SUSTAINABLE LIMITLESS WORK
Opportunities, Challenges and Future Scenarios

Produced by Torsten Kjellgren
The Association of Nordic Engineers
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A SUSTAINABLE FREEDOM

FOREWORD

We have entered a new age in our working life – the age of limitless working. The impact of transition and adaptability to new requirements brought on by expanding digitalisation, and recently further fuelled by the pandemic, is still to be fully measured. We can, however, already say that centralised structures and fixed working hours are fading out and giving space to a more flexible and remote working life.

Flexibility and freedom to be able to choose where and when tasks are performed have been in focus for a while, not least since the concept “the future world of work” was introduced as a consequence of the disruption caused by digitalisation. This working style was not new for engineers – the frontrunners of the technological development, as they often perform the so-called “digital site-independent work”. However, the continued digitalisation, lately fueled by the pandemic, has further blurred work-life boundaries and created pressure to “work around the clock”. It has strained relationships due to geographical separation and, in some cases, precarious conditions. The consequences of this can have psychosocial effects on mental health and impact all professionals in today’s world of limitless work.

This report sheds light on how engineers perceive the impact of working without limits. While there are many appealing benefits from the acquired flexibility in the working arrangements, engineers point out mounting unspoken expectations and risks of isolation, as limitless work is considered less socially stimulating.

One of the most significant burdens identified by engineers is an increasing transfer of responsibility from employer to employee, which calls for a revision
and re-balance of roles and rules in the workplace. It is time to pause and reflect on where the responsibility to create healthy work environment lies and how to empower managers to recognise and react to the first signs of ill-being in their employees. While we maintain focus on effectiveness and innovation, we need to put the human being in the centre.

It is difficult to predict how we will grow into the limitless work, but we can imagine a scenario where the limitless work is unbound, unregulated and (thus) unsustainable. Or we can consider our opportunities for creating a flourishing one with positive effects on our mental health and work-life balance. Which one do you think will become a reality? For a brief glimpse of the possibilities, we invite you to read the future scenarios in this report.

We want the findings of this report to stimulate a broader discussion in the Nordic Region and support individual reflections on the environment of the limitless work.

We also have something to disclose - the recommendations you will find in this report are tailored for engineers representing highly skilled white-collar professionals. Online digital work can pose completely different challenges for other professional categories.

We would like to thank our colleagues in the Swedish Association of Graduate Engineers, who took the lead on this project, and all engineers who contributed to the survey. Our special gratitude goes to Torsten Kjellgren for his great work in writing this report.

Trond Markussen
President

Inese Podgaiska
Secretary General
Limitless working brings flexibility and freedom to be able to choose where and when tasks are performed. At the same time, digital site-independent workplaces put new demands on the relationship between employees and employers. Many of the regulations and agreements that regulate responsibility for working conditions stem from the time when employees came to the workplace in the morning and left in the afternoon; a working life where they met managers and colleagues every day, and the tasks had time- and place-specific boundaries. This is not the case anymore. Work-life has changed, and engineers equipped with smartphones and computers can work practically anywhere and at any time. But how limitless can managers and employees be while maintaining health and well-being?

This report explores the effects of limitless working. It is based on a survey on limitless work conducted by the Association of Nordic Engineers, ANE, among the ANE Nordic engineering trade unions members in the winter of 2020–2021. The data shows, for example, that the well-being of young employees in exclusively limitless work is affected, that working days grow longer, that gender equality can be impacted negatively, and that loneliness, ill-health, and lack of creativity can increase.

This report outlines a direction of travel with recommendations on how limitless work through regulation can address the risk of these negative impacts, become more sustainable and build on the positive opportunities that limitless work also offers.
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Our working lives have undergone significant changes in recent years. The fixed and predictable working hours of the industrial society have been relaxed. Today, many workplaces have flexible working hours where employees work at different times of the day and in different places, often away from the employer’s premises. In recent years, the term "limitless work" has been used to describe this development. But how should we understand the term?

Gunnar Aronsson, Professor of Work and Organizational Psychology at Stockholm University, defines the term\(^1\) as "activities and tasks freed from spatial, temporal and organisational constraints and contexts" (Aronsson, 2018b). Where and when work is carried out has thus decreased in importance. Today, it is common for employees to regularly do their work in a café, while travelling or, above all, at home at different times of the day.

Another definition is “flexibility through trust”, meaning that less regulation of working time and place gives greater freedom for employees to make their own decisions. When work is limitless, the manager has less oversight of ongoing tasks. It becomes more challenging to exercise detailed control of the work process in the traditional sense, as the staff are not in the same place as the manager and also work partly at other hours of the day. This requires trust in the employees to carry out their work, even if it is done away from the employer’s premises and outside regular working hours (Fristedt, 2018).

\(^1\) Aronsson uses the Swedish term "gränslöst arbete" which is also sometimes translated to "boundaryless work".
Through this trust, employees have greater scope to adapt their working hours to their private lives. Parents of young children can, to a greater extent, adapt their working hours to drop-off and pick-up times at preschool, for example, and then catch up on their work later in the evening when the children have gone to bed. To a greater degree, private matters can be carried out during regular working hours, which people could previously only deal with in their free time. At the same time, more work is done outside normal working hours, in the evenings and at weekends, at times previously devoted to leisure.

It is the ambition of this report to provide a broad and fair picture of limitless work through an analysis of current research and examples from other countries and by identifying opportunities, risks, and challenges. A central foundation of the report is a survey conducted among thousands of members of the Nordic engineering unions. Furthermore, the report’s recommendations strive to present initiatives that can create a sustainable working life within the framework of limitless work. The final chapter of the report offers a prediction of what limitless working life might look like in ten years.

**Methodology**

Sample surveys were conducted between October 2020 and February 2021 in Denmark, Finland, Iceland, Norway, and Sweden. Each ANE member organisation sent out a questionnaire to their members during this period. Engineers employed in both the private and the public sectors were surveyed, but unemployed or self-employed members were excluded from the survey.

Although the questionnaire was sent out during the COVID-19 pandemic, at a time when remote work had become mainstream, respondents were asked to base their answers on their regular working conditions. The number of questionnaires sent and the response frequency for each Nordic country is presented in the table below.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>QUESTIONNAIRES</th>
<th>REPLIES</th>
<th>RESPONSE FREQUENCY</th>
</tr>
</thead>
<tbody>
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<td>Denmark</td>
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<td>834</td>
<td>9%</td>
</tr>
<tr>
<td>Finland</td>
<td>10 955</td>
<td>1 216</td>
<td>11%</td>
</tr>
<tr>
<td>Iceland</td>
<td>4 692</td>
<td>1 864</td>
<td>40%</td>
</tr>
<tr>
<td>Norway</td>
<td>3 945</td>
<td>1 272</td>
<td>32%</td>
</tr>
<tr>
<td>Sweden</td>
<td>61 429</td>
<td>15 481</td>
<td>25%</td>
</tr>
</tbody>
</table>
Background

The transition to limitless working life did not occur overnight, though it may feel that way for many people who went from office work to working remotely during the pandemic. The pandemic undoubtedly accelerated the process, but the trend was clear before. At the outbreak of the COVID-19 pandemic, about 40 per cent of Sweden’s employees had flexible working hours, compared with 28 per cent in the rest of the EU (Sveriges Ingenjörer, 2019).

The diagram below shows how widespread it is for Nordic engineers to be able to organise their working hours according to their needs. A clear majority have this possibility, at least to some degree. In Denmark and Norway, a majority of engineers are able to do so entirely, while the group that can only do so to some extent is larger in other countries.

The shift towards limitless working life gained momentum as a consequence of society’s great digitalisation, the beginning of which can be dated to about 20-30 years ago. Technological development has since made it possible for people to be constantly online and connected through laptops and smartphones anytime and anywhere. Digitalisation now permeates people’s social, organisational and financial lives in a way that would have been regarded as science fiction 40 years ago.
This development means that time and place have decreased in importance when it comes to the tasks and activities people engage in, both professionally and privately. As a natural consequence, work has likewise become less regulated in terms of time and place.

Furthermore, digitalisation, together with globalisation, has significantly changed the conditions for businesses. Today, there is a strong demand for goods and services at all hours of the day. Expanding a company’s opening hours and operating hours has become an essential tool for meeting demand. Researchers have referred to this phenomenon as “the 24/7 society”. Digitalisation and globalisation have also made it easier for companies to operate in different countries and to adapt production and service locations according to cost levels and access to labour supply. Many services can now be performed on the other side of the world from the customer and the rest of the business. Some examples among many include IT services and customer service (Aronsson, 2018b).

This development also means that it is more common than before for a “workplace” to comprise employees located in different places around the world and in different time zones. This gives employers additional reasons to support flexibility. Employees are encouraged to schedule their working hours and place of work more freely, partly to create a better balance with their private lives and partly to respond to 24/7 demands from customers and employees in different time zones.

New expectations and requirements

The transition to limitless work means that forms, processes, responsibilities and roles have changed, bringing new expectations and requirements for both employees and their managers.

For the employee

Digitalisation has led to connectivity. This means that both companies and private individuals are expected to be constantly connected and available. The expectation of connectivity has brought a considerable change for employees. The working day does not necessarily have to end just because employees have gone home from work. They are still available by email, chat and phone. Small and large tasks may arrive in the evenings or at weekends, and notifications beg the attention of an employee who is not formally on duty at the time. The evolution of social media has also meant that platforms that were initially mostly intended
for socialising with friends have now been professionalised. Many employees have both their private and professional networks on various platforms such as Facebook, Twitter, LinkedIn and Instagram. And they are expected to maintain their professional roles on these platforms around the clock (Sveriges Ingenjörer, 2021). Many employees also have social media monitoring as part of their job and thus participate in discussions there. As social media follows no time restrictions, with activity taking place around the clock, these employees have work tasks that are never put on pause and never stop.

A high degree of integration may work for some employees, depending on their preferences and life situation, while it may mean significant intrusions on private life for others. It is the manager’s job to find a balance that delivers results while at the same time being sustainable for the individual employee and the manager.

Additionally, there has been a shift from external regulation to internal regulation. The employer or manager previously set the framework for where, when and how work was carried out, but now a large part of the responsibility has been shifted to the individual employee. This autonomy and freedom resulting from internal regulation bring new demands for employees to be able to plan, prioritise and set boundaries themselves. Researchers have talked about a new critical professional skill within limitless work: “boundary-setting competence”. This refers to the employees themselves needing to be able to regulate their workloads and get their work done on time while maintaining a balance between work and private life (Aronsson, 2018b).

Developing individual boundary-setting skills is not easy. Everyone is different, and there is no one-size-fits-all approach. Research has identified two main strategies for boundary setting: segmentation and integration.

Segmentation is an ambition to separate work and private life. Here, clear boundaries of time and place are used. This means work tasks are always performed in a location other than the home, usually the employer’s premises;
you never take work tasks home. You follow strict working hours, usually weekday mornings to weekday afternoons. People who prefer segmentation want their home to be a refuge from the functions, requirements and expectations of working life. When they leave the workplace for the day, they want to stop thinking about work. They do not want to check their work emails in the evenings, at weekends, or in holidays (Mellner, 2018).

Integration is the opposite strategy. Employees who prefer this strategy want working life and private life to blend in both time and place. They appreciate the flexibility and are prepared to work anywhere and anytime, for example, in the evenings and weekends. To avoid work taking over their entire private life, people who prefer integration can set borders in other ways than time and place. For example, they may have separate mobile phones for work and private life or different areas in the home (for example, the bedroom) that are kept work-free. As integration has much looser natural boundaries than segmentation, it means that even greater demands are placed on the individual to maintain the boundaries (Mellner, 2018).

Surveys have shown that more employees prefer segmentation to integration, even in professional groups that have relatively limitless work; as many as 80 per cent prefer segmentation, while 20 per cent prefer integration (Fristedt, 2018).

For the manager

But it is not only the employees who face new expectations and demands as a result of limitless work. The role of the manager has also changed. When the employees’ work was conducted entirely on the employer’s premises, there was scope for oversight and detailed control of the work process. In external regulation, the employer and the manager had great power over when, where and how work was to be carried out. In the internal regulation of limitless work, the employee has more influence over these. At the same time, the leadership role has changed from detail-oriented leadership to trust-based leadership.

In this new context, managers need to take a coordinating and supportive role and ensure that their staff have the resources they require, a reasonable workload and a good working environment. Managers need to trust their staff and give them freedom with responsibility while also maintaining close and regular contact, partly to monitor and follow up the work done and partly to ensure a good working environment (Statens tillitsdelegation, 2018). Due to the different needs, circumstances and preferences of employees, managers need to be able to identify these aspects for their staff and create a functioning work culture in terms of the degree of segmentation or integration.
The flexibility given to staff is also something that managers themselves need to practise in their leadership and the organisation’s running. A high degree of integration may work for some employees, depending on their preferences and life situation, while it may mean significant intrusions on private life for others. It is the manager’s job to find a balance that delivers results while at the same time being sustainable for the individual employee and the manager (Mellner, 2018).

The members of ANE affiliated unions are currently quite happy with the support and feedback they receive from their managers. This can be seen in the diagram below based on the survey results. The scale ranges from 1 (do not agree at all) to 5 (completely agree). The graph shows a very positive attitude. A clear majority of engineers in the Nordic countries have answered 4 or 5 regarding the support and feedback they receive from their managers. Finland stands out as the country with the lowest percentage agreeing with the statement.

**DIAGRAM 2: My immediate manager gives me support and feedback on my work**

![Diagram showing support and feedback satisfaction levels across different Nordic countries.](image-url)
Limitless work offers a greater degree of flexibility and more influence for the employee. At the same time, more responsibility is placed on the employee to regulate the boundaries between work and private life, and there is a danger that these boundaries get blurred. This can have significant negative consequences for the employee’s health and well-being.

**Flexibility, influence and work-life balance**

Limitless work can make it easier to fit the different parts of a person’s life together, reduce the stress that can occur from everyday commitments and free up time, for example, when people do not need to commute to the workplace. This has the potential to create a better balance between work and private life. Research has shown that having a large degree of influence over where and when one’s work is carried out is a health factor and good for employees’ recuperation processes (Fristedt, 2018).

The responses from the engineers in the survey to some extent confirm the claim that limitless work creates a better balance between work and private life. Over half of the respondents in Denmark, Finland and Sweden agreed with the statement. Although a significantly lower proportion in Norway and Iceland agreed, the positive trend is clear, as shown in the diagram below.
Climate impact

If more people work without limits, i.e. not going to the physical workplace every day, this could decrease carbon dioxide emissions and have a positive climate impact. Business trips where employees fly to short meetings in another city or another country can be avoided. If these instead take place on Zoom, Teams or other digital platforms, carbon dioxide emissions can potentially be reduced by many tonnes per year. But this also applies to the daily commute to the workplace. If people were to work from home several days a week instead of, for example, taking the car to work every day, this could also have a positive climate impact.

The Swedish Environmental Institute, IVL, calculated the effects of this (before the COVID-19 pandemic) on behalf of the City of Gothenburg. In Gothenburg, approximately one in every three journeys to and from work takes place by car. The researchers then worked on a reasonably modest scenario where 5 per cent of the city council’s employees, equalling approx. 2000 people, would be working from home for on average 20 days a year instead of 0 days. As a result, the direct reduction of emissions was calculated to be 60 tonnes of carbon dioxide per year if this change came into effect. There were two explanations for this: reduced commuting to work (less car use) and reduced traffic jams during rush hours (IVL,
To put this figure into context, 60 tonnes of carbon emissions equals the average annual carbon emissions of more than 10 people in Northern Europe (EU Commission, 2020). Thus, for every single day that just 5 per cent of Gothenburg Council’s employees work from home instead of going to work, half of an average Northern European’s annual carbon emissions can be avoided. In another example from Finland, a study calculated that the carbon emission reductions from passenger cars could be as much as 6 per cent (0.34 Mt of a total of 5.67 Mt emissions from passenger cars in 2020) if employees were given a chance to work from home as much as they prefer after the pandemic (Kovalainen, Poutanen, & Arvonen, 2021).

This is echoed in the WWF’s list of how to live in a climate-smart manner, where working from home one day a week (if possible) is one of the principal recommendations. This is because a 20 per cent reduction in commuting would lead to a sharp reduction in carbon emissions (WWF, 2021).

One cannot automatically assume that more limitless work equals lower emissions, nor can one conclude the opposite.

Thus, both research and civil society point to climate benefits from relatively marginal increases in working from home. However, the long-term, systematic climate effects of increased limitless work are difficult to predict. While there is a lot of potential for emission reductions in reduced commuting and traffic congestion, there are also possible rebound effects that might completely negate the positive outcomes. For example, in a company with limitless work practices, a geographically spread-out workforce with face-to-face get-togethers a few times a year might produce more emissions if people fly to those meetings instead of their daily commute to a nearby workplace. Further, suppose limitless work leads to more people moving away from the cities out into the countryside where they have to use cars, due to the longer distances, to do grocery shopping, reach childcare and other activities. In that case, this could lead to an increase in emissions. The increase will be especially significant for those people who could previously rely on better connected public transportation or active travel in the cities. Thus, one could argue that there is a risk that total emissions might increase rather than decrease from working limitless.
Employers, employees, and policymakers must be aware of the possible dynamic effects of emissions caused by limitless work. One cannot automatically assume that more limitless work equals lower emissions, nor can one conclude the opposite. Hence, the climate effects must be carefully considered when making the guidelines for limitless work aiming to minimize emissions on the systematic level (and not only on the individual level) while optimising the wellbeing of employees and profitability of businesses at the same time.

**Working hours and recuperation**

Limitless work means that work can be performed at a lower level of intensity for a larger part of the day than work with regular office hours.

Regardless of where and when employees do their work, a key question is whether limitless work leads to more actual working hours in total compared with more fixed working hours and workplaces. Regulatory compliance concerning working hours becomes significantly more difficult in a limitless working life. For example, the EU Working Time Directive (2003/88/EC) regulates minimum levels for daily and weekly rest periods, breaks and maximum working hours per week. Nordic national working time legislation typically governs the number of working hours per day and week and the right to breaks and nocturnal rest periods. When the work is carried out away from the employer’s premises, and outside regular working hours, monitoring compliance with these rules becomes difficult.

Research has shown that limitless work leads to longer working weeks and more work in the evenings and at weekends. Nanna Gillberg, a management and organisation expert and researcher in working life, has expressed it as a prerequisite for someone to have flexibility is that another person is flexible to do the work. The demands regarding connectivity and having a professional online personality on social media where people constantly market themselves through visibility mean that working days for many employees may not have an actual endpoint (Gillberg, 2018).

The expectations regarding connectivity outside regular working hours mean that working days grow longer and that the time for rest and recuperation is less than when working regular office hours. The diagram below shows the extent to which their employers expect Nordic engineers to be available via email, digital platforms or telephone in their free time. Only in Denmark and in Sweden were a majority not expected to be available.

Expectations that are directly expressed and expectations that are more subtle created by the behaviour of others set the framework for the level of availability
an employee considers necessary outside regular working hours. In some cases, there is a clear expectation from the manager that staff should be available constantly. This could be for meetings with colleagues in other time zones, making working hours both irregular and unsocial, or a workplace with a specific culture, such as “always-on” or “anytime, anywhere”, built on constant availability to meet customer demand. There can also be unspoken pressure on employees to show themselves as ambitious and hard-working, both to each other and to the manager. This leads to responding to emails or participating in work-related activities in the evenings and at weekends.

Working from home can also encourage people to work even when ill due to workplace culture. Even if the physical effort of going to work has been removed, it is hardly optimal for a sick employee to work. Workplace culture and norms based on constant availability have been shown to lead to work invading and taking over employees’ private lives. That leads to higher stress levels and less time for recuperation (Mellner, 2018).

Judging by the survey responses from Nordic engineers, it is mainly a question of unspoken expectations regarding availability. The diagram below shows that only a minority in each Nordic country answered that there are guidelines at their workplace regarding accessibility outside regular working hours. In all countries except Sweden, a majority of the respondents answered no to the question.

Consequently, many Nordic engineers are expected to be accessible in their free time.

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**Diagram 4: Does your employer expect you to be accessible in your free time?**

<table>
<thead>
<tr>
<th>Country</th>
<th>Yes, often</th>
<th>Yes, sometime</th>
<th>No</th>
<th>Don't know/No opinion</th>
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<td>Iceland</td>
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<td>Norway</td>
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<td>Sweden</td>
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<td>The Nordics</td>
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<td>60%</td>
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<td>0%</td>
</tr>
</tbody>
</table>
time, but this is not regulated in any guidelines. Instead, this accessibility is, to a great extent, a result of the workplace culture and unspoken expectations that can easily become self-perpetuating. If an employee answers an e-mail in the evening and forwards it to a colleague with a question or request, an expectation is thus passed on so that the colleagues must also spend their evening on the task. In such a work process, it becomes difficult for an employee to go against the work culture, as it can be perceived as unfair, unprofessional or even disloyal towards colleagues, the manager, or the organisation.

Work management, screen time and breaks

No matter how limitless work seems, people still need time for recuperation. If working days consist of sometimes high-intensity and sometimes low-intensity tasks that take up a large part of the day, the scope for recuperation is reduced. Suppose this work situation continues for a longer period, including not only evenings but also weekends and holidays. In that case, there is an increased risk of burnout, chronic stress and other health issues. It also means that the actual working hours increase sharply compared with a regular 40-hour week, which can lead to an increased risk of stroke and type 2 diabetes (Kecklund, 2018).
Another challenge posed by limitless work is maintaining a reasonable allocation of work tasks that spreads the workload among employees. As managers have less oversight when people work in other places and at other times, it becomes more difficult for them to lead the work and be responsible for a fair allocation of tasks. The fact that employees have differing needs, work at different paces and have other preferences about hours and execution makes it difficult for the manager to have a clear overview. It creates a risk that those who deliver excellent and fast results and are flexible about their work times are given more tasks and a heavier workload than those who need more time to complete their tasks. People who find it difficult to say no to their manager in the limitless workplace can suffer an unreasonably heavy workload compared with those who are comfortable saying no. This phenomenon also exists within a more traditional work context, but it is reinforced by the internal regulation of limitless work, where the allocation of work has in part been shifted from the manager to the staff themselves. The result is that some employees may work significantly less than 40 hours a week, while others work significantly more (Fristedt, 2018).

Furthermore, with limitless work, it can be more difficult to take breaks from the screen. When the work takes place on the employer’s premises together with colleagues, breaks take place more naturally. Lunch breaks, coffee breaks or other more spontaneous breaks from work together with colleagues often occur automatically without people thinking about it. The engineers interviewed in the survey spend a lot of their working time in front of a screen. Over 70 per cent of the respondents in all countries, except Iceland (69 per cent) and Sweden (68 per cent), answered that they spend more than 75 per cent of their working time in front of a screen.

Good and present managers who care about the well-being of their staff can emphasise the value of taking breaks from the screen and establish routines for it. However, this becomes more challenging in limitless work, where the manager and the employees work in different places and at different times. The diagram below shows that the majority of engineers take breaks from their screens during working hours. Denmark and Iceland are the countries with the highest proportion who do not take screen breaks.
The widespread implementation of working from home during the pandemic has affected employees’ screen time and breaks. The opinion institute Novus conducted a survey among Swedish academics about a year into the pandemic. This showed that 75 per cent of the respondents work seven hours a day or more in front of a screen, which is an increase of 41 per cent compared with before the pandemic. Over 40 per cent stated that they take a lunch break of at least 30 minutes less often than before the pandemic. In addition, they also take fewer short breaks when working from home than before the pandemic (Saco, 2021). This is a natural effect of physical meetings have being replaced by digital meetings, where lunch breaks and coffee breaks with colleagues have been replaced by working in front of a screen in solitude.

The diagram below shows that even though there are national differences, a majority of respondents believe that their immediate manager encourages time for recuperation. Sweden had the highest proportion who agreed with the statement, while the proportion was significantly lower in Finland and Iceland.
Difficulties for young people

Newly graduated young employees need to be introduced to working life and work cultures. Being new to the labour market, they have often not had time to build up experience and routines for how to work efficiently and in a good way. To build these skills, young people and new employees will often need more guidance and support from their managers than more experienced colleagues. This can be more difficult in limitless work where many workers sit alone in their own place and do their work in their own time. Feedback and follow-up might come sporadically, and guidance during the work process itself may be non-existent. The limited access to advice from the manager may be insufficient for many young people. In a more traditional work context, with a fixed workplace and fixed working hours, it can be easier for a young person to learn formal and unspoken rules and routines at work. It might also be easier and less intrusive to ask colleagues for help with various tasks.

When it comes to self-management, the challenge can also be more significant for young people. In limitless work, employees often have to take responsibility themselves to regulate their working hours, set the level of ambition and draw boundaries between work and private life. These matters, for which the employer was previously responsible but have now been partially transferred to the employee, require experience. Without work experience, it is difficult for people
to have sufficient knowledge of their tasks, expectations and requirements, and their own capacity and limitations.

Several researchers have concluded that it is less appropriate for new graduates to work limitlessly, but this also applies to new employees. Although new employees may have several years of work experience, different workplaces function in different ways. Tasks, areas of responsibility, expectations, requirements and culture can differ significantly between workplaces. The ability to work independently is a prerequisite for being able to reap the benefits of limitless work (Aronsson, 2018a).

The research highlights the importance of organisational socialisation, often referred to as on-boarding, when it comes to new employees. Even if they have previous work experience, both professionally and socially, new employees need to adapt to the culture and expectations of their new workplace. They need to learn what their professional role entails and the expectations of managers and colleagues. This is necessary to feel secure at work, achieve good results, feel satisfaction and commitment in their position and build a willingness to remain at the workplace in the long term. And the process is only partly about learning formal and stated guidelines, routines and expectations. It is more about adapting to the unspoken routines and expectations that exist in a workplace created by the employees and the culture there. This requires the new employee to spend time physically and socially in the workplace (Bauer, Bodner, & Tucker, 2007). If you predominantly work on your own at home or somewhere else as a new employee and do not meet your colleagues in person, this process is therefore very challenging or even impossible.

The regulatory vacuum within the work environment

When work takes place in the traditional way on the employer’s premises, the responsibility for a good work environment is clear. In the Nordic countries, work environment acts regulate the employer’s responsibility to ensure that the workplace has a suitable physical, organisational and social work environment and that safety is guaranteed for employees. In concrete terms, the employer is responsible for ensuring that ergonomic workstations, noise levels, lighting and all organisational and social aspects promote good health for the employees. At the same time, the employer is responsible for ensuring that the infrastructure necessary for the business works as it should: technology, broadband connection, data and cyber security (Arbetsvärlden, 2021).
According to the agreement, the employee’s working conditions must also apply at home, and the responsibility for the work environment when working from home remains with the employer.

But with limitless work, the responsibility becomes more blurred. When the limitless work takes place somewhere away from the employer’s premises, for example, at home, neither legislation nor collective agreements in the Nordic countries regulate responsibility for the work environment. The closest thing that exists today is the EU framework agreement which states that an employee who works from home enjoys the same rights as when working on the employer’s premises. According to the agreement, the employee's working conditions must also apply at home, and the responsibility for the work environment when working from home remains with the employer. The agreement also states that the employer must provide adequate equipment and digital tools for employees to perform their tasks from home and ensure data protection and cyber security (EU, 2003).

However, the framework agreement has not been implemented in national legislation in the Nordic countries. Nor are the issues in the framework agreement found in collective agreements in the private sector in the Nordic countries. Therefore, it is unclear what actual responsibility rests with the employer to ensure a suitable physical, organisational and social work environment in limitless work.

Instead of a clearly expressed responsibility regulated by legislation or a collective agreement, which is the case when work takes place on the employer’s premises, the quality of the work environment in limitless work is determined by each manager or each employer’s support and measures. Judging by the survey responses from Nordic engineers, illustrated in the diagram below, the majority of managers are able to promote a good work environment. Iceland had the highest proportion who answered positively, while Denmark and Finland had a lower proportion.
Trade union organisation

Traditional union organisation is founded on a community of peers and social pressure to join the union, created by shared workplaces and standard working hours. When employees primarily work in their own places at their own times, much of the sense of community, which has long been an essential part of work, is lost. Union representatives have highlighted the importance of informal daily conversations between colleagues at a workplace, at the coffee machine or during lunch breaks. This is the kind of “water cooler talk” that facilitates and encourages trade union organisation. If employees are scattered in different places and working at different times, the water cooler talks disappear. People are focused exclusively on performing their tasks efficiently individually, and it is not natural for them to reflect and discuss issues such as the work environment, the manager’s leadership or the employer’s guidelines with their colleagues (The New Republic, 2020).

Another challenge is that employees in limitless working life can perceive the union as being absent. Just as previous sections highlighted, the work environment in limitless work finds itself in a regulatory vacuum, as the vast majority of
collective agreements does not cover it. It becomes difficult for trade unions to fight for members’ work environment issues if they work from their own homes or other places. The employer is at an advantage when it sets the working conditions and the working environment that apply in unregulated, limitless work without having to negotiate with a counterparty (Union Track, 2020).

If the situation persists, with the work environment and conditions regarding limitless work largely left unregulated, it will probably lead to declining membership of trade union organisations.

**Efficiency, creativity and social stimulus**

An argument that is sometimes put forward in favour of limitless work is increased efficiency. The employees sit individually, often at home, in front of their screens and can work undisturbed. For many employees, limitless work from home can mean that they can focus entirely on their work tasks, with fewer distractions than in a traditional workplace surrounded by colleagues. People have different circadian rhythms and sleep cycles, where some are “morning people” while others are “night owls”, limitless work can also mean that employees can, to a greater extent, work during the hours when they are most productive.

*The social stimulus of a relaxed environment with colleagues, the water cooler talks or the coffee room magic, if you will, has sparked many important innovations in recent years.*

A partly positive answer emerged when Nordic engineers were asked whether limitless work makes their work performance more efficient. The diagram below shows that even though the statement didn’t receive resoundingly positive support, more respondents agree than disagree. Finland stood out as the most favourable country, while Denmark was the least positive to the statement.

There are many indications that people’s creativity is less stimulated by sitting alone in front of a screen in their home. Research shows that creativity, innovation and breakthrough ideas thrive partly through social stimulation from others.
and partly through relaxation when the mind is unfocused, for example, when
daydreaming or doing physical exercise outdoors (Toivanen, 2018).

The social stimulus of a relaxed environment with colleagues, the water
cooler talks or the coffee room magic, if you will, has sparked many important
innovations in recent years. This applies not least in engineering. One example
is the gaming company Activision Blizzard, which has developed the globally
successful video games Call of Duty, World of Warcraft and Candy Crush. The
company initiates an innovation challenge twice a year, in which the employees
team up in teams of five. The task is to identify a key challenge for the company
and suggest a solution to it. Every team is given five weeks and a research budget
of $5,000. The rest is up to the creativity of the team. This innovation challenge
which follows a very loose, unstructured yet socially stimulating format, has
proven to be efficient in enhancing the company’s products and services (Fast
Company, 2019).

A format as above is more difficult to achieve when employees are working
limitlessly than in a traditional workplace with colleagues. This is especially true
of the social aspects. As many have experienced during the COVID-19 pandemic,
digital video conferencing cannot fully replace physical meetings. Physical
proximity and direct eye contact are entirely different from using a screen with video and audio links. A large majority of Nordic engineers also believe that limitless work is less socially stimulating. As illustrated in the diagram below, the position was particularly clear with Norwegian respondents and the general trend in the other countries.

DIAGRAM 10: Limitless work is less socially stimulating

There is also a danger within limitless work that the employer’s responsibility for capacity building is transferred to the employee. In the traditional arrangement where the employees came to the workplace every day during fixed hours, it was more natural for the employer to identify areas for capacity building in dialogue with the employees. These could be competence gaps that became clear in the daily work or a wish to develop new skills formulated over a cup of coffee or during the lunch break. There was no doubt that it was the employer’s responsibility to provide capacity building in these cases. But research has shown that both the incentives for the employer and the actual responsibility for capacity building become less clear in limitless work (Gillberg, 2018).
Mental health

The less socially stimulating work environment brought about by limitless work can also lead to other negative consequences, in addition to reduced creativity and capacity building. Limitless work can often be perceived as lonely. Employees sit alone and work without daily physical and social interactions with colleagues.

For many younger people, for whom it is common to live alone, limitless work can be especially lonely. When you work on your own in your own home, have lunch in your kitchen and make your coffee on your own coffee machine, you lose a lot of the small talk and the short everyday social interactions. If these are not replaced by other forms of contact, such as through leisure activities, clubs and societies or regular social interaction with family and friends, limitless work increases the risk of loneliness and adverse health consequences such as mental illness, cardiovascular disease, strokes and dementia (Vårdguiden, 2018).

The difficulties of drawing the line between work and private life that occur for many people in limitless work can also lead to mental health issues. A study by Eurofond shows how employees who work without borders display higher levels of stress, anxiety and fatigue than employees who work on the employer's premises during regular working hours (European Parliament, 2021b).

With limitless work, it also becomes more challenging to detect warning signs of mental illness than in a traditional workplace where all employees gather in the same place during the same working hours. Excessive workloads and work-related stress and sleep problems, anxiety, somatic disorders, and psychological issues are much more difficult for a manager to detect in limitless work. Even if employees with limitless work have the same right to occupational health care in the event of ill health, limitless working makes it more difficult to provide the continuous daily support that peers can give in a traditional workplace.

Women empowerment or gender trap?

One key question is whether limitless work is positive or negative for equality between men and women. As previously mentioned, one of the significant advantages of limitless work is the possibility to combine paid work with the unpaid responsibility for home and family (Aronsson, 2018b).

It should be particularly favourable for women if limitless work makes it easier to combine home and family commitments with full-time paid employment in everyday life. As women continue to be left with the primary responsibility for household work, the increased flexibility of limitless work can facilitate careers for
One conclusion that can be drawn from these results is that women, to a large extent, spend the time freed up by limitless work or working from home during the pandemic (no commuting time and more flexible working hours) on household work and family commitments.

women in paid employment better than traditional work. Increased flexibility could achieve better balance, and stress from balancing the two roles may be reduced.

Many surveys have established that women are more favourable to limitless work than men. In the survey of Nordic engineers, more women than men in all countries except Norway answered that limitless work creates a better balance in life. The reason why women are generally more positive than men thus seems to be that full-time paid work becomes easier to combine with household work and family commitments, matters for which women take much greater responsibility than men.

Nevertheless, limitless work can also become a trap for women. The widespread implementation of working from home for men and women during the COVID-19 pandemic is an interesting period to study. It can indicate how gender equality will develop as an increasing percentage of men and women will be able to work without limits (from home) after the pandemic. However, we are still in the pandemic, and it is too early to draw firm conclusions. A study by Norway’s Centre for Equality (Likestillingssenteret) has shown how gender roles and different degrees of responsibility for household work have been cemented and reinforced during the pandemic rather than being loosened. For Norwegian families where both the man and the woman have worked from home during the pandemic, it is clear that the woman still has the primary responsibility for household work and the children.

Furthermore, the table below shows how women spent more time on household work and family commitments during the pandemic than they did before. Especially regarding responsibilities linked to their children, significantly more women than men state that their obligations have increased during the pandemic compared with earlier (Aftenposten, 2020).
### Percentage answering that they spend more time on specific tasks since the 12th of March 2020

<table>
<thead>
<tr>
<th>Task</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household work</td>
<td><strong>11</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td>Cooking</td>
<td><strong>12</strong></td>
<td><strong>7</strong></td>
</tr>
<tr>
<td>Grocery shopping</td>
<td><strong>1</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td>Renovation/home repairs</td>
<td><strong>9</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>Helping children with schoolwork</td>
<td><strong>39</strong></td>
<td><strong>27</strong></td>
</tr>
<tr>
<td>Childcare</td>
<td><strong>51</strong></td>
<td><strong>29</strong></td>
</tr>
<tr>
<td>Taking children to leisure activities</td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
</tr>
<tr>
<td>Play and activities with children</td>
<td><strong>51</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

One conclusion that can be drawn from these results is that women, to a large extent, spend the time freed up by limitless work or working from home during the pandemic (no commuting time and more flexible working hours) on household work and family commitments. For many women who bear a heavy responsibility for household work, this could be perceived as creating a better balance and reducing stress. At the same time, it could reinforce gender inequalities if time freed up for men by limitless work does not increase the time they spend on household work and family commitments.

A natural follow-up question is what men’s time freed up by limitless work is spent towards. Research indicates that it, to a much greater extent than for women, leads to increased leisure time and better opportunities for skills development. Time spent commuting to and from the workplace can instead be spent on courses developing new skills or reinforcing existing ones. Social contact with other people during leisure time can also strengthen networks that can be useful in one’s career. In other words, men seem to cherry-pick from the cake of limitless work to a greater extent than women (Aronsson, 2018a).
This chapter discusses some of the attempts that have been made at different levels to regulate limitless work.

At the workplace

Several companies have introduced guidelines for regulating limitless work. German companies, in particular, have distinguished themselves with strict regulations at their workplaces. As early as 2011, Volkswagen introduced the routine of shutting down the company’s e-mail servers on employees’ mobile phones between 18:00 and 07:00 every day. Other large German companies, such as Allianz, Telekom, Bayer and Henkel, have since implemented similar policies (Lu Laboris, 2020).

BMW and Daimler have chosen a less rigid solution. They have clear guidelines that employees are not obliged to respond to e-mails after working hours. However, no shutdowns or automatic delays were introduced. Instead, it serves as a general guideline to reduce the requirements and expectations regarding connectivity (Global Workplace Insider, 2021).

National legislation

France is often referred to as an example in the debate on limitless work. It has opted for national legislation as a way to ban practices that are considered harmful.
The legislation, which came into force in 2017, makes it illegal for all workplaces with more than 50 employees to require their employees to be available digitally after regular working hours. The legislation strives to guarantee a "right to disconnect". This means that employees’ free time is respected, and the boundary between work and private life is clear. In the first instance, the employer must agree with the trade union and regulate a right to disconnect in the collective agreement. If an agreement is not reached, the employer must establish a right to disconnect policy at the workplace. This can, for example, take the form of shutting down the workplace’s e-mail server after working hours or activating an automatic reply message for employees’ e-mails and telephones outside fixed hours (Service Public, 2021).

The penalties for employers who do not have a policy can be high. For example, the French Supreme Court ruled that a British company had to pay 60,000 euros in damages to a former employee who had been required to have his mobile phone switched on constantly outside working hours (SHRM, 2019).

Despite this ruling, there has been criticism in France that the law does not work bindingly and that many employers have not implemented it (The Guardian, 2021).

Some years after France, Spain introduced similar legislation. Spanish law urges employers to respect free time and privacy. It also states that employees who work from home or remotely must have a guarantee that they can log out and switch off digitally after working hours (SHRM, 2019).

Several other countries have followed suit and introduced national legislation to regulate the right to disconnect, including Belgium, Argentina, Canada, India, the Philippines and Portugal (Lu Laboris, 2020) (Orbis, 2021).

**EU level**

As mentioned previously, the EU has had a working time directive and a framework agreement for teleworking in place for almost 20 years. These state employees’ minimum daily and weekly free time levels and the employer’s responsibility for the work environment, data protection, and cyber security when teleworking. The Working Time Directive is part of the EU’s 20 principles of social rights, and all the Member States have signed the framework agreement. However, the framework agreement has not been implemented in collective agreements or national legislation in the Nordic region.

Furthermore, there is no EU legislation in place that guarantees employees the right to sign out and switch off their availability outside working hours. The
European Trade Union Confederation (ETUC), the central organisation at the EU level that organises 45 million employees, has expressed the need for a mandatory obligation for employers to respect the right to disconnect. The European Parliament has recently endorsed non-binding legislation giving teleworkers the right to sign out of their availability outside working hours. The idea is that the law should stipulate a minimum level, where member states can then choose to go further in their national legislation, with more explicit requirements on employers and sanctions if the right to disconnect is not respected. The proposal has been forwarded to the European Commission (The Guardian, 2021).

The European Parliament’s proposal consists of three parts. The first part states that employers within the EU will not be able to demand availability outside regular working hours. The second part stipulates that employees who demand their right to disconnect should receive legal protection against penalties from the employer, such as dismissal or reduced salary. The third part of the proposal stipulates that employees’ capacity building, work-related training and the like conducted remotely should be considered working time (European Parliament, 2021a).

**International recommendations**

Several international employees’ organisations have presented recommendations for regulating limitless work. IndustriAll has emphasised the importance of respecting the right to disconnect and limited working hours. The organisation has demanded that working remotely must be clearly regulated, either by national legislation or in collective agreements. IndustriAll also wants to uphold the principle of voluntariness, i.e. that each employee should be allowed to choose whether they wish to work on the employer’s premises or remotely. This includes a requirement for all employers to provide a physical workplace, with the possibility for employees to work from there if they so wish (IndustriAll, 2020).
Managers in limitless work also need to ensure a safe physical and social work environment and actively encourage breaks and time off from the screen.

The International Labour Organization, ILO, has shown that teleworking means increased working hours for employees compared with working on the employer’s premises. According to the ILO, a key to ensuring that limitless work does not lead to burnout and other health issues among employees is that employers and managers maintain clear communication with their employees. The communication needs to present clear expectations that are realistic given the resources available. Clear policies and agreements with the employees regarding accessibility via e-mail, telephone and various digital platforms (e.g. Zoom and Teams) outside regular working hours are needed. Managers in limitless work also need to ensure a safe physical and social work environment and actively encourage breaks and time off from the screen. The ILO also makes a distinction in the employer’s responsibility between voluntary and requested teleworking. In cases where remote work has been requested, the ILO believes it can hardly be seen as a privilege for the employee. If an employee has been requested to telework, in contrast to voluntary teleworking, it is reasonable that the employer both ensures a good working environment and reimburses the employee for any additional costs involved in performing the work tasks. This includes costs like a broadband connection, electricity, a desk, a work chair, a computer and a screen. Furthermore, the ILO calls for a new standard to protect employees who work limitlessly, covering matters such as the right to private life and the right to disconnect (ILO, 2020).
The OECD also makes a distinction between whether teleworking is voluntary or requested. The organization does not take a general position for or against limitless work but conditions the concept on three points. According to the OECD, whether flexibility as a result of limitless work is positive or negative depends on whether it is:

1. Voluntary or not
2. Combined with increased or decreased autonomy
3. Linked to increased or reduced job security

If the answer on all three counts is the former, the OECD regards limitless work as something positive. If that is not the case, then there are risks and negative aspects to it (Aronsson, 2018a).
Summary

This report underlines the complexity of limitless work. More freedom regarding the time and place for work and more influence over its execution can be appealing to the employee. Limitless work can create a better balance in life and make it easier to combine full-time employment, household work, and family commitments. A majority of Nordic engineers confirmed this. Removing the commute to work several days a week, or even all working days, not only frees up time for employees but possibly also reduces carbon emissions. The same applies to the reduction of business travel if meetings take place digitally instead of in person.

But limitless work also poses challenges and risks to the well-being and health of employees. Even before the COVID-19 pandemic, many engineers and other academic professions in the Nordic countries sometimes worked without fixed times and a fixed place. Many employees have become their own supervisors in limitless work. This creates a risk that employees will have heavier workloads and longer working hours in total in limitless work than before, with an increased risk of fatigue and burnout.
The digitalisation of society has resulted in employees having explicit or unspoken expectations placed on them to be constantly available through e-mail, phone calls, social media and chat platforms such as Microsoft Teams, far beyond regular working hours. When these low-intensity tasks take up a large part of the day, time for sufficient recuperation is lost. Formal guidelines governing expectations regarding accessibility are lacking at most Nordic engineers’ workplaces. This leaves a lot of room for unspoken expectations created by the workplace culture. Great responsibility is thus placed on the shoulders of individuals to maintain boundaries themselves, which can be burdensome. This is especially true for young people, who have not built up routines and experience of working life. They can often find it more challenging to speak out and go against the culture of a workplace. Other new employees may also have difficulty regulating and setting boundaries, as they do not know the culture and expectations at their new workplace.

Limitless work also places new demands on leadership. At least in the traditional sense, staff management at a detailed level becomes more complicated when the staff and managers work in different places and at flexible times. Leadership must then be built on trust and freedom with responsibility for the employees while ensuring a good working environment. Furthermore, it is crucial that the manager provides continuous feedback and support to the staff and encourages them to take breaks from the screen and recuperate during their free time.

The survey showed that a majority of Nordic engineers were satisfied with such measures from their managers. Also, more respondents agreed with the statement that limitless work is more efficient than those who disagreed. Among Nordic engineers, the argument that it is easier to get more done and find peace and quiet at home during flexible times of the day than during fixed hours on the employer’s premises seems to have support.

However, a large majority of the respondents said that limitless work is less socially stimulating. This can have several negative consequences. Creativity and innovation are negatively impacted when spontaneous meetings and forms of collaboration in groups are fewer or non-existent in limitless work. Sitting alone and working all day, in many cases with the phone or video calls via a screen as the only form of company, can also lead to loneliness, social isolation, or depression. It is much more difficult for a manager or colleagues to see warning signs of mental health issues in an employee working limitless and remotely than when everyone is in the same physical place and works side by side during the same working hours.
Women are generally more positive about limitless work than men. This is linked to the fact that women take greater responsibility for the home and family and that limitless working makes it easier for many to combine this unpaid work with full-time paid employment. But there is a risk that limitless work becomes a gender trap. Studies have shown that women use most of the increased flexibility and the time freed up for household work and family commitments. On the other hand, men spend more of the time freed up on leisure activities and capacity building. This may therefore increase gender differences, where women spend even more of their time than today on home and family, while men spend more of their time on leisure activities and capacity building to invest in their well-being and their careers. In such cases, this could lead to an expanded wage gap and increased differences in health, (e.g. fatigue and burnout) between men and women.

Finding the Nordic way

In many ways, the Nordic engineers that participated in the survey have better scope for a successful and sustainable limitless working life than many other types of employees. Our countries have a well-developed infrastructure, and our workforce has a high level of digital competence. Our labour markets largely consist of skilled employees with qualified tasks that can often be done anywhere and anytime. We have well-developed childcare, and it is relatively easy to work in peace and quiet at home - for both women and men. The Nordic countries have long had cultures based on trust, where the work culture is less hierarchical, and micromanagement is less common than in other countries. Freedom with responsibility and the privilege to plan the work has been more common for employees here than in many other countries, even before digitalisation. Reduced commuting to work and thus limiting transport emissions by working more from home chimes well with the high climate ambitions of our countries.
Those countries that have introduced national legislation on the right to disconnect offer a different path than the Nordics. France, Spain and others have chosen to see limitless work as exclusively negative. The legislation entails a kind of "one size fits all" that makes it difficult, and in some cases impossible, to work outside the traditional boundaries of time and place. Companies and businesses are missing out on increased efficiency and longer opening hours. Employees don’t get the opportunity to adapt their working hours according to their needs for creating a better balance between paid work and responsibility for home and family. National legislation can thus mean wasting great positive opportunities. It would also be an infringement of the Nordic model, which is based on the social partners and collective agreements rather than law-makers deciding on issues such as working hours and the workplace.

The EU’s framework agreement for teleworking includes several points to ensure a good working environment in limitless work. But the agreement has not been implemented in national legislation or collective agreements in the Nordic region. The new initiative by the European Parliament to regulate limitless work has good intentions, but if it is implemented, it will only constitute a kind of European minimum level.

The Nordic region’s way forward must be based on flexibility, not only from employees but above all from employers. The needs of the employees should guide the model, a kind of "one size fits none". It should be underpinned by a trust from the employer and voluntariness on the part of the employee regarding working hours and workplaces. The aim should be to take advantage of the great opportunities that limitless work offers. To utilise the infrastructure, competence and welfare systems that we have built up in the Nordic countries while using collective agreements to remove the adverse effects on the work environment and health that limitless work entails.
Recommendations

Much of the risk in limitless work arises from a great deal of responsibility having been transferred from employers to employees. That burden needs to be removed from employees’ shoulders, and other stakeholders need to take their rightful responsibility for regulation, setting limits, and the work environment. Consequently, we offer recommendations at three levels: for managers, employers, and trade unions.

For the managers

1. **TRUST-BASED LEADERSHIP**: Employees are given freedom with responsibility. Focus on results rather than micro-management. Trust the staff to get the job done, even if it is done away from the employer’s premises and at different times of the day. Set clear goals for the team as a whole and each individual. Provide the resources necessary to fulfil the targets and work with concrete follow-up on both organisational and individual goals.

2. **BE FLEXIBLE**: Adapt working hours and requirements regarding coming into the workplace depending on each specific task and each employee’s individual needs. Some employees prefer segmentation, others integration. Allow flexible arrangements regarding time and place as long as results are delivered. The manager enables this flexibility and adaptation to needs.

3. **ACTIVE DIALOGUE WITH STAFF**: Be attentive and understand each person’s situation to build a fair picture of their needs and workload. Be sensitive to their work environment, the scope for recuperation, and any warning signs of burnout or other mental health issues.

4. **HELP STAFF TO SET BOUNDARIES**: Encourage breaks and physical activity. Ensure that employees’ free time really is a time for rest and recuperation without demands for availability. Talk openly about the risks surrounding the work environment, connectivity outside regular working hours, and the value of setting boundaries. Offer extra support to younger and newly recruited employees who do not yet know the workplace culture. They need help with setting the level of ambition and setting limits in their work.

5. **SET A GOOD EXAMPLE**: Set your own boundary preferences for accessibility and communicate them to the staff. Be aware that your own actions play a major role in the norms and culture of the workplace.
For the employers

1. **FLEXIBILITY BASED ON VOLUNTARINESS:** Always offer the opportunity to work on the premises. Employees who prefer segmentation must always be able to come to the employer’s premises during regular working hours.

2. **RETAINED RESPONSIBILITY:** The employer must not relinquish responsibility for work management and the work environment. Nor should limitless work serve as an excuse for the employer to downsize office space (to cut costs). The employer must not use limitless work to abdicate responsibility for the employees’ capacity building. All areas of responsibility that the employer previously had remains in place but may take on new forms and have new procedures. Furthermore, employers must continuously stand up for the Nordic collective agreement model negotiating with their counterparts: the trade unions.

3. **LEAD THE WORK AND ALLOCATE TASKS:** The employer is still responsible for distributing work tasks. Regardless of where and when employees perform their tasks, the employer must still maintain a good overview of how much the employees work.

4. **ESTABLISH AND COMMUNICATE CLEAR GUIDELINES:** State clearly what rules apply regarding working hours, recuperation and availability. Determine expectations regarding reading and responding to emails, chat messages or social media in the evenings, being available at weekends and so on. Communicate clear routines to encourage rest and breaks in limitless work. Build up routines for employees in other time zones. Ensure that all employees know what expectations and what common boundaries there are at the workplace between working hours and free time. The guidelines should be developed in consultation with employees and their union representatives and be maintained by continuously discussing them openly with employees.

5. **GIVE MANAGERS TOOLS FOR GOOD LEADERSHIP:** Invest in capacity building for managers to learn the new leadership role required of them. This involves knowledge of organisational and social work environment and feedback, follow-up, and work management processes. They also need tools for detecting and managing heavy workloads, blurred boundaries between work and private life and mental health issues such as fatigue, burnout and depression. Give managers enough scope to practise sustainable leadership, for example, by scheduling part of their working time for feedback, follow-up and dialogue with staff.
For the trade unions

1. STRIVE TO IMPLEMENT THE EU FRAMEWORK AGREEMENT IN COLLECTIVE AGREEMENTS. The framework agreement clarifies the employer’s responsibility to ensure a good physical, organisational and social work environment, data protection and cyber security for the employee - even in limitless work. If the agreement is implemented, it could positively affect many employees’ work environment in limitless work, as the issue of responsibility will be more transparent, and the current regulatory vacuum will be filled. Therefore, the EU’s framework agreement needs to be implemented in collective agreements in the Nordic region.

2. HOLD THE EMPLOYER ACCOUNTABLE: Do not let the blurred boundaries of time and place be an excuse for the employer to back away from their responsibilities for work management, work environment and capacity building. Express the same expectations to the employer for these areas within limitless work as those that previously existed in the traditional work context. The trade unions need to be vigilant and build up routines for when conditions stipulated in collective agreements are circumvented in limitless work. One example is digital outsourcing, where employers can bring in external consultants under working conditions not covered by collective agreements.

3. DECIDE HOW LOW-INTENSITY TASKS ARE TO BE DEALT WITH: A key issue in limitless work is how tasks outside regular working hours, such as reading and answering e-mails, being available in chats or on social media, are to be classified. The trade unions in the Nordic countries need to decide how to deal with this in negotiations with employers when negotiating local agreements. Regardless of how you look at these tasks, the most important thing is that the employees’ free time should be time free from work: without requirements to be available or expectations to carry out low-intensity tasks.

4. ESTABLISH BOUNDARIES IN THE AGREEMENTS: Although employees’ individual needs and boundary preferences should be respected, some common guidelines and limitations can be established when local agreements are signed between the social parties. These can ensure the right to recuperation time, which all employees need regardless of individual boundary preferences. It is vital that trade unions do not accept unlimited working hours just because some members prefer integration and limitless work. There is an essential need to set a ceiling for how many hours they can work per week, per month and per year to avoid fatigue and burnout. This should be regulated in the agreements between employers and employee representatives.
5. MAINTAIN INFLUENCE FOR THE EMPLOYEE: One of the significant advantages of limitless work is the employees' increased influence over the execution of their work. This right for employees should be protected and stated in collective agreements. It is a natural consequence of the co-determination legislation that has been in place in several Nordic countries since the 1970s (Denmark 1973, Sweden 1976, and Norway 1977). Co-determination and influence should be used as key arguments for recruiting new members to trade unions and retaining existing members. Along with a good work environment and job security, this right to co-determination underlines the continued relevance of unions in limitless working life.
One of the lessons from this report is that limitless work is a complex phenomenon. There are advantages and disadvantages, opportunities and risks, and differences between different workplaces and different countries. Predictions of how limitless work will develop in the future, therefore, contain great uncertainty. However, we will make an attempt.

Continued digitalisation

We start where there is the least uncertainty. The digitalisation that has radically changed society and working life in recent years is here to stay. Most indications are that we will rely even more on the tools and opportunities of digital technology in ten years than we do today. Digital meeting platforms such as Teams, Zoom, Hangouts and more will probably offer an experience more like real physical meetings in the future than they do today. Many functions have already been developed to improve the digital meeting experience – break-out rooms, screen sharing and more. New features will be integrated, and digital meetings will run even more smoothly, with fewer disruptions. As virtual reality (VR) technology is further developed with more people using it, digital meetings will be perceived more natural, as almost physical, in the future. VR will enable meetings to be physically simulated so that the participants experience that they are sitting in the same physical meeting room. We are probably not many years away from such meetings taking place.
Lessons from the COVID-19 pandemic

Along with the continued technological development and the central role of digitalisation, there are conclusions from the COVID-19 pandemic that can provide insights for the future. The widespread implementation of working from home has provided a taste of what limitless work might look like, where everyone at the workplace works from home at more flexible times than before. It has become easier for many to balance the commitments of everyday life with working life, and it has been nice not to commute to and from work. Many employees have now gotten used to having an extra hour in the morning and an extra hour in the evening and the benefits of spending more time at home. The pandemic has also led many to reformulate their domestic needs. A clear trend has emerged where many people are selling their small apartments in the city and moving out to houses in the countryside. When people spend more time at home, space becomes valuable. Living spaciously in cities is too expensive and an impossibility for most people. Most major cities globally, including the Nordic capitals, experienced net outward relocation in 2020 for the first time in many years (Dagens Nyheter, 2021).

A return from having zero hours in commuting time to several hours per day will not be desirable for most people. The same applies to re-adjusting from being able to put on the washing machine between meetings, or from eating breakfast in the morning in peace and quiet after the children have left for school, to a return to rushing from home to travel to work by car or public transport to make it to a physical meeting on time. Therefore, many people will prefer to continue to participate in online meetings and perform other work tasks from home in the future if this is allowed or even encouraged.

Several employers have also realised the benefits of limitless work during the COVID-19 pandemic. One conclusion is that employees working from home perform several tasks just as well, if not better. This also means lower costs for premises, electricity, internet, maintenance, service staff, etc. An extensive survey of 1,000 small and medium-sized companies in the UK showed that almost a third were already planning to increase the scope for employees to work in more flexible locations and at more flexible times after the pandemic compared with before (ILO, 2020). Furthermore, several large IT companies, such as Microsoft and Spotify, have implemented new guidelines for teleworking that will apply after the pandemic. At Spotify, employees can choose whether they want to work from home full time, at the office full time or a combination of the two. Microsoft has gone even further and allows full-time teleworking, where employees can work from anywhere in the world (CNBC, 2021).
Another development that seems more or less certain is that business travel will be less common after the pandemic than before. For example, travelling between the Nordic capitals or to and from Brussels on the day of a meeting will probably be less common in the future. It is inefficient, as it takes a full working day. At the same time, getting up early, travelling and coming home late can be tiring for employees, and when it occurs regularly, it becomes more challenging to balance work and family life. Given the seriousness of the threat of climate change, it is also difficult to justify the high carbon emissions generated by these trips. In the survey, respondents were almost unanimous that business travel will have decreased in three years compared with before the pandemic. It was only in Denmark that the respondents were more doubtful.

This indicates that many employers and employees will prefer to work more limitlessly after the pandemic. Many meetings that took place face to face before the pandemic will in the future take place digitally. But the social aspect will be difficult to replace. Sessions focused on creativity, innovation, and collaboration will, in many cases, always be best held physically. The fact that many people feel less socially stimulated when they work limitlessly indicates that many will still prefer to come in and work at the workplace, at least occasionally. Therefore, most indications are that physical workplaces will continue to play an essential role in the future as a central point for exchange, creativity and group work, and for social support, socialising, and sense of community.
This may lead to a development in the future where women work limitlessly to a greater extent, to combine paid full-time work more easily with household work and family commitments, while men work from the workplace to a greater extent.

Given all this, it is a qualified guess that employers will be more understanding of employees’ needs to work in other places and at different times, and in many cases to a greater extent encourage it, compared with before the pandemic. Many employees will probably also prefer this flexibility to a greater extent after the pandemic. But many employers will always organise work so that the employees are expected to be in the same physical workplace at least every week. Whether it is one day, two days or three days a week is difficult to predict, and it will probably vary significantly between different workplaces and industries.

Gender equality

Which groups that will work more limitlessly than others will depend on several factors, such as personal boundary preferences for staff and managers, the nature of the work, workplace cultures, gender, and at which state people are in life. Many employers and managers have already expected a high degree of flexibility from the employees for the past years. They will most likely implement more formalised policies in the future, increasing the flexibility further, and many workplaces will adapt more to the needs of the employees. Employees who prefer integration will work more limitlessly than those who prefer segmentation.

The trend that can be seen concerning gender differences in attitudes to limitless work is interesting and little explored. Women generally seem more favourable to limitless work than men. This may lead to a development in the future where women work limitlessly to a greater extent, to combine paid full-time work more easily with household work and family commitments, while men work from the workplace to a greater extent. If this is the case, there is a great risk that limitless work will develop into a gender trap, where the wage gap in the labour market
and the responsibility gap in the home will grow wider (Affärsvärlden, 2021). It can also have more far-reaching consequences when men have better opportunities than women to network, i.e. acquire new contacts and maintain old ones that can help them in their careers.

But this gloomy future forecast for gender equality is far from certain. Several processes can change in different directions, and many factors can exert influence. Perhaps robotisation will lead to a lot of household work being rationalised away and disappearing as an area of responsibility. Maybe the digital opportunities for capacity building will trump the physical ones. And above all, perhaps women will have a more dominant position among skilled occupations in the labour market, which can be performed limitlessly. In recent years, developments in school results and enrollment in universities, where girls do significantly better than boys, point in that direction (Saco, 2010). If the future labour market is built more on competence and less on gender discrimination, glass ceilings and peer recruitment, we will see an increase of women in the top and middle management positions in qualified industries.

**Will we grow into it?**

It is still unclear whether the current disadvantages and risks that come with limitless work are matters that we will only wrestle with now or if they will become permanent. Although it can sometimes be hard to take in, digitalisation, and everything that comes with it, is very new to us humans. The ability to work limitlessly is a recent phenomenon. The infrastructure for it has only been in place for a short time. Having constant access to one’s professional and social life and being constantly connected and accessible through a smartphone in one’s pocket is something most of us take for granted. But this everyday reality has only existed for just over a decade. It is possible that some disadvantages of digitalisation and limitless work, such as professional expectations regarding constant availability (connectivity), are growing pains. Perhaps in time, employers, managers and employees will mature in their use of digital tools. Maybe we will all grow into the costume of limitless work and master it better than we do today.
In the survey, Nordic engineers were asked to respond to predictions for the upcoming three years on several key issues. No clear negative or positive trend emerged regarding whether there will be a better balance between work and private life in three years - see Diagram 12.

On the issue of accessibility, a more apparent trend emerged. Diagram 13 below shows that many respondents believe that there will be greater demands regarding accessibility in three years’ time.
The survey results point to a genuine risk of increased connectivity, with negative consequences for the working environment and employees' health as a result. But the answers also underline how complex it is to look into the future.
The role of trade unions

One certain thing is that employers will not grow into a matured approach of limitless work automatically. It will require hard work from employees and trade unions to ensure that we can regulate the risks and build sustainable routines and procedures for limitless work. Working life will undergo major changes in several areas in the years ahead, with continued digitalisation and an increase in limitless work being just a couple of them. Automation, robotisation, and climate change will all require change and adaptation. Trade unions will play a key role in tackling these enormous challenges and, for the good of employees, they cannot ignore these changes. They need to see the opportunities while tackling the risks. Through negotiations with employers, they need to ensure good working environments and create sustainability in the new reality. If this process is successful, the working life of tomorrow can be better than that of yesterday. We can then look forward to greater efficiency, better work-life balance, more freedom, and better adaptation to individual needs while enjoying a good organisational and social work environment with adequate support when it is needed.

Whether employees' organisations succeed in regulating limitless work while benefitting from its positive aspects forms the basis for this report's forecast. Other factors include whether employers take responsibility and whether managers succeed in adopting the new leadership style required by limitless work, as well as how other processes develop in the society and economy of the future: digitalisation, gender equality in the labour market and at home, climate change, the housing market and so on.
Three different future scenarios

Simply put, there are three different scenarios. A first, where limitless work has been prevented and not allowed to develop. A second, where limitless work has not been regulated at all and thus become unsustainable. And a third, where effective regulations have been introduced while the positive aspects of limitless work have been allowed to flourish. These three scenarios can be seen as theoretical models, where reality may well end up somewhere in between. The three alternative scenarios for ten years into the future are:

1. WORK WITH LIMITS: Through national legislation worldwide, like seen today in France, Spain, the Philippines and more, limitless work has been banned. In the zeal to stop connectivity and other aspects of limitless work perceived as harmful to everyone, the whole process towards limitless work has stopped. There has been a return to fixed workplaces and fixed working hours. Leadership has shifted from being built on trust, flexibility, and freedom with responsibility to a return to more micromanagement. Employees are not expected to be available online or by phone after the end of the working day. But the price is high: many employees feel increased stress levels and irritation in everyday life. The many people who moved out from the cities to the countryside during the COVID-19 pandemic now have very long commutes and have to sit in traffic jams and on public transport several hours a day. The return to fixed workplaces and working hours is also tough for those who have not moved out of the cities but who have nevertheless become accustomed to flexibility and being able to work in places and at times that suit them.

Women, who are still taking the most responsibility for the home and family, find it especially difficult to combine full-time paid work with these commitments when they are not allowed to work in places and at times that suit their needs. As a result, more women than before work part-time, which widens the wage gap and the pension gap between men and women. Gender inequalities increase as women’s responsibility for unpaid household work becomes even more pronounced than before. At the same time, men have the same opportunities to do their paid work at the workplace, build social networks, develop skills and advance their careers.
2. WORK WITHOUT LIMITS: Limitless work has been left unregulated, and the system has become very unbalanced. Limitless work is mandatory, and employers have downsized office space sharply to cut costs. Daily commuting has ceased entirely. At the same time, many people have moved out to the countryside where they rely on cars rather than public transportation, which was available when they lived in the cities. All employees, even those who prefer segmentation, are forced to work away from the employer’s premises and at times other than regular working hours. Employees are expected to be constantly available through their laptops and smartphones for large and small tasks. Working life and private life are no longer separate for employees. They do not have opportunities for rest and recuperation to recover in the evenings, at weekends and on holidays. Managers show no understanding of the need for recuperation and do not encourage screen breaks.

Employers have shifted their responsibility for both the work environment and work management to individual employees. Some employees, therefore, have quite little to do while others have an unreasonably heavy workload. The latter leads to high levels of stress, fatigue, and burnout for many employees, especially young people. Mandatory teleworking, which occurs in solitude at home without lunches and coffee breaks with colleagues, makes many people very lonely. Depression becomes more common as a result. This is exacerbated by the fact that managers have no obligation to have regular follow-up and check-in dialogues. Creativity and innovation slow down when people no longer meet regularly in person, even though many monotonous tasks are completed faster than before. Ergonomic stress injuries become widespread, resulting in high sick leave rates, as many employees do not have the financial or practical means to create a healthy workplace at home when employers do not provide any support.

Gender injustices have been aggravated, with women taking on even greater responsibility than before for home and family because they have devoted the time gained from having no commutes and flexible working hours to these commitments instead. Men, on the other hand, have spent their freed-up time on capacity building and leisure. The wage gap in the labour market has grown as men have been allowed to develop their skills further and have been able to devote more time to networking, which has benefitted their careers. Women have been able to find a balance between full-time paid work and unpaid work in the home and family, but they have found it more challenging to advance in their careers.
3. **SUSTAINABLE LIMITLESS WORK**: Thanks to the persistent work of trade unions, limitless work has been regulated in collective agreements. Nowadays, limitless work is based on voluntariness. Some employees work predominantly from home, while others come to the employer’s premises a few days a week. Another category of employees, those who prefer segmentation, comes to the employer’s premises every day and work during regular working hours. The different needs and preferences of employees are respected and safeguarded. Those who work during normal working hours are not expected to be available after work. Those who prefer integration are allowed to work in other places and at other times, with increased availability as a result.

Employers allow all employees to come to the workplace whenever they want. The physical workplace is retained for creative and group-related tasks, spontaneous meetings and exchanges, as well as being a place to gather and feel social community. Business travel only occurs if the meetings cannot take place in an efficient digital way. Productivity has increased, as many employees get more done when they can work undisturbed in places and at times they have chosen themselves according to their needs. At the same time, creativity and innovation have been maintained because employees are permitted and encouraged to meet in person. Many employees who live a long way from the workplace or prefer to work a lot from home avoid several hours of commuting a week and have reduced their carbon footprint.

Employers continue to have complete responsibility for the work environment. The employees have a good physical, social, and organisational work environment wherever and whenever they work, with frequent follow-up and check-in dialogues. Managers are able to allocate tasks fairly, have an overview of people’s workload and availability schedules and have good insight into their physical and mental well-being. When needed, adequate organisational, physical and social support is provided. Employers and managers continually encourage their staff to take breaks from the screen, exercise and devote sufficient time to recuperation during the working day and during planned free time. This has contributed to a sharp decrease in levels of stress, fatigue, burnout, and other mental health issues.
Gender equality has increased, as both men and women work without limits when they prefer to do so and in more traditional fixed ways when they desire. At first, more women than men worked limitlessly, but as the labour market became increasingly equal, with more women taking up top and middle management positions in more industries than before, the balance in responsibility for home and family also became more equal. Men now take greater responsibility than before for commitments at home.

Both women and men see significant benefits in everyday life from limitless work when it suits them to combine full-time paid work, household work, and family commitments, while they go to the employer’s premises to work from there when that suits them better.
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References


CNBC. (11. March 2021). For better or worse, working from home is here to stay. Hentet fra CNBC: https://www.cnbc.com/2021/03/11/one-year-into-covid-working-from-home-is-here-to-stay.html


Lexology. (23. April 2019). Changes to the number of annual overtime hours in Hungary. Hentet fra Lexology: https://www.lexology.com/library/detail.aspx?g=5c44e305-0f3-4edc-a74d-1b70fe6f6d92


The Association of Nordic Engineers, ANE, consists of engineering trade union associations from the five largest Nordic countries:

- The Swedish Association of Graduate Engineers
- The Danish Society of Engineers (IDA)
- The Norwegian Society of Engineers and Technologists (NITO)
- The Association of Chartered Engineers in Iceland (VFÍ)
- Engineers Finland.

For more information, please visit www.nordicengineers.org

@nordicengineers

Linkedin.com/nordicengineers

nordicengineers@ida.dk