with a recap of why and how these five challenges were selected; subsequently, the facilitators provided talking points to initiate a discussion on the topic at hand in each group. The discussions eventually resulted in some practical recommendations for each of the five prioritised challenges.

# 5 Findings

The findings are presented for each of the two stages of data collection. Findings from stage I are presented country wise, with a summary table (see table 3) that encapsulates the tone and tendency of the findings across the different countries as reported by the Nordic labour inspectors.

# 5.1 Stage I – national findings

#### **5.1.1** Norway

Table 1 shows the number of inspectors who chose each of the challenges, and the inspectors' recommendations for these challenges.

**Table 1.** Ranking and percentages of the selected topics by importance by the inspectors with subsequent recommendations for the selected challenges

	Inspection	Guidance	Regulations	Dissemination of information	Cooperation with the parties involved	N
AI, robot-technology and automation	39%	39%	72%	50%	61%	18
Work related crime	100%	29%	82%	35%	59%	17
Migrant labour	82%	65%	47%	59%	41%	17
Platform work	53%	33%	100%	20%	27%	15
Digital monitoring/ surveillance	82%	73%	73%	46%	46%	11
Consequences of homeworking	0%	30%	60%	70%	30%	10
Climate and environ- mental changes	38%	63%	50%	63%	38%	8
Consequences of sitting at work	38%	100%	25%	63%	50%	8
Younger workers	86%	100%	14%	57%	57%	7
Elderly workers	20%	60%	40%	20%	60%	5
Other (self-chosen topic)	80%	100%	40%	60%	60%	5
Contagious infections and pandemics	67%	67%	100%	33%	33%	3

#### "Open-ended feedback"

In the following section, we present the feedback of Norwegian inspectors from the open-ended text boxes for the five most chosen challenges by the inspectors, namely AI, robot-technology and automation, Work-related crime, Migrant labour, Platform work, and Digital monitoring/surveillance. The responses are written together as an analytical text by OSH experts and analysts at NLIA.

#### AI, robot-technology and automation

The inspectors highlight this as an important current and future topic that will influence the entire labour market to a considerable degree. New technology can

New technology can in many cases contribute to easier work but is also likely to give rise to new and unexpected challenges.

in many cases contribute to easier work but is also likely to give rise to new and unexpected challenges. The use of self-service checkouts in stores and automation in industry or in farming will cause professions and jobs to change or even vanish. New technology can provide incentives to reduce or even replace the workforce. Professional skill requirements will change, and technological changes will affect health, environment and safety, for example through the introduction of new machines. The laws and regulations con-

cerning the working environment will require updating. The NLIA will also need to discuss how these new issues should be addressed during inspections.

#### Work-related crime / undeclared work

Several inspectors highlighted work-related crime / undeclared work as a serious and challenging societal problem that must be prioritised by the NLIA. Perpetrators of work-related crime commit tax fraud, exploit workers and create unfair or even impossible competition for ordinary companies. Through work related crime and/or undeclared work, these perpetrators face high potential profits while simultaneously facing a relatively low risk of punishment. It is especially hard to combat foreign companies involved in work-related crimes in Norway, and this topic is closely connected with work immigration, the platform economy and platform work.

To combat work-related crime, the NLIA needs resources, a continuous presence, technology, investigations and inspections, and a closely coordinated cooperation with other authorities. Several inspectors highlighted the importance of good information exchange between cooperating authorities in addition to problems with today's regulation, where not all information can be shared.

Several inspectors suggested that the current approach to combat work-related crime frequently fails, and that the NLIA are hampered by excessive administration, making inspections less effective. The cooperating authorities' management such as Tax, Police etc are not sufficiently goal-oriented, and there seems to be disagreement concerning prioritising, whereby leaders have insufficient time and capacity to be involved.

#### Migrant labour

Several inspectors suggested that migrant labour will result in an even more fragmented labour market. Migrant workers will most often get low-paid jobs that are high-risk and that have a heavy workload. These are frequently low-status jobs involving physically strenuous work that are unpopular among Norwegian workers, leading to an uneven workload. This is often combined with a lack of affiliation/relationship to the workplace resulting from temporary positions and short-term contracts, meaning this group of workers is afforded less protection under labour laws. Many migrant workers have less knowledge of Norwegian regulations and OSH, making them a vulnerable group susceptible to exploitation by players involved in work-related crime. Market forces arising from the increased use of migrant, low-cost labour will put the common standards for OSH and welfare under pressure.

Migrant workers can pose challenges concerning language and cultural codes. One of the inspectors recounted an inspection in a family company where the organisation of the workplace made it hard to understand who was in charge of the company. Many migrant workers are in Norway for a short period of time and wish to work as much as possible while in the country, putting further pressure on today's regulations, especially concerning working hours.

Many inspectors emphasised the probability that the future labour market in Norway will be more dependent on migrant labour. Thus, Labour Inspection Authorities must set aside resources and time to follow up these group of workers, securing them equal rights and decent working conditions.

#### Platform work

Several inspectors highlighted the increasing use of platform work as a growing trend in the future. New technological advancements are increasing the speed of this trend, and platform work will, for many workers, offer an alternative source of income with the independence to choose when to work and how much. Platform work and the platform economy influences and challenges the traditional organisation of employment. Several respondents argued that today's regulations are less applicable to platform work as the roles of employers and employees are less clear. Further development of regulations and policies is necessary to avoid a considerable number of employees being unprotected by the working environment laws. This will have consequences for health, safety and job security, in addition to socioeconomic consequences. The manner in which the organisation of platform work is included in working environment rules and regulations should be clarified, and the definition of employer and employee should be updated.

Younger workers, who are likely to miss out on the benefits of permanent work including, among other things, pension entitlements and insurance, might be particularly susceptible to finding platform work appealing. Platform work and the platform economy can facilitate major players' exploitation of the workforce.

#### Digital monitoring/surveillance

The inspectors noted that employers now have easier access to cheaper means of surveillance that can be used to monitor their employees, for example camera

surveillance, GPS in cars and the monitoring of production lines. These are topics several of the responding inspectors have worked with during inspections. One of the respondents reported the example of the surveillance of waiters. When the waiters made mistakes, they were paid less, given fewer shifts or even had their contracts terminated.

Digital surveillance is carried out at the expense of personal data protection and personal privacy. This creates insecurity among employees and can lead to an increased workload and mental health issues. Several inspectors suggested that it is important to have clear guidelines and regulations, and to include this topic in inspections as soon as possible.

#### Findings of the Norwegian focus group

The findings from the two Norwegian focus groups are presented as a summarised analytic text under each discussed topic.

#### Al, robotic technology and automation

Both focus groups started with this as the highest ranked topic. The inspectors argued that there have been ongoing developments in the area of AI, robot technology and automation in certain industries for some time, and that this topic will only become more relevant in the years to come. The industrial sector is one where developments have been taking place for quite a while, and inspectors with experience conducting inspections in this sector participated in both focus groups. In the industrial sector, a considerable amount of heavy, monotonous and dangerous manual work has disappeared. Now workers operate machines instead of doing harmful work in a dangerous environment. The NLIA should support the automation of such work. The development and production involved in automation is costly; however, it pays off in the long run, both financially and regarding workers' health. Developments in this area have a negative impact on low-skilled workers and persons with learning difficulties. There will be fewer jobs available for low skilled workers and a greater demand for skilled labour and increased productivity. The maintenance of machines and equipment will also become increasingly complicated, requiring highly skilled employees and inspectors. The NLIA should be active and helpful both when industries are going through a phase of restructuring and automatisation, and after this transition. It is also important for the NLIA to cooperate with the employers' organisations, trade unions and government early on to contribute to the continuing development of the regulations. Regarding technological development, the NLIA should work closer with people in research and science.

This topic is, to some extent, related to digital surveillance, which has considerable potential for abuse. Digital surveillance is a broad term that can include many different types of surveillance activities. One inspector highlighted that the NLIA itself uses a form of digital monitoring to ascertain the extent to which employees use electronic aids. An example of how digital surveillance can be positive is the case of hospital at home programmes, where hospital-level care is provided in a patient's home with the help of digital monitoring and advanced communication technology. This often applies to children with cancer, who should preferably stay at home.

Some of the discussion on this topic also covered how the introduction of new technology can make the distance "too long" if something goes wrong. An example is how to report an IT problem to an IT department in a workplace versus the possible future situation where one may have to report such a problem to the developers of an app in another country.

#### Migrant workers

Many labour immigrants enter the work force via recruitment agencies, potentially leading to these workers being considered second-rate in certain types of occupations such as in the manufacturing and the cleaning industries.

There is a significant distortion of competition between companies that try to comply with the regulations and strive for a good working environment and the other companies that undercut them. The exploitation of labour immigrants has serious consequences and often further leads to work-related crime.

Labour immigrants have less affiliation with workers' unions, especially recently arrived immigrants. Working immigrants who have been here for a long time have frequently needed the help of workers' organisations and become members. This is also a group that uses the occupational health services to a lesser extent as the employer is usually abroad and is therefore unable to inform the employees what kind of health assistance they are entitled to in Norway. There is a difference between working immigrants employed in Norwegian companies and those who are employed in foreign companies, whereby the latter group receives poorer working terms and less attention from leadership.

Many migrant workers with low affiliation to Norway want to work intensively during their stay in Norway so they can earn as much as possible before returning to their home country. The inspectors explained that there is a considerable difference in the attitudes of workers who wish to live in Norway and those who do not.

The NLIA should obtain information about where the immigrants work and in what contexts criminals who exploit them are "allowed" to do so without consequence. It is important to collaborate with the employers' organisations, trade unions and government to further influence the organised companies with business requirements and standard requirements. This can have a greater effect than simply amending the regulations. The NLIA has the potential to help those who come to Norway and do not speak the language. Migrant workers can be supervised so they can do their job in a safe and secure workplace. Here, the NLIA can affect policy even without amending regulations.

There was also discussion about the importance of distinguishing between labour immigration and work-related crime. Even though working immigrants are somewhat overrepresented in this area, it is important to remember that the vast majority of working immigrants do not intend to contribute to criminal activities. Companies with many employees who are working immigrants can often be suspected of work-related crime due to prejudice. The fact that Norway has access to foreign labour is positive and frequently necessary.

#### Work-related crime

The inspectors agreed that the most appropriate method for tackling work-related crime is through carrying out inspections, but they emphasised how challenging it can be to identify the right companies to inspect. The NLIA should have a greater focus on acquiring more knowledge about this area of work-related crime. Much of the existing knowledge and information in this area is not managed and shared in an adequate manner. The inspectors would often benefit from having access to sufficient information and knowledge prior to carrying out an inspection connected to work-related crime, but it can be difficult to determine exactly what information is necessary.

Another challenge for inspectors is the unpredictable nature of inspections of work-related crime. Inspectors can often uncover issues during an inspection that deviate completely from the issues they had prepared for.

The NLIA attempts to distinguish between work-related crime on the one hand and what is referred to as "precarious employment" on the other. This is difficult, however, because there is rarely any clear distinction between the two. For the inspectors, it can be easier to target workers in precarious employment than the obvious criminals who have no intention to follow the law.

In Norway, there are regional centres working with work-related crime, comprising employees from the NLIA, the police, the tax authorities and the labour and welfare administration. The discussion in the focus groups revealed a lack of knowledge among the inspectors about how these centres are working and why the NLIA has been given such a central position in this work. There seems to be a consensus that the police should have a greater role in targeting criminality and that the NLIA should rather contribute to knowledge and intelligence. There also seems to be a consensus that collaboration with other authorities is essential to make this work effective. There is a perception that there are certain gaps in the regulations. meaning companies can frequently continue to operate. The inspectors referred to several cases where there have been attempts to stop criminal activities but where the companies involved have been able to continue operating without consequence. If the police do not follow up the case, then the NLIA has little opportunity to do anything about it. The dedicated centres working with work-related crime should be evaluated, especially regarding what role the NLIA should play. The NLIA expends a considerable amount of resources with little impact.

These challenges are common to all the Nordic countries. We require some sort of collaboration with respect to work-related crime, and we have not yet found the most efficient method for approaching this area.

<sup>17</sup> For more information about the concept precarious work and various definitions, please see <a href="Precarious work">Precarious work</a> | European Foundation for the Improvement of Living and Working Conditions (europa.eu)

#### Gig/Platform work

This is a relatively new issue that poses major regulatory challenges. The NLIA should try to establish a joint Nordic, and possibly also European, cooperation. These are completely new forms of attachment to work driven by a desire for easy money that leads to insecure working conditions for others.

Low-skilled workers who struggle to find other work tend to take particular platform jobs.

Although there are many types of platform work, the discussion with the inspectors mostly concerned the most visible type, food delivery, such as Foodora. Inspections reveal that it is frequently students, migrants and young employees who take on platform work. Some people are motivated by the combination of flexi-

bility, salary and physical activity through biking, while others work full time in the companies. The NLIA answering service has received several enquiries from people employed in platform workplaces with unclear employment conditions. As with the topic of labour immigration, there are certain employees who want full control over how much they work. People who perform this kind of work are not considered employees and thus have little motivation to develop their own working environment and regulations.

Low-skilled workers who struggle to find other work tend to take particular platform jobs. This type of work is relatively easy to obtain, but it can lead to a lack of
connection to working life amongst employees. In platform workplaces, employees
do not have contact with their colleagues in the same manner as in working life
otherwise. It is also difficult for an employee in a platform workplace to obtain
legal assistance in legal matters concerning their job. The rules and regulations
meant for other types of jobs are difficult to enforce in the case of platform work.
It is also difficult to assess the monitoring that occurs in delivery assignments. The
lack of connection to working life will affect people who depend on platform work
as a full-time job much more than people who simply use platform work to supplement their income. The inspectors stressed the importance of considering the pace
of technological development and highlighted that new apps and digital solutions
are used in the restaurant and food delivery industry, and it is difficult to assess
whether routines and systems are satisfactory prior to a new app being released.

#### Older workers

Older workers often have difficulties using new technology. Many can have a painful transition from working life to retirement and many leaders are pressured to lay off older people who are unable to keep up with developments. The levels of competency demanded are continuously increasing, and with a lack of support from employers, increasing numbers of older workers are taking sick leave. The retirement age will most likely be raised, so it is therefore important to provide support and guidance to this growing category of employees.

#### Young workers

The NLIA has previously carried out projects targeting this group; however, these projects have, in retrospect, been unsuccessful. The targeting of young employees

needs to be an ongoing process with a preventative focus. Young people frequently have a poorer understanding of risk and lack knowledge about working life in general. Some of the jobs and tasks young and unskilled workers have traditionally been given are disappearing due to automation and new technology. The NLIA needs to evaluate the projects that targeted young workers to determine the effect they had. There is a perception among inspectors that similar projects and initiatives are simply rebranded and repeated. The NLIA should consider new ways of encouraging companies to take on young employees. One inspector argued that although the NLIA has previously tried to provide guidance via schools without success, this should nonetheless be pursued again. Not all young people are aware of or have the same desire for permanent employment. The NLIA needs to use a wide range of measures to reach this group, even concerning educating young people about workers' rights and contracts.

#### Health consequences of sedentary work

This topic is related to musculoskeletal problems and chronic health problems. One inspector argued that the NLIA should set stringent requirements for employers. Many people consider this to be an issue which largely places responsibility on the individual, but greater responsibility could still be placed on the employer to facilitate physical activity. The NLIA rarely conducts inspections of traditional office workplaces. Many new office buildings are smaller with less room for movement. Attempts have previously been made to carry out ergonomics inspections in various industries, but this only lasted a short period. The discussion with the inspectors revealed that there was a consensus that facilitating physical activity is important, but there seemed to be differing opinions regarding whether regulations could be enacted to force employers to further facilitate physical activity

#### 5.1.2 Denmark

In the following, the topics chosen by the inspectors as the most important OSH trends to manage in the future working environment are described in order of priority. The analytical text describes challenges discussed by the inspector in the focus groups under each topic, with some recommendations from the inspectors.

#### GIG economy, online platform work

The "false" self-employed are very visible in the streets as it is widespread in the transport sector e.g. pizza delivery, but the inspectors also meet them in other sectors such as cleaning, agriculture and construction. Typical sectors mentioned are type house companies, floor layers, commercial climbers in electricity and plumbing and transport companies such as post and couriers.

The inspectors noted that the contractors do not see themselves as employers and that these workers frequently have low salaries and a poor working environment. This type of employment is rapidly growing.

Inspectors mentioned cooperation with social partners, the possible adjustment of legislation and sanctions to cover the new ways of work, strengthened cooperation with other authorities, and the focused use of communication strategies. The

Danish Government has recently presented a proposal for reform that encompasses many of these topics.

#### Working from home

Working from home will remain after the pandemic. It can have a positive impact on the work-life balance, but there are challenges to be managed, such as isolation, blurred boundaries between work and private life, and distance management. Currently, we do not perform inspections of private homes in the case of home working.

Inspectors mentioned clarifying rights and duties regarding home working (ongoing) and the need for considering adjustments of inspection methods to better encompass an increased use of home working.

#### Migrant workers

Migrant workers – from EU and from outside EU – have the hardest and dirtiest jobs and the poorest working conditions in Denmark. They have very little knowledge about the working environment and their rights in the Danish labour market. Migrant workers are not only present in the construction sector but also in other sectors. The number of Migrant workers will increase because of the lack of workforce.

Inspectors mentioned cooperation with social partners, intensified inspection activity (taking into account seasonal work) and guidance as recommended actions.

Regarding inspections, there should be an increased focus on talking to migrant workers (it is easier/more efficient to talk to Danish workers) and accept that it takes more time to explore the working environment for migrant workers.

There should be a more "intelligent" use of interpreters e.g. a one-day focus on inspections of Chinese restaurants with a Chinese interpreter. The use of interpreters on special inspection actions in sectors with many migrant workers (construction) is recommended.

There should be capacity building of inspectors, including cultural diversity. There should be info meetings in major cities for information about working environment and labour rights e.g. in cooperation with trade unions, other authorities etc. Such invitations might be distributed by the inspectors.

#### AI, robotics and automation

The inspectors are meeting with increasing frequency robots, exoskeletons, 3D print, drones and equipment for image recognition etc. This is a rapidly growing trend.

The technical development may be followed by new hazards, new psychosocial issues such as alienation etc. The greater use of technical solutions in the social/health sector often causes conflicts with patients/users and relatives.

Research, cooperation with social partners, and dialogue with companies regarding

their considerations of purchases of new technology were all mentioned as recommendations. Due to the forthcoming organisation of the work, knowledge sharing with and guidance of companies, it was mentioned that the capacity building of inspectors on this topic is important.

#### Elderly workers

The number of elder workers will increase because of the higher retirement age and fewer workers from the younger generations. The lack of workforce in certain sectors is an amplifying factor.

To maintain the work force for future years there must be a greater focus on physical and psychosocial attrition in legislation, guidance, inspection activity and cooperation with the social partners. There should be a specific focus on elder workers in all inspections as we have on the young workers today. It may be necessary to have a "task force" in the authority.

#### Social dumping

Large businesses can avoid liability, penalty, etc. due to hired labour. For example, established companies with 100+ employees are judged much more severely than businesses that in reality employ and determine over 200+ employees but formally only have 10 employees.

#### Digital surveillance

Digitization makes it easy to control the work and the worker in detail. This trend is increasing and frequently generates resistance among the employees. One example is the surveillance of transport time in certain sectors. Digital surveillance might have negative consequences for psychosocial health, information, knowledge sharing, and cooperation with the social partners. It was mentioned that the Danish labour inspectorate might use drones for the inspection of e.g. major construction sites, or small surveillance units placed on the sites (site security).

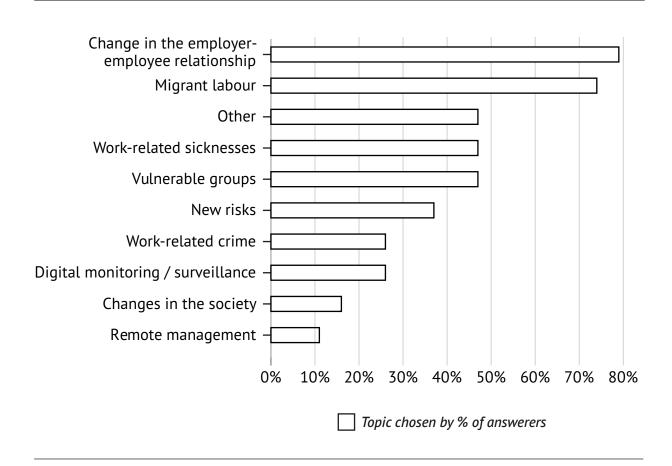
A clarification of how the authority can handle the psychosocial impact of digital surveillance is in demand by society and social partners.

#### Health consequences of sedentary work

The trend towards more sedentary work has been ongoing for many years. There are less physical demanding jobs and workers are being retrained to other functions such as quality control, surveillance etc. A consequence of this is an increase in cardiovascular and lifestyle diseases. Knowledge sharing, information and cooperation with the social partners is recommended.

#### 5.1.3 Finland

Table 2 shows the percentage and ranking topics chosen by the inspectors who completed the questionnaire.



**Table 2:** Ranking of the selected topics by importance by the inspectors.

In the following section, we present the feedback from the open-ended text boxes. The feedback was written together as an analytical text. The overall finding was that the topics are very strongly related to each other and result in the increasing polarisation of workplaces.

#### Change in the employer-employee relationship (including platform work)

The change in the employer–employee relationship was regarded as the most important phenomena to consider in the next five years. According to the respondents, there are clear signs that forced entrepreneurship and platform work are also used to transfer the risks of work to an individual, who is not able to effect real change to affect the content of the work. Currently the topic is considered very problematic because OSH inspectors do not have proper jurisdiction if there is no clear employee–employer relationship. The topic requires changes in legislation to ensure safe and healthy working conditions for all.

#### Migrant labour

The same problems occur with migrant labour as with other vulnerable groups. The problems pertain to terms and conditions of employment in addition to working conditions. The language barrier makes it more difficult for employees to

get information on their rights and can also cause safety issues when there is no common language for giving instructions and communication at the workplace. It was regarded as important that inspections also cover the safety of the working

environment not just the right to work or terms and conditions of employment.

As the labour force diminishes, young, old, partially disabled and other vulnerable groups such as migrant labour will form bigger part of workers.

Vulnerable groups (young, old, partially disabled)
As the labour force diminishes, young, old, partially disabled and other vulnerable groups such as migrant labour will form bigger part of workers. These groups also frequently work in new forms of employment where the employer-employee relationship is not always clear. In particular, young workers form a group whose rights can often be neglected. Young workers are not always fully aware of their rights, are in their first

jobs and work part time while studying, which exposes them to exploitation.

#### Challenges across different topics

Work-related sicknesses caused by biological exposure and psychosocial strain will require more attention in the future.

New risks in rapidly evolving technology and industry are extremely difficult to detect. Maintaining knowledge requires constant training and co-operation with the companies developing new technologies. Digital monitoring/surveillance increases. This has already raised considerable questions about employees' privacy and rights. It is important to ensure that legislation is up to date and OSH inspectors have a united interpretation on the topic. It is also important to communicate the rights and responsibilities of both employee and employer to workplaces.

Changes in the society, especially 24/4 society and labour shortage in some industries, will cause new risks and add to the polarisation of working life. Combating work-related crime requires adequate sanctions and efficient co-operation between different authorities.

#### 5.1.4 Iceland

The Summarised points from the four focus groups at AOSH were written together as an analytical text and are presented here under each challenge.

### Supervision of working hours, especially for young people

With the increased use of AI and surveillance equipment, the work and working hours of employees will be closely monitored, especially of young people or those who are making their first steps in the labour market. The AOSH needs to prepare for this reality and try to restrict such controls with respect to data protection and prevent such controls from compromising their health and occupational safety. It is important that institutional cooperation be robust in order to ensure that such monitoring does not affect staff. Education is and will be very important, but it

We must pay attention to foreign staff and translate our content into more languages.

is important to have accessible material. The content needs to be interesting, especially for young people. We must pay attention to foreign staff and translate our content into more languages. The labour inspectorate requires its own workforce with knowledge and time in order to design materials and dissemination methods that appeal to the target groups and meet them

where they are, e.g. young people and those who have limited or no Icelandic language skills.

#### Knowledge of technology, employment relationships and research

The AOSH must have all the latest technologies and equipment at hand for conducting inspection tasks, promoting effective OSH activities in undertakings and using them to improve workers' safety and health. It is also important that AOSH conducts OSH research to anticipate changes in the labour market and apply the latest methods in active surveillance, whether through field trips or digitally or remotely.

#### Diversity and inclusion

Because of multiculturalism and the presence of of diversity in the workplace, it can cause challenges, but through the correct channels and with emphasis on inclusion, such diversity can improve employee morale and skills as such a mixture might lead to a boiling pot of ideas and prosperity for the good of all. It is important that this is valued whatever its background and its equality, although competition can also flourish. It is also important that AOSH promotes a healthy workplace culture within companies when monitoring them and encourages companies to adopt OSH policies with focus on inclusion and respect.

#### Home working

Working from home is on the rise in the Icelandic labour market, especially during Covid. Many workers have continued to work increasingly from home or from places other than their traditional workplaces, in part to avoid having to spend considerable time getting to and from work with heavy traffic delays and also due to the carbon footprint. This raises challenges regarding the OSH of these workers and how AOSH can best monitor them. It is important that AOSH urges home workers and their employers to pay close attention to the working environment, especially regarding office equipment and air quality; the vast majority of them work on a computer screen for such work. This can be done through targeted information tunnels and routine inspections with informed consent by all parties.

#### Drones as an aid

Drones can be extremely useful tools in various inspections and make it easier to spot OSH violations. Most occupational accidents and fatalities occur on construction sites, frequently due to deficiencies in the use of personal protective equipment, weak scaffolding and poor working conditions. If drones, piloted by AOSH inspectors, were to hover randomly over workplaces, it would be an important reminder to employees and employers to use all safety equipment as required by law and regulation, which in turn would undoubtedly reduce accidents and

fatalities significantly. Drones are used by the Icelandic Directorate of Fisheries for fishing activities along Icelandic coasts, with good results. Such drones are mainly used in outdoor workplaces, but privacy and legislative approval need to be considered to utilise such technology for inspection and surveillance.

#### Attention should be given to migrant workers in the gig economy

GIG or platform workers are a sizable group in the Icelandic labour market, and as they are mostly self-employed, OSH for them is limited. It is important that these workers are not left out by AOSH when monitoring workers' safety and health in the labour market. In particular, AOSH can appeal to this group with powerful educational information on OSH in the media and on social media, where it is likely to get their attention.

#### Promoting healthy workplace culture

It is important that AOSH promotes a healthy workplace culture when visiting companies and institutions with emphasis on how psychosocial hazards can have an impact on mental health and wellbeing of the employees, e.g. stress, violence and bullying. This could be done through promotion and advertising in the media and social media, which is likely to get attention by both managers and employees.

#### 5.1.5 Sweden

The findings from the Swedish questionnaire are written together as an analytical text by the Swedish members of the FOW group.

The inspectors were first given the possibility to rank the different trends in our national work market according to how large their different impact would/could have on work-life as a whole. In Sweden's case, the inspectors viewed work-life criminality very much as a top priority, but also considered working from home (very much pandemic-related) and AI and robotisation. Closely following those trends, we find the platform economy together with digital surveillance, AI and robotisation. In addition, the inspectors viewed sedentary work, the influx of migrant workers, and young workers as important areas. It was somewhat surprising that climate change, infectious diseases and pandemics were seen as a low priority. Finally, a trend that requires more attention concerned elderly workers.

After this process, the inspectors evaluated which of the agencies tools and activities would become more important to enable the authority to keep up with the increasingly changing and challenging work market. Unsurprisingly, they believed that inspections are the important tool, as noted earlier, but one can interpret the result such that dialogue with social partners is an important tool.

The core of our authority is – and should be – inspection and rules and regulations. In connection with this, we need to convey knowledge so that the employer/employee understands. The social partners, in turn, need to ensure that knowledge and capacity building is disseminated throughout different industries and sectors. The inspectors also asked for more reliable technical aids to help them be more effective when conducting inspections, in addition to better (quicker) support

systems from other departments for helping out in different aspects. Lastly, there is a need for more inspectors to cover more companies and workplaces, in collaboration with other authorities focusing on work-life criminality, but also in the planned inspections.

# 5.2 Summary Table of stage I findings

This table summarises the quantitative and qualitative findings prioritised by Nordic Labour Inspectors' themes across the countries. The wording of the topics has been adapted/rephrased in other questionnaires. In some cases, some of the topics have been merged to enhance the visibility and understanding of issues of concern.

**Table 3** – *Summary table of stage I findings.* 

	Norway (expressed in %)	Denmark (expressed in %)	Finland (expressed in %)	Iceland (expressed in %)	Sweden**
Al, robot-technology and automation	70	60	80	70	
Work-related crime Denmark: social dumping	66	40	26	20	
Migrant labour	66	70	74	60	
Platform work (FI*: Change in the employer- employee relationship)	58	80	79	70	
Digital monitoring/ surveillance	42	40	26	50	
Consequences of homeworking	38	80	10	50	
Climate and environmental changes	31			20	
Consequences of sitting at work	31	40		40	
Younger workers	27		47	30	
Elderly workers	19	50	47	30	
Other (self-chosen topic)	19		47		
Contagious infections and pandemics	12			30	

<sup>\*\*</sup>Findings from Sweden were not available in percentages.

<sup>\*</sup> FI refers to Finland.

The figures in bold indicate approximately 70% support. The table is not a scientific summary but rather an attempt to provide an overview of the general support of frontline inspectors for the findings of the original report, in addition to the similarities and differences in the national economies and challenges.

This summary indicates that some topics are more prevalent and prioritised by the labour inspectors than others. When observing which topics received approximately 70% support or more across the Nordic countries, we see five topics which lie above this figure. These five topics – Homeworking, AI and Robotics, Platform Economy, Digital Surveillance, and Undeclared Work – were the basis for the trans-Nordic focus group discussions of labour inspectors in stage II.

## 5.3 Stage II – Trans-Nordic findings

The trans-Nordic findings are presented as topical summaries from the five mixed focus groups held at the Nordic Labour Inspections Conference in Copenhagen, 2022. The focus group discussions resulted in practical recommendations for each of the five prioritised challenges.

#### Homeworking

- A video or app-based training programme should be considered, targeting new and young workers on home-working and work-life balance.
- The possibility of inspecting home-working conditions should be explored through technological devices such as 3D scans of the working area using smartphones, but care should be taken not to violate workers' privacy.

#### Robotics and Al

- There should be greater collaboration with the EU stakeholders and commissions (SLIC, ACSH, EU OSHA) as the regulations and developments emanating from the EU policy structures will impact the technology development in this area in the Nordic region.
- There should be recruitment, training and continuous education of inspectors to update the skill levels of inspectorates in the Nordic region in the area of robotics and AI.
- Robotics and AI robotics must be integral to risk assessments regardless of the type of occupational exposure (accidents, chemicals, ergonomics etc.)
- There should be a continued focus on the designer's responsibility and the hierarchy of controls should still guide the technological development to protect workers better.

#### Platform economy

The new form of work arrangement poses significant regulatory challenges.
 Therefore, joint Nordic international cooperation is necessary to develop innovative policy interventions to protect workers while facilitating the use

- of novel technologies. As they define platform workers, closer collaboration with the EU should be a priority.
- There should be collaboration with social partners and new stakeholders in the platform economy to provide better OSH protections for platform workers must be considered.
- The use of algorithms is prevalent in this line of work, and a better understanding of algorithmic regulation must be developed.
- The training and education of inspectors are vital as understanding the algorithms of the working platform economy will be essential to make appropriate decisions on risk and risk mitigation efforts.
- Information from this group of workers is difficult to obtain so a Nordic survey could be initiated as a research project.
- Inspectors or other professionals from the inspectorate could attempt to
  work in the platform economy better to understand this sector's challenges
  and working conditions. The inspectorate could provide such adaptation to
  inspectors so that better insight into the working conditions of the platform workers can be obtained.

#### Digital Surveillance

- Information should be provided to employers and employees on the proper application of digital surveillance, its benefits and drawbacks vis-à-vis OSH.
- There should be cooperation with other authorities dealing with data privacy as the surveillance of workers in both physical and digital workplaces threatens workers' privacy.
- Social partners should be informed of surveillance risks through data and research gathered in Nordic countries.
- Digital surveillance (as an occupational risk) at physical and digital workplaces should be considered integral to workplace inspections.

#### **Undeclared** work

- There is a need for cooperation between the authorities, including the exchange of information collected, both during and after the inspection. The ability of the respective authorities to share collected information between each other's registers, retrieve information in each other's registers, and exchange information, may require regulatory changes.
- Cross-agency cooperation from top-down and bottom-up levels should be improved to create the necessary push and pull factors that lead to effective cooperation.
- A holistic approach should be devised that includes both deterrence and prevention.
- It is necessary to establish "a common and healthy culture" when working together in an intra-national and international context on undeclared work issues.

# 6 Synthesis of recommendations from Nordic Labour Inspectors

# 20 recommendations moving towards the future of work

The synthesis can be understood as the process of combining objects, data or ideas into a complex whole. Based on stage II findings, the FOW group performed a synthesis and this resulted in 20 practtical recommendations addressing the five identified prioritised areas. When addressing these challenges and implementing the suggested practical recommendations, collaboration and engagement among local and global stakeholders remains paramount. Thus, recommendation also addresses the recommended stakeholders to be involved and/or responsible for the follow-up to the suggested practical strategy.

Furthermore, the Nordic Labour Inspectorates have different tools at their disposal as potential approaches to be utilised. The recommendations are therefore labelled with one or more suggested tools: Regulations, Guidance, Collaboration and Knowledge development. Regulations refer to developing, updating or clarifying legislation. Guidance involves the guiding and dissemination of information to relevant stakeholders such as employers, employees, safety delegates, union representatives and occupation health services. Collaboration also involves the mention stakeholders, in addition to social partners and other intra- and international partners (e.g. the EU). Knowledge development refers to mapping, generating or requiring data and information on topics where the Labor Inspectorates identify a need for new studies or knowledge. It may also refer to training relevant stakeholders (e.g. internal competence upskilling or the reskilling of labour inspectors).

Lastly, in an effort to maximise the practical utility of the recommendations, they have been categorised into different time frames, ranging from short-term, medium-term and long-term. The time frames indicate a period of time required to implement the recommendations to maximise their impact. Recommendations with a short-term aim could show results within a year or less. Medium-term recommendations could take two to three years before we can expect to see any results, whereas long-term recommendations estimate results five to six years into the future. Depending on how social, political and economic circumstances evolve, these recommendations may have to be altered, adapted and refined to address the needs of working life.

# 6.1 Home working

Time frame	Recommendation	Stakeholder	Tool
Medium-term	1. Develop instructional videos and apps for home workers to improve work-life balance:  Create educational materials in the form of video content and mobile applications aimed at assisting distance workers in enhancing their work-life balance. These resources should consider covering various aspects, including time management, setting boundaries between private and professional sphere vis-à-vis work-life balance, ergonomic considerations and psychosocial well-being.	Social partners, OSH organisations, software developers and LI	Guidance and Knowledge development
Medium-term	2. Utilise smartphones and 3D scanning for home workspace assessments while safeguarding worker privacy: Employ smartphone applications and 3D scanning technologies to evaluate home-based work environments. It is crucial to prioritise the privacy of the worker during these assessments and focus solely on assessing the safety and health aspects of the workspace.	LI, software developers, EU-OSHA	Knowledge development (Training)

# 6.2 Al and robotics

Time frame	Recommendation	Stakeholder	Tool
Short-term	3. Provide specialised training for inspectors in AI and robotics competencies  Offer dedicated training programmes to equip labour inspectors with the necessary expertise to assess the safety, ethical considerations and compliance features of AI and robotics in work settings. This should also include the increased recruitment of inspectors and professionals with competence in these disciplines at the inspectorates.	LI	Knowledge development (Training)
Short-term	Incorporate Al/Robotics and algorithmic management into risk assessments:  Ensure that risk assessments thoroughly consider the impact of Al, robotics and algorithmic management systems on worker safety, fairness and productivity.	LI, Social partners, and EU-OSHA	Knowledge development (Training)
Medium-term	5. Emphasise the responsibility of designers and hierarchy of controls Place a significant importance on designers and manufacturers of AI and robotics systems to integrate safety features. Promote the hierarchy of controls to mitigate risks associated with these technologies, with a focus on elimination, substitution, engineering controls, administrative controls and personal protective equipment.	LI and engage with designers and social partners	Guidance and collaboration
Long-term	6. Collaborate with ILO and EU stakeholders to establish guidelines and regulations  Work closely with stakeholders within the EU, such as governmental bodies, industry associations and research institutions, to establish a coherent framework for the development, deployment and regulation of AI and robotics in workplaces.	LI, collaboration with ILO, EU agencies, and especially EU-OSHA	Collaboration and regulations

# 6.3 Platform economy

Time frame	Recommendation	Stakeholder	Tool
Short-term	7. Educate inspectors on the complexities of platform work: Provide training to workplace inspectors to help them understand the intricacies of platform-based employment and the specific risks associated with it.	LI	Knowledge development (Training)
Short-term	8. Facilitate information exchange between inspectors and platform workers in different channels: Informing workers at inspections is an important channel of information exchange, but it is also necessary to create channels for inspectors and platform workers to share insights and information regarding safety, working conditions, and risk assessments, enabling more informed regulatory decisions.	LI in cooperation with SLIC, EU-OSHA, ILO, ICOH and IALI	Guidance and collaboration
Medium-term	9. Promote collaboration among platform companies to establish industry-specific OSH standards:  Encourage platform companies to work together in establishing OSH standards tailored to the unique challenges faced by gig workers.	LI and engage with platform enterprises and social partners	Guidance and collaboration
Medium-term	10. Advocate for transparency in workflow-steering algorithms: Facilitate the development of regulations mandating transparency in the algorithms responsible for managing and assigning tasks to platform workers, enhancing accountability and fairness.	LI (in collaboration with platform enterprises)	Regulations and knowledge development
Medium-term	Allocate resources for research on OSH among Nordic platform worker:  Dedicate funding to support research efforts focused on understanding the working conditions and challenges faced by platform workers in Nordic regions. This research can inform policymaking.	LI and Research agencies	Knowledge development
Long-term	12. Collaborate with ILO and EU stakeholders, including international institutions and social partners, to develop guidelines and regulations:  Engage in cooperation with EU stakeholders and international institutions such as ILO, IALI, ICOH, including labour unions and industry representatives, to create comprehensive guidelines and regulations that safeguard the rights, safety, health and well-being of workers in the platform economy.	LI, ILO, EU, ICOH, IALI and international agencies and social partners	Collaboration

# 6.4 Digital surveillance

Time frame	Recommendation	Stakeholder	Tool
Short-term	13. Incorporate digital surveillance into workplace inspections Ensure that workplace inspections specifically address digital surveillance practices, evaluating their adherence to legal and ethical standards.	LI (in collaboration with software developers)	Knowledge development (Training)
Medium-term	Educate employers and employees on responsible digital surveillance practices:  Develop educational materials and training programmes to promote ethical and responsible use of digital surveillance technologies in the workplace	LI, social partners, OSH research agencies, ICOH, and NIVA	Guidance and collaboration
Long-term	15. Cooperate with data privacy authorities: Collaborate closely with data privacy authorities to ensure that digital surveillance practices align with relevant data protection laws and regulations.	LI and privacy authorities (Nordic and EU)	Regulations and collaboration
Long-term	16. Share information about surveillance risks with employer confederations and labour unions Engage in open discussions with employer confederations, labour unions and worker representatives to address potential risks associated with workplace digital surveillance, fostering collaboration in risk management.	LI, engage with social partners	Collaboration

#### 6.5 Undeclared work

Time frame	Recommendation	Stakeholder	Tool
Medium-term	17. Enhance information sharing among national and EU authorities for controlling undeclared work Improve mechanisms for exchanging information among relevant government agencies to better identify and combat undeclared work activities.	LI and collaboration with SLIC and EU LIs	Collaboration
Medium-term	18. Promote cross-agency collaboration for more effective action to combat undeclared work  Encourage closer cooperation between different government agencies, such as labour departments, tax authorities and law enforcement, to coordinate efforts in combating undeclared work.	LI and other public sector agencies	Collaboration
Long-term	19. Combine deterrence and prevention strategies for undeclared work  Develop a comprehensive strategy that combines deterrent measures (e.g. penalties for non-compliance, publicising data on serious offenders) with preventive efforts (e.g. awareness campaigns and incentives for compliance) to address undeclared work effectively.	LI	Regulations and guidance
Long-term	20. Cultivate a unified approach to address intra/ international undeclared work  Foster a shared understanding and commitment to combating undeclared work not only within the country but also through international cooperation and agreements to effectively address cross-border undeclared work activities.	LI, ILO, EU, and other international institutions	Collaboration

#### Abbreviations:

**EU** European Union

EU-OSHAEuropean Agency for Safety and Health at WorkIALIInternational Association of Labour InspectionsICOHInternational Commission on Occupational Health

**ILO** International Labour Organization

LI Labour Inspection

NIVA Nordic Institute for Advanced Education in Occupational Health

**SLIC** Senior Labour Inspectors Committee

## 7 Potential challenges shaping the future of work

In a working life that is dynamic and constantly changing, the only constant is change. In work today, and in the future, technological developments are occurring at an unprecedented rate, and the potential of these is unknown. In the current report, we have identified several challenges that will affect Nordic working life

In a working life that is dynamic and constantly changing, the only constant is change.

in the future through surveys and focus groups with labour inspectors. However, there are other potential challenges that may shape FOW in the Nordic countries that have not been identified via the empirical findings in this report. The reason for this is that labour inspectors scan their horizon, which is sometimes limited to their immediate surroundings. Thus, we risk the possibility

of missing some obvious trends and potential challenges in the working life that ought to be considered moving ahead. Therefore, it is necessary to take a step back and carefully consider challenges that perhaps fall outside the radar of the labour inspectors. In the first report of this series, <sup>18</sup> the FOW group included four specific megatrends: climate change, technology, demography and globalisation. The labour inspectors' perspective to a great extent supports the themes and recommendations provided in the report from 2020. However, the world of work has evolved rapidly since 2020 and even through 2021 and 2022, which concerns the data from this report. Certainly, then there are topics and challenges that require a closer examination and diligent work moving forward from this report. Here, we present a non-exhaustive list, in no specific order, of the potential challenges that have not been adequately addressed earlier.

• Climate change and Sustainable development: The health of our workforce is inseparable from the health of our climate. Climate change will impact working life regarding floods, droughts, cyclones and more extreme weather events. From immediate action engaging different groups in the work force such as firefighters and rescue workers, longtime restructuring in various industries, companies and communities is expected to follow, as will transitions to renewable energy sources, green jobs and low- or zero emission transport and production. This will affect working life and OSH both in terms of physical and psychological health for many Nordic citizens<sup>19</sup>. The climate change and OSH perspective needs to also be supplemented by the sustainable development perspective. In particular, controlling environmental hazards, promoting energy saving measures and advocating circular economy are all elements that are also integral to better OSH and decent work. The EU commission has placed Climate Change and OSH in

<sup>2020.</sup> Work today and in the future: Perspectives on Occupational Safety and Health challenges and opportunities for the Nordic labour inspectorates. <a href="https://julkaisut.valtioneuvosto.fi/handle/10024/162419">https://julkaisut.valtioneuvosto.fi/handle/10024/162419</a>

<sup>19</sup> The Nordic future of work. Drivers, institutions and politics. 2018:555. The Nordic future of work (norden.org)

its strategic framework<sup>20</sup> and the Labour Inspectorates may have considerable inspiration to draw from these developments in the coming years. Indeed, specific data on Climate Change and OSH is lacking in the Nordic countries, which creates an opportunity for further work for the FOW group.

- Chemical and Biological exposures: Although not addressed in an adequate manner in this report, preventing chemical and biological exposures in the workplace will remain crucial in FOW. First, ongoing technological advancements and the emergence of new functional materials (i.e. nanomaterials) and process (gene editing) will introduce novel, still unknown hazards. Second, as working from home and automation become more prevalent, monitoring and maintaining safe working environments will be vital. Third, with global interconnectedness, the spread of infectious diseases (future pandemics) demands rigorous workplace health measures. Finally, there is the issue of "Forever Chemicals". This is a term used to describe certain types of chemicals, such as PFAS (per- and polyfluoroalkyl substances), that do not break down in the environment and can persist for a very long time. These chemicals can be harmful to human health and the environment are a big concern because they stick around for a very long time, making them challenging to manage and remove from the environment. Occupational exposure to these chemicals is a major concern as workers in industries such as manufacturing, firefighting and food packaging may be at risk. Mitigating these risks requires comprehensive regulations, improved workplace monitoring and the development of safer alternatives. The persistent nature of these chemicals and their potential health consequences necessitates sustained efforts in research, regulation and workplace safety measures to ensure the well-being of workers and the environment.
- Healthcare workers: An ageing population will put increased pressure on the healthcare sector and potentially on workers' OSH, especially in combination with the shrinking supply of labour. As women are often in the majority of the workforce in the healthcare sector, this is an important question regarding gender equality in the work environment. There is tendency for healthcare work to move into the platform economy as with many other services, and again this is innovation at one end that might benefit the users, but the social protections of the healthcare worker will need to be guarded. The definite OSH burden will be on common mental disorders and musculoskeletal disorders, and carefully crafted interventions will be urgently required if labour inspectorates are to efficiently deal with the challenges in the healthcare sector so that it provides sustainable and quality health services.

European Commission 2021. EU strategic framework on health and safety at work 2021-2027 Occupational safety and health in a changing world of work. <u>EUR-Lex - 52021DC0323 - EN - EUR-Lex (europa.eu)</u>

Precarious work and occupational health inequalities: These are two interrelated yet mutually exclusive themes that recur across the megatrends, namely precarious work and occupational health inequalities. Both these concepts have existed for a while in the Nordic working life and also in the global OSH discussions. However, the inspectors, although aware of these issues, did not necessarily identify them individually, although they could well be camouflaged within topics such as undeclared work, migrant workers, employment conditions, social dumping and platform economy. These two issues are gaining more recognition in the face of new technologies, migration, globalisation, the ageing workforce and climate change, as they are seen to negatively impact health of the workforce. Precarious work denotes jobs marked by insecurity, instability and minimal employment safe-

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guards. Workers in such roles frequently experience uncertain conditions, low pay, limited benefits and job instability. Examples include temporary or contract positions, part-time roles without benefits and gig economy work. Precarious work raises concerns about labour rights and financial stability for employees inducing stress

that could instigate and perpetuate physical and psychosocial risks at work. The advent of new unregulated technologies (platform economy), migration attributed to conflicts, poverty and climate change, together with a fragmented work—life balance, is creating breeding ground for more precarious work. Precarious work can increase occupational health inequalities by limiting access to safety measures, health benefits and support systems as well as by exposing workers to higher levels of stress and unsafe working conditions. In other words, workers in low status, low skilled and low-paid jobs (e.g. cleaning, food couriers) might experience a worsening of their working conditions regarding health, safety and wages. A more cogent effort is certainly needed by the Nordic Labour Inspectorates as they move ahead on these topics that have recently been identified as issues of critical importance by both the EU Commission and global institutions such as the ILO.

• Large Language Models (LLM): A technology that has evolved at turbo speed in 2023 and is not directly addressed by the inspectors in this report or previous reports in the FOW series concerns LLM technologies such as Chat GPT, Bing Chat and Google Bard. These are powerful tools that can be used for a variety of tasks, including generating text, translating languages and writing different kinds of creative content. However, there are also some potential challenges associated with these technologies in the workplace, particularly in the context of OSH. One challenge is that these LLMs are still under development, and they may not always be accurate or reliable. This could lead to problems if they are used to generate important documents or routines to make decisions that could affect the safety of workers. Another challenge is that such LLMs could also be used to create content that could be harmful or dangerous. For example, they could be

used to generate fake news articles or to create propaganda that could mislead or manipulate the public, employers or workers about a product, service or commodity. This could have negative consequences for workers, employers and society at large. Sustainability is another major topic where LLMs has been under scrutiny for their carbon footprint. Moreover, a recent study argues that water footprint is of critical concern for social responsibility and environmental sustainability<sup>21</sup>. Sustainability is only one of many concerns in relation to regulating AI. The upcoming EU AI Act, the first regulation on AI, aims to ensure that AI systems used in the EU are safe, transparent, traceable, non-discriminatory and environmentally friendly. Al systems should be overseen by people, rather than by automation, to prevent harmful outcomes. Al systems that negatively affect safety or fundamental rights will be considered high risk and will be assessed before being put on the market and also throughout their lifecycle<sup>22</sup>. This act may indeed affect the impact of AI on working life in the EU and in the Nordic countries and may well help regulate reduce potential OSH risks

Overreliance on technology poses an OSH risk and can lead to accidents, diseases and faulty interventions.

due to AI technology. Finally, many tasks currently performed by humans could be automated. This could lead to job losses, and perhaps a race to the bottom for low quality jobs exacerbating precarious work, undeclared work and occupational health inequalities. Technology remains a wonderful tool, but it depends on how it is adapted. The LLMs are here to stay but regulators, researchers and social part-

ners need to collaborate to find a fine balance between rapidly evolving innovation and adequate sustainability and social protection measures as we move forward.

• Emerging technologies on the horizon: Artificial General Intelligence, Brain Computer Interface, Quantum Computing, and Block Chain are all technologies on the horizon, and their impact on OSH is something we will only realise in the coming decade. Overreliance on technology poses an OSH risk and can lead to accidents, diseases and faulty interventions. Little is known about these technologies, their implementation and their uptake related to OSH, but the labour inspectorates certainly need to be cognisant about these developments.

Li et al. 2023. Making Al Less "Thirsty": Uncovering and Addressing the Secret Water Footprint of Al Models. <a href="https://arxiv.org/abs/2304.03271">https://arxiv.org/abs/2304.03271</a>

<sup>22</sup> European Parliament 2023. EU AI Act. <a href="https://www.europarl.europa.eu/news/en/headlines/society/20230601ST093804/eu-ai-act-first-regulation-on-artificial-intelligence">https://www.europarl.europa.eu/news/en/headlines/society/20230601ST093804/eu-ai-act-first-regulation-on-artificial-intelligence</a>

#### 8 Strengths and limitations

The strength of this report lies in its original and novel two-staged mixed-methods approach. Using both surveys and focus groups on labour inspectors and other frontline OSH experts in each Nordic country (stage I) to validate previous findings, but also to inform the trans-Nordic focus group discussions in stage II, led to a synthesis of empirical and multileveled recommendations for the Nordic Labour Inspectorates and relevant stakeholders. The findings were validated throughout the process, both in each Nordic country but also across the Nordic countries. All the Nordic members in the FOW expert group contributed to the design of the study and data collection, which yielded a satisfactory representativity of inspectors. The approach, methods and findings blur the line between a scientific approach and expert opinions from practitioners. Although the guasi-scientific approach in this report may lack some methodological rigor, the approach and findings arguably have high ecological validity and high value for practice and decision makers. The current comprehensive trans-Nordic approach in this report gives the findings and the recommendations a high degree of transferability and applicability for the Nordic Labour Inspectorates but might also be informative and useful for labour inspectorates in Europe and globally.

There are some limitations in the data of this report. The data collection in some of the Nordic countries was done almost two years ago. Given the rapid pace of technological developments and its effect on work, some of the findings might be considered outdated, especially regarding LLMs and the impact these have had the last year or so. However, the current recommendations in the report are still considered valid, up-to-date and representative in these topics as we have not seen major OSH impacts in Nordic working life due to LLMs. However, this might be due to lack of data, studies and knowledge on this evolving matter. Some topics addressed in part one of the report series<sup>23</sup> were not followed-up in the current report, neither empirically by the inspectors nor by the FOW group in the potential challenges chapter. For example, climate change, occupational health disparities etc. Thus, there might be potential risks and drivers that eventually emerge but are not addressed in the current report and may indeed impact the Nordic working life going forward.

<sup>23 2020.</sup> Work today and in the future: Perspectives on Occupational Safety and Health challenges and opportunities for the Nordic labour inspectorates. <a href="https://julkaisut.valtioneuvosto.fi/handle/10024/162419">https://julkaisut.valtioneuvosto.fi/handle/10024/162419</a>

### 9 Going forward into the future of work

The 20 recommendations provided by the FOW group in this report give the Nordic Labour Inspectorates some concrete pathway for further actions in the coming years. There will, however, be a need to adjust and adapt the recommendations in each country to consider social, economic and political factors. Many of these recommendations are practical in nature and could be implemented gradually if they are integrated in the agency's short- and long-term strategic business plans.

These recommendations follow the mandate that requested the labour inspector's perspectives on FOW and OSH. The larger mandate for the FOW group comprises a wider template and, therefore, some consideration must also be given to the ongoing efforts of the FOW group that are beyond the scope of this report.

As technologies continue to evolve at a rapid pace, regulatory work and efforts need to be in sync with these processes. It also demands that knowledge that informs regulatory processes is updated and refined. The Nordic Labour Inspectorates should therefore consider updating their findings from their 2020 report with inputs from research and international OSH institutions. Areas such as climate change, pandemics, the role LLMs, precarious work, occupational health inequalities, and synergies and commonalities between OSH and undeclared work are some elements that need to be included, updated and refined for policy makers at the labour inspections vis-a-vis FOW and OSH.

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Importantly, including the social partners' view in such an endeavour could be a critical next step. The core of the Nordic working life model is social dialogue and trust. However, the sustainability of this model is also being challenged in the face of new technologies, global economic changes and demographic shifts. Going forward into FOW, sustaining and investing in a strong tripartite cooperation with social dialogue, high

rate of trade union organisation and independent social partners can be crucial for OSH. The involvement of the social partners might also be important in the current FOW groups' continued work going forward. It is essential to be cognisant of the representation of marginalised groups of both employers and workers in an increasingly fragmented work life. Such a comprehensive approach will better help the Nordic Labour Inspectorates in crafting effective preventive interventions for a safe, healthy, decent and sustainable working life. Furthermore, more engagement and collaboration with representatives of occupational health services and OSH professionals going forward into FOW could be beneficial for the Nordic Labour Inspectorates to enable businesses to perform high-quality risk assessments and systematic health, safety and environment interventions at the workplaces.

Currently, psychosocial risk factors mainly derive from how the work is designed, organised and managed, and are associated with both common mental disorders and musculoskeletal disorders. With new and emerging technologies and possible methods for organising work, our understanding of risk factors and which

With new and emerging technologies and possible methods for organising work, our understanding of risk factors and which risk factors are most prevalent in the future in OSH might also change.

risk factors are most prevalent in the future in OSH might also change. Not only is the evolving landscape of risk factors in the workplace of interest for businesses trying to risk assess their working environment, but it is also of interest for the Nordic Labour Inspectorates to monitor and gain insight into trends and changes on psychosocial risk factors going forward. The hazards of surveillance caused by using new technologies driven by AI and sensors is imminent and already considered in this report. However, these technologies are bound to become even more pervasive and will have far-reaching implications for the psychosocial working environment.

The report does not adequately consider how gender affects OSH, or how labour inspectorates can be more inclusive or sensitive to people of all gender orientations. This is a limitation but, perhaps, it reflects the nature of how labour inspectorates and inspectors are conditioned by tradition, experience and biases. Looking ahead, it might be important to integrate a gender perspective into FOW groups' analysis and recommendations. This means acknowledging the unique challenges that women and other gender-diverse people face at work, in addition to the potential biases and barriers they may be encountered when reporting health and safety concerns. By examining how to adapt OSH measures and labour inspections to better account for gender-specific risks, vulnerabilities and protective measures, future efforts can help create a more equitable and inclusive workplace for everyone. Such an approach is also aligned with international standards and frameworks that emphasise the importance of gender equality in labour, OSH and employment practices. The same reasoning and approach regarding gender might also be applicable to cultural diversity and sensitivity, with integrating systematic training in cultural diversity and interventions that account for cultural sensitivity within the LIs. By incorporating a gender and cultural sensitivity lens, the efforts of the FOW group could be responsive to the changing needs of the diverse workforce.

Whatever new challenges and trends emerge, the Nordic Labour Inspectorates would certainly benefit from establishing a trans-Nordic analytical group with the purpose of gathering and developing knowledge and data about emerging OSH trends, challenges and strategies for OSH in Nordic working life both today and in the future. Several topics and aims could be of interest for such an analytical group. First, this group could regularly survey, monitor and study frontline labour inspectors' knowledge about this topic as information and communication between labour inspectors, workers and employers at inspections are an important source of practical OSH information and trends that needs to be systematically collected and monitored. Second, the same strategy could be applied to climate

change and its impact on OSH in the Nordic countries. Regularly analysing the impact of climate changes on OSH could yield crucial information about trends and developments which would benefit the Nordic Labour Inspectorates and benefit the cooperation with our European and international colleagues. Perhaps a Nordic Research Project synthesising the knowledge impact of climate change on OSH would be a timely initiative.

Currently, the FOW group is actively monitoring the proposed changes in the workplace<sup>24</sup> and Display Screen Equipment<sup>25</sup> directive in Europe in addition to the ongoing discussions on the right to disconnect<sup>26</sup> between EU social partners. Moreover, the group is keenly observing the positive movement on the Platform Directive<sup>27</sup> that has been proposed by the EU commission and adopted by the European Council<sup>28</sup>. The FOW group is also keenly observing issues pertaining to setting Precarious work and Psychosocial working environment<sup>29</sup> on the European agenda in the coming years. These initiatives if and when implemented will have a far-reaching impact on OSH regulations and the practice of Nordic Labour Inspectorates. The FOW groups are actively engaged in different European and international forums to better understand and collaborate with our European and international colleagues to secure a safe, sustainable, healthy, and decent working environment for now and in the future.

Council directive 89/391/EEC concerning the minimum safety and health requirements for the workplace 1989 L393/1. <u>EUR-Lex - 31989L0654 - EN - EUR-Lex (europa.eu)</u>

<sup>25</sup> Parliamentary question – European Parliament 2022. Revision of the directive on safety and health regarding work with display screen equipment. <a href="https://www.europarl.europa.eu/doceo/document/E-9-2022-003482\_EN.html">https://www.europarl.europa.eu/doceo/document/E-9-2022-003482\_EN.html</a>

<sup>26</sup> European Parliament resolution 2021. <a href="https://www.europarl.europa.eu/doceo/document/TA-9-2021-0021">https://www.europarl.europa.eu/doceo/document/TA-9-2021-0021</a> EN.html

<sup>27</sup> European Commission 2021. Directive on improving working condition in platform work. <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:762:FIN">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:762:FIN</a>

<sup>28 2023.</sup> European Council. Press release. Rights for platform workers: Council agrees its position. <a href="https://www.consilium.europa.eu/en/press/press-releases/2023/06/12/rights-for-platform-workers-council-agrees-its-position/">https://www.consilium.europa.eu/en/press/press-releases/2023/06/12/rights-for-platform-workers-council-agrees-its-position/</a>

<sup>29</sup> European Council 2023. Council calls for measures to address impact of precarious work on mental health. <a href="https://www.consilium.europa.eu/en/press/press-releases/2023/10/09/council-calls-for-measures-to-address-impact-of-precarious-work-on-mental-health/">https://www.consilium.europa.eu/en/press/press-releases/2023/10/09/council-calls-for-measures-to-address-impact-of-precarious-work-on-mental-health/</a>

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