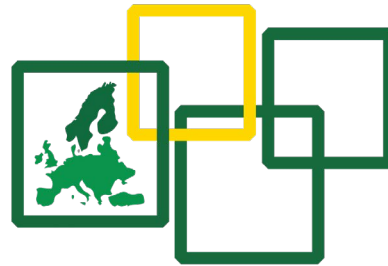


# Sustainable Work 2020

Health, Innovation & Growth



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## ABSTRACTS

The Nordic Approach to Sustainable Work –  
Towards new EU research challenges



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## THE NORDIC APPROACH TO SUSTAINABLE WORK – TOWARDS NEW EU RESEARCH CHALLENGES

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In recent years, policy discussions regarding the future of work have been revitalized. At the European level, the process of developing policies focusing the *European Pillar of Social Rights* clearly illustrates this development. The European Pillar of Social Rights addresses twenty sectors of policy development, research and innovative practices. Sustainable work is a central policy area for the Nordic Council of Ministers as well as in Sweden. The future of work reflects the visions and missions of many international organisations as ILO, OECD, EU, Eurofound, EU-OSHA and many others. Many research funders also give high priority to challenge-driven research and innovations.

Globalization, digitalization, international competition, new demography and technological transformations have fundamental impact on working conditions, working hours and location of work. The development towards work without borders, a sharing economy and labour market polarization have significant repercussions on employment relations, social protection and the role of social partners. Temporary jobs and precarious working conditions increase in the service sector, while high-performance jobs become more common in the advanced industrial sector. More knowledge is needed on how to accomplish secure and adaptable employment, health and safety at work, proper work life balance, a good social dialogue and effective participation of workers. Quality of jobs, social protection, and improvement of living conditions are major visions both in ILO centenary mission 2019 and in the *UN Sustainable Development Goals* presenting vision up to 2030.

The purpose of this conference is to focus on Nordic research and ideas on how to succeed in creating sustainable work in a European context for Horizon 2020. It also represents a final activity by the Swedish Platform for Sustainable Work as a Resource for Health, Innovation and Growth which was initiated in 2013 with the purpose of promoting inclusion of issues focusing on sustainable work in Horizon 2020 ([www.sustainablework2020.se](http://www.sustainablework2020.se)). The mission of the platform is not only to emphasize the Nordic approach in the light of Horizon 2020, but also to focus on Horizon Europe – the next research and innovation framework programme.

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## DAY 1

### **The Swedish platform for sustainable work in Horizon 2020 - in retrospect**

*Maria Albin, project leader, Sustainable health 2020, KI, Sweden*

The nationwide Swedish advocacy platform “Sustainable work as a resource for health, innovation and growth” started in 2013 with the aims of i) identifying possible openings for the research area within the European framework program Horizon 2020, ii) implementing a strategy to impact Horizon 2020, and iii) to connect Swedish and European researchers.

The basis for this agenda was that although work and working conditions have a major influence on the health, wellbeing and prosperity of workers and their families in the EU, these aspects were lacking or extremely fragmented in Horizon2020. Since this is both a strong research area in Sweden and seen as strategically important by the social partners, it should be a Swedish priority to promote those issues in Horizon2020. The initiative was funded by Vinnova, co-funded by the participating universities, and supported by the social partners and other stakeholders.

Using a pragmatic definition of sustainable work as including health, innovation and growth, and also highlighting inclusiveness-productivity as a part of sustainability, the platform drew from a basis in the occupational health and safety research community, connected to wider networks of working life research. Fundamental elements in establishing the platform were a joint ambition from the research community to highlight the importance of the field in Horizon2020, but also to extend the European networks. The support of the social partners was crucial for the credibility of these ambitions, and VINNOVA should be commended for recognizing the strength and potential of the area as well as supporting the platform in spite of recognizing the difficulties to impact the European research agenda.

The platform has extended the dialogue on the European research agenda within the Swedish research community in interaction with key stakeholders, and gradually built a strategy to impact the framework programs. Over the years, our advocacy has also developed in interaction with the European agencies Eurofound and EU-OSHA, and with PEROSH. The main issues have been to develop approaches focused on the societal challenges (Horizon2020) and missions (Horizon Europe-FP9), rather than using traditional areas on working life research as the point of departure.

Our impact on the early calls in Horizon2020 was minor, while work and working conditions is much more visible in the later calls, and definitely on the agenda in the first drafts for Horizon Europe (FP9). Our focus will now be on making the opportunities known to Swedish researchers, and on facilitating participation in applications.

The platform is tiny on an international scale, but the work with position papers and comments on draft documents for Horizon2020 and Horizon Europe (FP9) has been highly appreciated among our European colleagues where open advocacy by researchers (and public funding for it) is not an option.

We see that funding opportunities for Sustainable work in Horizon 2020, and most likely its follower Horizon Europe, are now a reality, and that the main challenge is to make full use of these opportunities.

## **From the European Employment Strategy to the European Pillar of Social Rights to the ILO Global Commission on the Future of Work**

*Allan Larsson, Special advisor on the European Pillar of Social Rights, Sweden*

The labour contract, the handshake between a worker and an employer, is a fundamental element in any economy. It consists of rights and obligations – the obligation to do the work, the right to remuneration. To create a level playing field between the two partners, the social contract, including both formal and informal arrangements, has been developed. This is one of the big achievements of the work of the ILO, recognizing that “labour is not a commodity”.

However, progress has been uneven, and the development of the last few decades has been disappointing. Most workers in the world still lack basic rights at work and enjoy limited social protection. Many forms of work do not provide either income security or opportunities for self-realisation. Two billion workers are in informal employment. In many countries, wages have not recovered to pre-crisis levels.

European countries have been leaders in the development of the social dimension. With European integration, the EU has had to play a more prominent role in setting the European social and employment standards.

- The Delors initiative at the end of the 1980s to strengthen the social dialog and the social dimension was a first step.
- Ten years later the Treaty of the European Union was amended, and employment became “a matter of common concern”; the European Employment Strategy was agreed. Social policies were recognized as a productive factor. A new open method of coordination was introduced to drive the process.
- The financial crisis 2008 and the macroeconomic mistakes blocked further progress. Since then, there has been an economic recovery that has brought most countries back only to the level of output they registered in the middle of last decade. There has been no similar social recovery – public policies during the last ten years have been too weak to manage strong market forces and to secure a widely shared prosperity; in many countries austerity policies has widened and deepened income gaps, left people and regions behind.
- The purpose of the Juncker initiative in 2015 on a European Pillar of Social Rights is to change direction, strengthening the social contract and start a social recovery, as agreed at the EU Social Summit a year ago.

The next initiative of great importance is the Global Commission on the Future of Work, preparing the 2019 ILO jubilee. The background for the Commission is the widespread social and political discontent, which is paving the way for nationalism, xenophobia and protectionism. The multinational system as we know it is under attack, partly in crises. Nations and international organizations are at a cross roads:

One road is business as usual. This means that the imbalances between the financial and economic system on one hand and the social realities in working life and societies on the other hand will get worse, feeding discontent and nationalism and deepen the crisis.

The other alternative is to develop a new paradigm, replacing the one that imploded in the financial crisis, a new paradigm of the same magnitude and strength as the one shaping the world after 1945, that can guide Member States economic and social policies in the new world of work during years and decades to come.

## **PEROSH – an overview**

*Inger Schaumburg*, Director general, The National Research Centre for the Working Environment, NFA, Denmark, Vice chair, PEROSH

An overview will be given on PEROSH (The Partnership for European Research in Occupational Safety and Health) . Apart from the organizational structure, also some of the PEROSH core activities will be highlighted, such as the PEROSH joint research programme and the PEROSH research conferences. Furthermore, a description will be given on the PEROSH activities in identifying future challenges in the OSH research. Finally, the new PEROSH strategy for the coming years will be presented.

PEROSH – the Partnership for European Research in Occupational Safety and Health was founded in 2003. It has 13 member institutions in 12 European countries. The core activities are to create new knowledge on OSH and to inspire policy makers and workplaces to develop healthy, safe, innovative and sustainable workplaces. The core activities are joint research programmes, research conferences and researcher exchange programmes.

PEROSH will contribute to impact of OSH research in European countries, Europe and the world.

## Future work, digitalisation and new skills requirements

Jan Gulliksen, Professor, KTH, Expert member of the Swedish Digitalisation Council and Sweden's Digital Champion, Sweden

Digitalization is changing our working life more than anything else has done since industrialization. And it is actually not the technology in itself, but rather the change and development of work that comes as an effect of the opportunities offered by digital technologies. The Swedish committee for digitalization named it “**Societal digitalization**” to emphasize the change of society, working life, business, technology use and the new business conditions that arise from the opportunities offered by the technology. Digital technology allows us to do things in completely different ways than we could before, but it also gives us the opportunity to do brand new things (SOU 2014:13, SOU 2015:91).

Digitalization also has the consequence that it removes the need for some jobs, typically jobs with little or no skill development opportunities within the job, monotonous, hard or dirty jobs, jobs with a high degree of automation opportunities. Typically it is the middle skills jobs that are disappearing. The Frey and Osborne study (2017) have investigated which jobs that will be influenced based on the case of U.S.A. As much as 47% of the jobs are facing a high risk of computerization within the next 20 years, particularly affecting office and administrative support work, sales and related and service jobs. In Sweden the extent of jobs that disappear due to digitalization is even higher (Fölster, 2014). But this should not be interpreted as digitalization is a bad thing that should be prevented. The change is necessary but requires conscious efforts to handle the consequences of digitalization in a good way.

More importantly is also to think about all the new jobs that comes as a consequence of digitalization. Looking into the new jobs and new professions many of these happen to be within the digital sector and requires digital skills on all different levels. This means that it will be very important to supply the labor market with the skills needed, and currently there is a skills shortage in the digital sector. Therefore, when people lose their jobs due to digitalization, a successful labor market has the capability to encourage and support people to develop their skills to move further up the value chain. Different countries have managed this in different ways (Holmes & Mayhew, 2012). The question is also what role universities and higher education institutions should play in the extensive needs of life long learning.

Currently, on an expert level, we have an IT skills shortage in the EU as well as in Sweden. The Swedish IT and Telecom authority claims that by 2022 there will be an IT skills shortage of 70.000. Can we meet these needs by extending the higher education programs? Probably this should happen, but it is not sufficient. We need new methods of educating, making use of digital tools to make higher education accessible independent of place and time, but still being an education of high quality, content wise as well as pedagogically. This requires dedicated efforts in our higher education institutions, a change of attitude in industry to supporting continuous education, and an improved model for funding and rewarding higher education from the government.

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# Promotion of future world of work – Four parallel sessions

## SESSION 1. Working longer and better

### **Sustainable work for health and job longevity**

*Maria Albin*, Professor, Metalund, Lund University and Karolinska Institutet, Sweden

National policies in many countries now use economic incentives to prolong working life in response to the demographic transition with an ageing population, and in many countries (including Sweden), also a shortage of skilled labour. In parallel, access to disability pension is often reduced. Given the increasing divergence in both working conditions and healthy life expectancy, these policies may increase social inequalities in health, and render already vulnerable populations more vulnerable. In addition, these changes are controversial for the social partners.

Another approach would be to look at barriers towards accomplishing a full and productive working life, individual drivers to extend it, and at workplace and societal measure to support this. Longitudinal epidemiological studies show that excessive psychosocial stress or an excessive physical workload are drivers of long-time sick leave and premature exit from the labour market. A report to the Swedish Commission on Inequalities in Health concluded that the main contribution of work factors to gender differences in health are the psychosocial ones, while physical workload contributes most to the socioeconomic differences. Programs addressing these factors at the workplace level are keys to reduce loss of workability and years lost due to premature exit.

Population-based surveys indicate that a considerable proportion of the workforce in specific occupations report that the physical and/or psychological demands at work exceed their capability. Access to occupational health service in Sweden is decreasing, most markedly among manual low-skilled workers, and among women. This strongly suggests an increasing mismatch between risk and workplace resources for managing health hazards and for adaption of work to the worker. In addition, a significant proportion of older workers report that they would like to change job but dare not. Thus, the current infrastructure to support job adaptation, job-shifting/re-training seems to be insufficient, mismatched to needs, and likely to contribute significantly to loss of good and productive working year before age 65.

Studies of workers who have chosen to prolong their working life are still few. Qualitative studies suggest that a wish to continue to develop professionally, to contribute, and to remain included in the team may be important driving forces, and that this may contribute to an activity balance during the increasing healthy years after age 65. However, this is an area which needs more research.

The mission Sustainable work for health and longevity needs to include innovation and productivity, as well as social sustainability. To support such policies, we need a scientific evaluation of current policies from a multidimensional sustainability perspective including health inequalities, and specifically address challenges to healthy working life in the low-end of the labour market in different contexts, e.g. globalization, deregulation and the Scandinavian tripartite model.



## **Sustainable work and labour law research**

*Birgitta Nyström, Professor, Faculty of Law, Lund University*

Labour law research is a small area within the law research environment involving less than a hundred academics in the Nordic countries altogether. We deal with traditional legal questions: Interpreting and analysing law and court cases, comparing different legal systems etc., but are also concerned with questions relating to law in practice and how legislation should be designed in the future in order to meet new challenges in society.

Changes in society, globalisation and internationalisation, the gig economy, demands for flexicurity but also the need for a longer and more sustainable working life has raised interest from labour law scholars. A few of today's interesting labour law research questions concerning sustainable work are:

The concept of worker/employee is important to analyse in the light of the recent developments when "new" types of performing work emerge, because labour law protects only those who are defined as workers.

The concept of employer has recently begun to raise attention. Who is the responsible employer in complicated production chains, for agency workers, in platform work situations etc.

The ban on discrimination is important to highlight and analyse, especially the ban on age discrimination. There are many complicated legal questions concerning discrimination law, and this area has caused considerable attention from labour law scholars.

How can we combine security and flexibility? Questions concerning security of employment, fixed-term contracts, part-time employment, agency-work, employees' qualifications and employability as well as solutions in collective agreements and parts of the social security system are of interest here.

Combining working life and family life, work environment and working hours are vital in order to reach a sustainable working life. There is labour law research in these areas.

Many of the questions concerning sustainable work have elements of EU law. The social partners and collective agreements also play an important role here. A general question is to which extent the involvement of the European Union changes the traditional Nordic model with its large area of manoeuvre for the social partners, and what this will mean for the Nordic labour markets in the future.

## SESSION 2. The new world of work

### **Job quality, innovation and employment outcomes in Europe**

*Chris Matheiu, Associate Professor, Department of Sociology, Lund University*

Work will not disappear, at least in the foreseeable future, so it is best to concentrate our concern, and policy and firm strategy discussions, on real potential threats. Three particular areas will be focused on in this presentation:

1. The tendency for innovations to exacerbate inequalities in firms and society.
2. The potential that “obsolescence cycles” for skilled workers will accelerate, meaning that the age, or period from which they received their most advanced qualifications, that firms will be tempted to replace older skilled workers with younger, more recently qualified. Skilled workers will decrease.
3. That employment, not work disappears at a more rapid pace, meaning that an increasing number of “peripheral” workers disappear from firms and workplaces, and carry out work tasks as own account workers or platform-workers.

Much of the empirical basis for points 1 and 2 derive from the results of a recently concluded Horizon 2020 project QuInnE – *Quality of Jobs and Innovation generated Employment outcomes* (Quinne.eu). The primary findings of QuInnE are that innovative firms tend to increase employment (add jobs), and that the jobs added tend to be higher quality jobs, while often reducing the number of low skill, low quality jobs. While this is beneficial in two important respects – innovation tends to increase, rather than decrease employment, and innovation tends to increase good quality jobs, and not bad quality jobs (in line with the skill-biased technological change thesis), this tendency also exacerbates inequalities in firms, and also by extension in society. Linked to the issue of the increasing demand for skilled employees, and demands for new, and sometimes radically new skills among skilled employees looms the issue of obsolescence of incumbents in possession of what within firms are deemed to be inadequate skill levels. This is the core of point 2. There is a risk that accelerating innovation will make skills and qualifications of incumbents obsolete faster and earlier. This leads firms to a classical dilemma, but one which they will probably confront with increasing frequency – whether to replace workers with older skills and qualifications with workers with more recent (current) skills and qualifications, or to invest in training. These firm choices are strongly affected by institutional and regulatory structures.

The third point is somewhat related to the previous two, but is often studied as an autonomous trend. As firms make the assessment that some work doesn't need to be carried out by core employees – either because of skill level, task or project duration, or compartmentalization of the task/work, more work may take place remotely, mediated by apps and contracting. This too has implications for skill development and employment opportunities, as traditional channels for learning and career progression have been coupled to workplaces.

All three of these pose challenges regarding the internal and societal sustainability and distribution of work. Potential solutions require both extensions of existing logics as well as new perspectives and societal agreements and arrangements.

## **Sustainable work, digitization and new forms of work**

*Lena Abrahamsson, Professor, Human Work Science, Luleå University of Technology, Sweden*

There are clear signs that digitalization approaches such as Industry 4.0 will become more apparent in European workplaces. This development requires reflections and considerations so we do not create more problems than we solve. Our contribution to the discussion is to highlight the issue from several perspectives. First, we conclude that Industry 4.0 is essentially a technology-driven concept but also connected to several organizational concepts, where Lean Production is the most powerful. Given the strong influence of Lean Production in the companies today, Industry 4.0 will require new demands for teamwork, responsibility, and comprehensive understanding of production flow, which can be seen as a movement from qualifications dependent on the process to qualifications more independent of process. Another and partly contradictory effect is that digitalization allows for a flexible labour market, where labour can be purchased on demand from all parts of the world as long as there is a working Internet connection. Good or bad, there will be significant differences in working conditions between the two alternatives. In the first option, we see the worker embedded in a technological production system where the workplace is a social unit, while the second development is based on individual work through the various types of monitoring and remote control.

There are many positive aspects of Industry 4.0, digitalization and Internet of Things, probably most of the parts, but there are many questions that must be clarified. The development cannot and should not be stopped, but it requires reflections and considerations. Working life research has an important role to play when new technology should be valued and introduced, but that role is not pre-given to us; we have to mark our position by highlighting issues that are perceived as important and relevant for developing sustainable work. A first step is to ask the right questions.

## SESSION 3. Body at work - problem or potential?

### **The Body at Work – ergonomic challenges in the new workplace**

*Svend Erik Mathiassen*, Professor, Centre for Musculoskeletal Research, Department of Occupational and Public Health Sciences, University of Gävle, Sweden

Future research devoted to developing and understanding sustainable work in the context of exposures to the body (including the brain and mind) faces several challenges encouraging or even necessitating changed priorities when selecting research issues. Also, new ideas of how to collect, analyze and interpret data will be needed. Major transitions in occupational life of relevance to “the Body at Work” include new types of jobs, new groups at the labor market, and new behaviors of those having (or not having) jobs. Research will be expected to address these transitions, and do so in a context of work being viewed as a key element, not only in determining the health and well-being of the individual, but even in addressing societal challenges related to equality, inclusion and prosperity.

New jobs. Major transitions in occupational life have already occurred due to the implementation of Information Technology, IT, for a multitude of purposes. One example of this having an obvious impact on the Body at Work is the change of what used to be jobs posing excessive physical demands, such as forestry, mining and heavy industry, into jobs largely performed by operators controlling heavy machinery using computers. Another example is the evolution of many office jobs into flexible, “boundary-less” jobs where the worker can, to a large extent, decide herself when, where and how to work. These transitions may have led to a proportional increase in problems related to physical inactivity and mental stress, but even to new opportunities for arriving at a desirable balance between work and non-work. Without any doubt, tasks and jobs will change further in the future; likely comprising transitions brought about by technical developments that are beyond the imagination of most people (even researchers...).

Notably, the current trendy emphasis on addressing and understanding the influence of IT (“digitalization”) on a multitude of jobs should not overshadow that large sectors in working life – especially in less developed economies – are still characterized by “traditional” risk exposures to the Body, such as heavy manual handling and repetitive tasks. Research with a long-term purpose of reducing the occurrence and effects of such exposures is still highly relevant.

New groups. For demographic and political reasons, the proportion of elderly in working life will likely increase. Since capacities, experiences and preferences may differ depending on age, tasks and jobs need be developed that can be adapted to workers with different abilities; this may even address a general need to construct jobs that allow individuals with intellectual or physical disabilities to enter the labor market and stay there. Another “new” group in occupational life, at least in Sweden, is recently arrived immigrants. Those who ever get a job may accept low-status employment in enterprises with a less developed working environment, where tasks are associated with unfavorable physical and psychosocial working conditions and thus augment socioeconomic inequalities.

New behaviors. New generations entering the labor market likely have other attitudes than those of their parents to occupational work and its role in accomplishing personal goals in life. In contrast to previous ideals of life-long, secure jobs within a certain profession, expectations may have changed into work being an opportunity to realize different kinds of experiences. Thus, the individual pursues a rewarding series of jobs, rather than a yearlong stable employment. Global mobility of people offers a similar example of behaviors implying that workers frequently move between jobs. This challenges traditional occupational epidemiology, in which identification of hazardous jobs implicitly assumes that workers stay in those same jobs for a long time. To this end, careers comprising

diversified jobs call for a better understanding of effects of variation in physical and mental exposures, not only on the short term (days) within a job, but even on a longer term (weeks, months), and between jobs.

New contexts. Occupational work, and the exposures associated with work, is to an increasing extent viewed as a component in the overall socioeconomic status of the individual, as well as in the overall prosperity of society. Thus, research needs to understand work in a socioeconomic context; not only for the individual, but even as a factor tightly associated with social rights, equality, and justice. This includes addressing issues related to the role of work in determining conditions of life for potentially vulnerable groups, such as functionally disabled. At the other end of the scale, work can also be viewed as a potential arena for promoting health; not only in the sense of preventing ill-health, but even in terms of literally improving physical and mental capacity. This, in turn, requires research to address combined effects of both social, mental and physical exposures at work, and understand those in the context of the total life of the worker, including non-work activities. The societal perspective on work even encourages research into factors at work determining the ability of individuals to produce services and products to the benefit of companies, organisations and society; as well as research devoted to economic correlates of the physical and psychosocial work environment. Research will have to close up on realities and be guided by societal needs.

New opportunities. While the discussion above suggests that research into the Body at Work may get increasingly complicated, new developments in IT has opened new opportunities to collect and analyze the data needed to address some of the outlined challenges. Instruments are already available, and will likely get both better and cheaper, to collect data on physical activity continuously for prolonged periods of time, at least up to weeks; and internet-based tools for recording important outcomes, such as perceived pain, have recently been used for long-term, repeated data collection. Also, IT, internet and, eventually, artificial intelligence allow for advanced, automated procedures for analyzing extensive quantities of data, and for merging large data sets in repositories allowing BigData multivariate meta-analyses.

In conclusion, the new workplace presents thrilling challenges to the conceptualization, design, and analysis of studies focusing on the Body at Work. At the same time, addressing these challenges will be facilitated by developments in techniques for collecting, merging and analyzing large data sets, supported by IT.

## **Sustainable work and the exposure to chemicals**

*Anders Gudmundsson, Professor, Ergonomics and Aerosol Technology, Lund University, Sweden*

The chemical exposure is extensive. In recent decades, the amount of chemicals has doubled and today there are around 145,000 chemicals registered in the world. In our globalized world, chemicals are used in manufacturing at one place causing high exposure and manufactured products are then used elsewhere with lower exposure. The chemical exposure is unevenly distributed throughout the world and between different social groups. More and more sophisticated chemicals are being developed. With the access to "big data" and the development of artificial intelligence, one hopes to increase the ability to design chemicals with very specific characteristics. The human body can be exposed to these chemicals mainly through the skin, respiratory tract and gastrointestinal tract. The absorption can take place through our skin of approximately 2m<sup>2</sup>, which comes into contact with solid surfaces, liquids or the surrounding air. Every day we breathe 10m<sup>3</sup> of air passing over 100m<sup>2</sup> of lung surface, where particles or gases can be deposited. And every day we eat food and drink liquid. A special time of exposure is our time as fetus, when the mother's absorption of chemicals can be transferred to us.

Over the years, research has been able to show many risks in working life and many authorities and organizations are involved in regulating manufacturing and use. And in many ways, we have a safer chemical work environment in Sweden / the Nordic countries, but there are still old problems that have not been solved. In Sweden, for example, 1 000 to 1 500 occupational diseases are annually reported caused by chemical or biological substances. Eczema and airway sickness are most frequent. Among the risks are also more serious diseases such as cancer and chronic poisoning. A backward glance shows that we have found it difficult to spot certain risks and had difficulty getting the risks accepted, which has delayed the ability to prevent or reduce exposure to hazardous chemicals. There are new and new old threats, such as allergy-causing substances, hormone-causing substances, nanoparticles and new chemicals that we do not even know today. It is therefore important to discuss what exposures and chemicals need to be researched more, the premises on which our research is conducted and what new challenges we believe we have in front of us. During the session, we would like to discuss below following questions, but of course, all thoughts and opinions are welcome. The overall issue is: How can research in chemical health risks be more effective in contributing to society's goals with a poison-free society.

- Do we need to move from a dominance of "misery research" to the risks of more action-oriented research focused on health promotion? And how does the potential for financing and scientific merit influence such development?
- Does research in chemical health risks take due account of social justice, equality, gender and the relationship between work and leisure?
- Are there workplaces / industries for which researchers are not sufficiently aware? Need more measurements and mapping at work?
- Many of the products and chemicals we use are produced in other countries. How should our research be influenced by this fact?
- Is our research sufficiently observant and equipped / competent for future changes in chemical exposure due to, for example, globalization and technology development?
- Is there a great potential for using and / or developing technologies to collect "big data" to develop future research into chemical health risks?

## **SESSION 4. Promotion of R&D on sustainable work**

### **A Swedish network for interactive research on sustainable work**

*Ulrika Harlin*, RISE Research Institutes of Sweden, and *Mikael Widell Blomé*, Ergonomics and Aerosol Technology, Lund University, Sweden

This session will present a growing Swedish network for development of future work and workplaces (AFoU) and an example of an interactive research project providing gains for both practitioners and researchers.

#### *About the network AFoU*

AFoU (Workplace related R&D for sustainable working life) is an open network in Sweden that in collaboration, shares and builds knowledge about how good work environment, quality, innovation and competitiveness are connected. The ambition is to strengthen workplace research that contributes to sustainable working life and sustainable development of organizations through interactive collaboration between industries, workplaces, researchers, and social partners. Today, there are 150 members from over 50 organizations, including 25 universities, as well as 28 companies and public organizations.

The network AFoU has active dialogue with the labour market parties, researchers and practitioners, authorities and ministries. A work committee and steering group is the engine in the network with the chairmanship of Göran Johnsson, former IF Metal President. A reference group has been established with expert representatives of the labour market parties with 4-6 meetings a year. Activities take place in an annual process with a strategic dialogue seminar followed by theme-based workshops and networking meetings. Network meetings apply a model with rotating "site hosts" in the union head quarters and rotating "agenda" where researchers present their interactive research for sustainable working life. This is an important forum for collaboration, identifying research needs, sharing experiences of methodology for interactive research approaches, creating new contacts and initiation new R&D projects in new partnerships.

#### *An example of an interactive research project*

The research project "Work Force in Skåne" was performed as an intervention study during 2016-2017 with the objective to increase competence and initiate age management strategies for a sustainable development of the participating organizations, with a special focus on the elderly. The interventions were inspired by the concept and activities of the AFoU-network, which brought together researchers with companies from the network "Företagarna" – the largest organization for SMEs in Sweden. The intervention study has showed promising results with new insights and established strategies for both individuals and the participating companies and organizations. Several local events with seminars and workshops has been held or is planned as a spin off from the study. Also, the network of participating companies with interest in AFoU is growing and now addressing expansive companies from different branches such as energy, clothing and gaming, with special focus on adolescents and young leaders.

## **Linking work research to development horizons in the European Social Fund**

Lars Wårngård, Forte, Swedish Research Council for Health, Working life and Welfare

Dolores Kandelin Mogard, Akademikerförbundet, SSR

Questions about cooperation, knowledge and social relevance have been the subject of renewed interest in recent years. Common words in the current research policy is synergy. The title of the latest research policy proposition is *Knowledge in Collaboration - for societal challenges and enhanced competitiveness* (Prop. 2016/17: 50). This challenge also has a bearing on the workplace. There is a need for collaboration between research funding agencies and between authorities and organizations in the area. Such an example is highlighted at this session

A recent example of interaction is between the Swedish ESF Council and Forte through the Social Fund's thematic platform for sustainable working life. The Swedish ESF Council and Forte, in 2017, have initiated cooperation to create good conditions for a sustainable working life that will last until mid-2020. The aim is to offer employers, practitioners and experts the opportunity to innovate / use existing knowledge and research, but also help to create a sustainable working life. The theme platform spans several areas; global analysis, knowledge compilations, analysis of results in ongoing projects and dialogue with regional and national actors.

The European Social Fund in Sweden (Swedish ESF Council) manages the national program of the European Social Fund in Sweden. The program covers just over SEK 13 billion in 2014-2020 and will strengthen national labor market policy. Efforts include, among other things, transition to jobs for those far from the labor market and skills development for employed persons and overall support the development of a sustainable working life. They are carried out in broad collaboration between different actors

In the second part of our presentation we would like to illustrate how project supported by the European Social Fund can make a difference and contribute to a sustainable working life we will present the project "Universal Design in the Workplace"

To achieve a long-term sustainable work life, we need to be better at making use of people's differences. Currently there are few workplaces that reflect the entire population of Sweden. Work life needs to be designed, planned and organized around being inclusive. *Universal Design in the Workplace* is a two-year project involving Akademikerförbundet SSR, Funktionsrätt Sverige, Föreningen Sveriges Företagshälsor, Randstad, Swedavia and Vasakronan. The project is part-financed by the European Social Fund, ESF. ESF finances projects that strengthen people in and outside work life through skills development.

The UN defines the actual concept, universal design, as "the design of products, environments, programmes and services so that they can be used by everyone as far as possible without the need for adaptation or special design." A universally designed workplace means that from the start it is inclusive for everyone, and that differences are incorporated and made use of. The goal of the project is to help bring about a change of perspective. Moving the focus from individually-adapted solutions – that can be perceived as both stigmatising and excluding – to right from the start taking account of and designing the workplace in line with the differences within society. If you design workplaces based on outliers, they function for everyone and make use of people's differences. The project will produce methods and models for training and skills enhancement within four fields: physical work environment, social work environment, the design and leadership of the work organization, and skills provision and recruitment processes. The task includes training aimed at municipalities and other organizations within the welfare sector. At the same time, the project is an initial step in putting the concept of universally designed workplaces on the map in earnest. This involves creating an awareness, both within work life and society at large, of what this involves and why it is so important.



## DAY 2

### **Trends in Scandinavian research on work, environment and health**

*Mikko Härmä*, MD, PhD, Research Professor, Research and Service Centre of Occupational Health, Finnish Institute of Occupational Health, Helsinki, Finland.

Editor-in-Chief, Scandinavian Journal of Work, Environment & Health

This paper reviews the recent trends in the Scandinavian research on work, environment and health. The analysis is based on the contents of the Scandinavian Journal of Work, Environment & Health, based on the published papers, citations, number of internet views and the opinion of the Journal editors as the “best papers” of the Journal.

Scand J Work Environ Health is published by the Nordic Association of Occupational Safety and Health (NOROSH), but it is an international journal due to getting most subscriptions and authors outside the Scandinavian countries. Although each journal has its own expertise in the form of editors and scope, the contents of the Journal still reflect the general trends in the scientific research of occupational health and safety in the Scandinavian countries.

Recently, the papers associated with mental health and stress management, sedentary behavior, physical activity and musculoskeletal disorders, return-to-work, shift work and health and sustainable employability are most cited. These areas also reflect the most popular contents of the Journal during the last two years, even papers on e.g. environmental issues, occupational health care and working life issues like precarious employment and economic evaluation of occupational health interventions have become more frequent. The editors liked systematic reviews and papers with strong added value and the use of innovative methodology. The top viewed papers were, however, associated with the negative aspects of open-plan office work and the Helsinki criteria for diagnosis of asbestosis, asbestosis and cancer in addition to the areas with high scientific citations.

Compared to the citations classics during the last 30 years, high focus on issues associated with the psychosocial and musculoskeletal problems, as well interest for the working hours and health has not changed. However, the methodological requirements of the new papers are growing, favoring for new concepts, objective exposure and outcome assessment, repeated measurements, advanced statistical methods and long follow-ups. As a limitation of this presentation we need to realize that the contents of the published papers in high quality scientific journals reflect mostly the past instead of new research strategies, due to the long time-lag from research agendas to funding, and from funding to the final publication of the paper.

## The future research on sustainable work – young scholar look ahead

### Danse your PhD 2017 Ergonomics Infrastructure

Cecilia Berlin, Associate professor, Chalmers School of Technology, Sweden

[https://www.youtube.com/watch?time\\_continue=15&v=-Xz2WlyZdCE](https://www.youtube.com/watch?time_continue=15&v=-Xz2WlyZdCE)

### Balancing the fit between man and task

Mette Korshøj, The National Research Centre for the Working Environment, Denmark

Although the level of occupational physical activity has decreased during the last decades<sup>1</sup>, it is still thought to increase the risk for deterioration of the musculoskeletal and cardiovascular systems and thereby work sustainability. Previously, initiatives aiming to decrease deterioration from occupational physical activities, e.g. ergonomics and work organization changes, have shown mixed results<sup>2-7</sup>.

Hypothetically, an increased physical capacity will decrease deterioration from occupational physical activity and thus benefit work sustainability, as a worker with high physical capacity are less strained compared to a worker with low physical capacity when performing physical activity<sup>8</sup>. However, only few of the initiatives have investigated the effects of increasing physical capacities<sup>9,10</sup>.

The occupational groups suffering majorly from the deterioration of the musculoskeletal and cardiovascular systems are blue-collar workers<sup>3,11,12</sup>. Blue-collar workers tend to be less physical active during leisure time than white-collar workers<sup>1</sup>, this combined with the paradoxical health effects from occupational and leisure time physical activity<sup>13</sup> indicate that blue-collar workers may not maintain sufficient physical capacity for performance of occupational physical activity.

Physical capacity are a key competence for performance of occupational physical activity<sup>14</sup> and are therefore essential for work sustainability. However, from a cultural and social perspective the physical capacity has been, and to some extent, still is considered as a part of the workers privacy. However, exposure to occupational physical activity doesn't seem to be modified by age or physical capacity<sup>15</sup>, like the saying "fitting the task to the man"<sup>16</sup>. On the other hand, the opposite "fitting the man to the task" by including initiatives for maintenance of sufficient physical capacity for performance of the occupational physical activity needed to fulfill the task doesn't seem to broadly exist in occupational contexts either.

Therefore are initiatives, knowledge and attention towards how to balance the fit between man and task, while maintaining and developing physical capacity, needed to achieve maintained work sustainability among blue-collar workers.

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## **Sustainable work – a challenge for social partners**

### **TCO on working life policies**

*Samuel Engblom*, Policy director, The Swedish Confederation of Professional Employees, Sweden  
(Excerpts from <https://www.tco.se/om-tco/This-is-TCO/TCO-in-the-working-life-of-the-future/2018-10-23>)

### **Our world**

We are living at an exciting turning point in history. Industrialism, which dominated the 20th century, is being replaced by a new working life characterised by the production of services, new demands for knowledge and expertise and an accelerated rate of change. This transformation of society is offering new opportunities to a great number of people, but, like most changes, it is also causing some anxiety and concern.

TCO strives to create the security and the conditions that people need so that they can enter the working life of the future with an open mind. There is no doubt that working life is the focus of many of the changes now taking place. Terms and conditions of employment, and the way that work is organized, must be adapted to the new demands. It is not working life alone, however, that is presenting new demands. The employees of today expect very different things from life than those of only a few decades ago.

We want to have interesting jobs in which we can develop, but we also want to have time and energy left for our children, families, friends and leisure activities. Of course, we also want to be able to exert influence over our everyday lives, even at the workplace. Offering tools that make it possible to exert such influence is one of the most important tasks of the trade unions today. The aim is that employees should acquire greater influence over both working hours and job content.

This is a context in which old and new ideas and concepts can benefit from each other. What is new is the increasing demand to be able to make individual life choices - what is old is the realisation that those who want to change the world can best do so by co-operating with others. The strength of the collective gives the individual greater freedom. This is why the concept of trade unionism, which is more than 100 years old, has such good prospects for the future. We want to have time for our children, families, friends and leisure activities.

The former [TCO-label](#) with focus on health and safety has developed into an international sustainability certification for IT products. Today the certification includes a wide range of [criteria](#) ensuring that the manufacturing, use and recycling of IT products is carried out with regard to environmental and social responsibility. TCO Certified combines requirements for social responsibility as well minimal environmental impact for both the product and its production during the whole life cycle.

**Europe under challenge. A programme for a prosperous and competitive Europe** (Excerpt)  
*Bodil Mellblom, Work environment Specialist, The Confederation of Swedish Enterprise, Sweden*

### **The recipe for a competitive EU**

The success of the EU's can be measured largely in the level of exchange in goods, services, people, and capital. The complete implementation of the Single Market is key. Much remains to be done in many areas, such as the free movement of services and labour, eliminating restrictive national processes, regulations and standards, and ensuring that common legislation is applied uniformly and consistently. As long as barriers to the four freedoms remain, European competitiveness will continue to be held back.

The digital dimension of the Single Market is hampered by national regulations and outdated legislation. The legal and physical infrastructure throughout the EU needs improvement and it is imperative that data can flow freely between Member States and into and out of the EU. Moreover, unless market failure is shown, new digital solutions should not be prohibitively regulated while rapid technological development is on-going.

The socio-economic benefits from free trade will not stop at the European borders. While it is important to remove the barriers remaining within the EU, the goal should be to minimize and preferably eliminate restrictions to trade in goods and services with third countries. Moreover, the EU has a central role in taking global leadership in promoting free trade, and, in the absence of multilateral agreements, in securing trade deals with our most important trading partners. This external dimension of the Single Market is necessary for the EU to be able to sustainably increase growth and create more jobs. EU-wide legislation should be reserved for areas where it demonstrably provides added value.

The principle of subsidiarity should be strictly applied. Any regulation must be necessary, proportional, and effective. These principles for improving regulations must apply to every EU institution that participates in legislation and be applied throughout the legislative process – including implementation and monitoring. The EU must set clear objectives for reducing the regulatory costs of business, increasing transparency, improving impact assessments of planned legislation and evaluating existing ones. These objectives must be monitored more consistently and effectively.

(...)

A Social Europe can only be built with high employment levels laying the foundation for better living conditions. This cannot be achieved through additional EU level social regulations, but through competitive companies and healthy economies in all the Member States. The EU has a responsibility to stimulate national reforms that contribute to increasing employment levels. Given the wide variation socially, economically and institutionally across the EU and the need for attention to national context, social policy should essentially remain a national competence.

Benchmarking within the framework of the European Semester may be a way for the EU to promote positive progress in the Member States. The EU's role as a catalyst for competitiveness-enhancing national reforms can be strengthened in other areas as well. By benchmarking Member States' different solutions, the EU can stimulate the exchange of ideas and spread of best practice. Europe's diversity is a competitive advantage that should be better utilized.

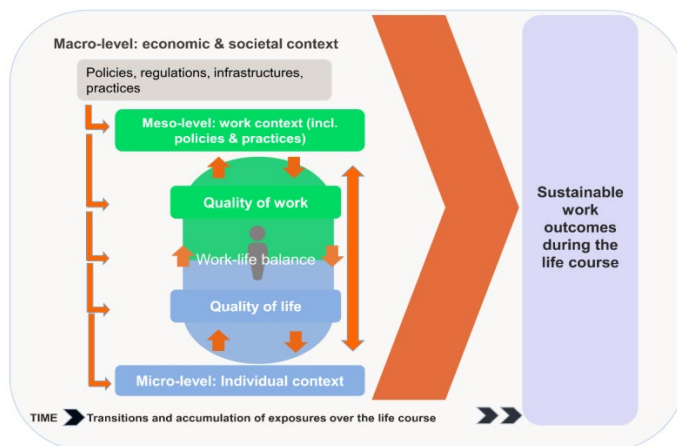
## Towards the new generation of the European workplace

### Sustainable work over the life course: Impacts of technological change on the manufacturing sector Franz Eiffe. Research Officer, Eurofound

Eurofound (2015) has defined *sustainable work* comprehensively as living and working conditions being such “that they support people in engaging and remaining in work throughout an extended working life”. Outcome indicators of sustainable work hence need to capture the two aspects set out in this definition: *engaging* and *remaining* in work. While sustainable work itself remains an unobservable construct, a feasibility study commissioned by Eurofound (*forthcoming*) focused on its operationalisation with the purpose of mapping out its constituents and how they are interrelated. The focus of the study was to identify elements and components that are measurable and to set out a preliminary list of indicators to be used in future analyses.

Eurofound’s approach departs from the *working individual* finding itself in a concrete job situation (job quality) interacting with its private (quality of) life domain. Policies, infrastructures, regulations and practices are setting the scene of both the individual and work context to unfold within an institutional framework and macro-economic and societal developments.

Eurofound analytical framework of sustainable work



Source: Eurofound forthcoming

In order to understand how work can be made sustainable also in the future, the implications for work and employment in terms of digitalisation of the economy have to be taken into account. Three main vectors play a crucial role: (i) the automation of work replacing human labour input by digitalised machine input; (ii) the digitisation of processes referring to the use of sensors and rendering devices to translate the physical production process into digital information and (iii) coordination by platforms. This leads to a shift in tasks and has impact on job quality as Eurofound explored on the example of five types of occupation in the manufacturing sector. The five analysed occupations have all been affected by significant technological, market and regulatory changes in recent years. These changes have inevitably influenced the way companies operate and work is organised, which in turn has affected job content, skills needs and quality requirements. While some of those changes have the potential of making work more sustainable in terms of higher work engagement, better use of skills or more employee flexibility, others imply the risk of marginalising workers and increasing segmentation.

## **Impact of rapid developments in ICT on occupational safety and health – an EU-OSHA foresight**

*William Cockburn, European Agency for Safety and Health, EU-OSHA, Bilbao, Spain*

Digitalisation of the economy will fundamentally change the types of jobs available, forms of employment, where we work and how we work. This in turn may give rise to new and emerging OSH challenges that must be anticipated.

Aiming to support an evidence-based policy response, EU-OSHA implemented a scenario-building “foresight on new and emerging OSH risks associated with ICT by 2025”. The study covered on-line platforms, robotics and artificial intelligence in a two-step methodology: 1) Identification of key trends and drivers of change through horizon scanning and expert consultation; 2) Development and testing of scenarios through an interactive process with stakeholders.

Follow-up expert review papers and study were commissioned on challenges highlighted in the foresight. By the end of the study, 92 Societal, Technological, Economic, Environmental and Political (STEEP) trends and drivers of change were identified and used to develop four scenarios on the future world of work and the new and emerging OSH risks associated with ICT. Each scenario presents different OSH challenges and opportunities.

In addition, expert review papers were prepared on crowdsourcing, robotics, 3-D printing, monitoring technologies and the e-retail sector, as well as a short review on “Regulating the OSH impact of the online platform economy”.

This work highlights that the future can evolve in different directions shaped by the actions and decisions that policy makers take today.

## **The future of work: Opportunities and challenges for the Nordic models**

*Jon Erik Dølvik, Professor, Fafo, Norway*

How will work and working life change in the future? Will new technologies destroy large numbers of jobs and propel joblessness or will rising productivity spur creation of more, new, and better jobs? How will the changes affect labour markets, working conditions, work environments, employment relationships, and the regulation of working life? Will the Nordic model become a casualty or a resource in the changing future of work? These are the kinds of questions the project *Future of Work: Opportunities and Challenges for the Nordic models* commissioned by the Nordic Council of Ministers, is assigned to examine.

Too often debates about the future of work narrowly focus on changes in technology – currently digitalization – while other important factors that already are at work, and will continue influencing working life, tend to be ignored. This introduction will focus on the main drivers and trends expected to shape work in the future and discuss their possible implications for Nordic working lives and the Nordic model of work and welfare.



## **Nordic Work Environment Institute in transition – and ways forward**

*Inger Schaumburg*, Director general, The National Research Centre for the Working Environment, NFA, Denmark

The Danish National Strategy for the working environment 2020 is still the 'Psychosocial work environment', 'Musculoskeletal diseases' and 'Occupational accidents'. We use survey data from "Work and Health", working time from "DAD", or job exposure from "DOC\*X" to link to registers on hospitalization, medication, sick listing etc. We rethink the general areas as in 'The Goldilocks principle' on designing jobs to fit workers, overviews on what works in creating mentally healthy workplaces and have workplaces integrated in the research process of how to maintain a good climate on to prevent accidents and the 'Vision Zero strategy'.

Because of the societal need to keep seniors at work, NFA has started the research area 'Prolonging working life'. It begins with the young workers, as their starts seems hard. Chemical exposures are also still important. Nano safety has been a way to keep the area alive. We have learned a lot, - about dust and spray products, international collaboration and this year NFA delivers four reports on health based TLVs – three nano and diesel fumes. The past few weeks NFA had the possibility to study the 600 old TLVs in Denmark to decide which ones need adjustment.

Research transfer and exchange has been an important field for NFA in order to work with impact – both academic and societal. NFA has worked with partnership, networks and now a panel of workplaces to help bridge the gap between research and research users.

Finally, I will speak about the result from the Danish Governments the Expert Committee on Occupational Safety and Health, which just gave their advice.

## Transformation of work and work ability

Antti Koivula, Professor, Director General, FIOH

Digitalization and globalization are primary mega-trends fundamentally shaping current work life (Störmer et al. 2014). In Finland, this transformation is catalyzed by several forces - including the structural renewal of the key industries (Honkatukia et al. 2014) and the changes in the population characteristics in terms of aging (Lundell et al. 2011), migration of foreign workers as well as growing importance of micro-companies. The prediction of the transformation's outcome on the Finnish society is challenging but changes are likely to be radical (Prime Minister's Office 2015). Accordingly, several studies propose that more than 10-50% of the current occupations are likely to disappear or transform during the upcoming years (Frey & Osborne 2013, Arntz et al. 2016). This transformation will have direct consequences on the functioning and set-up of the welfare state (Ministry of Finance 2016, Alatalo & Tuomaala 2008).

Transformation of work and its impact on work ability and welfare state represents a multidimensional policy issue. The sustainable development evolves when governments strive to fully integrate sustainability in all policy development. Progressive governments adopt an integrated approach that goes beyond the economic, environmental and social pillars of sustainability and encompasses society-wide, systemic sustainability goals for policy development (OECD 2015). The evidence by multitude of research (e.g. Brynjolfsson & McAfee, 2015; Fairlie, 2013; Frey & Osborne, 2015) shows that global trends of digitalization and globalization continue to transform intensively production, services and consumption habits of citizens: spread of ideas, economic forces, technologies have become an irreversible process transforming behaviors (Sundararajan, 2016). The consequences of these changes are visible in the contemporary everyday life and working life and in the qualifications and demand of the highly skilled work, and are much researched (Järvenpää & Immonen, 2011). Some of the current changes, however, are less analyzed and range from global sub-contracting patterns (Seppälä & al., 2014) to more informal chains with critical questions of the division of responsibility, preservation of trust and even the future of democracy (Miettinen, 2013).

To properly address the challenge, a novel segmentation model describing the new relationship between work ability and employability (as illustrated in figure 1). is needed.

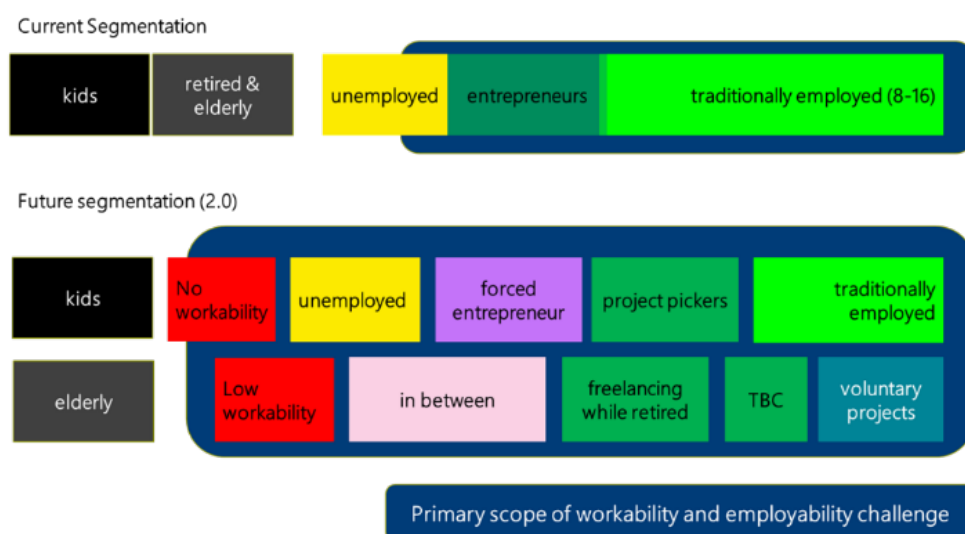


Figure 1: Illustration of potential changes in the segmentation of work ability and employability

The starting point to build the new model is the constant flow back and forth between the theoretical and practical in search of an even more profound understanding of the different parts of the segmentation model, new tools and policies enhancing work ability, employability and productivity. To catalyze the process, this all must be done in close collaboration with all relevant parties. Currently, this work is being conducted in Finland under the "TOIMI" project in the Office of the Prime Minister (at: [www.vnk.fi/toimi](http://www.vnk.fi/toimi)).

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## **Work Environment in Norway – from a tri-partite to a four-partite collaboration**

*Sture Bye*, Director of Information and Communication, National Institute of Occupational Health (STAMI), Norway

Work environment is high on the agenda in Norway. Both in the political discussions and as a part of IA Agreement (The Inclusive Agreement 2014-2018). The agreement between the social partners and the authorities is reaching its end in December 2018, and it is up for negotiations this fall. Today the participants in the agreement are preparing for the upcoming negotiations.

The Letter of Intent regarding a more inclusive working life (The IA Agreement 2014-2018) is based on a tradition of cooperation and trust between the authorities, employees and employers in Norway, both centrally and locally. The Agreement is based on a shared acknowledgement that activity through work promotes good health and that early implementation of active measures could prevent withdrawal from work.

The cooperation for a more inclusive working life is an important policy instrument designed to help achieve the paramount goals in employment and social policy and shall supplement and reinforce other general policy instruments of a legal and/or financial nature. A good working life that helps prevent illness and withdrawal, includes those who are fully or partially excluded and increases the age of retirement, also contributes to mobilisation of labour in a time where this is becoming increasingly important.

In the interim evaluation (IA-avtalen 2014-2018 Underveisevaluering, Oppfølgingsgruppe for IA-avtalen) of the latest agreement performed in 2016, work environment and prevention was at the centre of attention – as a central part of the agreement, as was the development of evidence-based knowledge and knowledge-based practice. The evaluation, among all areas evaluated, pointed out that work environment was part of the paramount objectives, and not directly defined as an operative goal, such as the other objectives in the agreement.

As a follow-up of the interim evaluation, the tri-partite collaboration set forward a task of redefining and focusing work environment better, based on scientific evidence, and work environment was set much higher on the agenda in the second period of the current agreement. Work environment is set as a priority area both in strategic high-level tri-partite discussions and in relation to knowledge-based regional and local activities on business and organisational level. STAMI was included as an equal high-level strategic partner and is now, as the main proprietor of knowledge on work environment in Norway, representing the fourth pillar in the tripartite collaboration, knowledge.

## **Towards Challenge-Driven Research and Innovation on Sustainable Work – looking ahead for the next European Framework Programme Horizon Europe**

*Tuomo Karjalainen, DMD, MS, PhD, European Commission, Directorate-General for Research and Innovation, Health Directorate Policy/Programme Officer - Environment and Health*

Research on occupational health and safety (OSH) has been supported by the EU Framework Programmes of Research and Innovation since the beginning of the Framework Programmes.

My presentation will focus briefly on the priorities for the three final years of Horizon 2020 (the current Framework Programme for Research and Innovation) under Societal Challenge 1 (Health, Demographic Change and Wellbeing), especially on the open calls for proposals and the outcome of recently closed calls focusing on OSH aspects.

The bulk of my presentation, however, will concentrate on the European Commission's proposal for Horizon Europe – the next Framework Programme for Research and Innovation, to run from 2020 until 2027. A comprehensive overview will be given on its structure, the foreseen funding instruments, the budget, the timetable, and the proposed Global Challenges, with emphasis on OSH-related activities.

*Jan Michiel Meeuwssen, Manager International Affairs, PEROSH*

PEROSH supported topics for new Working Program (2018-2020) HORIZON 2020 through 8 NCP's, in general giving more attention to work and health in Societal Challenge 1 and 6. My presentation will also include what we plan for the next framework programme

*Cecilia Beskow, Head of Research and Evaluation, Forte*

One of Forte's main priorities is a sustainable and inclusive work life. My presentation will therefore mainly focus on Forte's engagements in Horizon Europe, presenting Forte's main priorities in an inclusive and sustainable working life for Europe and out 10-year programme on Working life research,

*Anna Halldén, National Contact Point for H2020, Vinnova Sweden*

Horizon 2020 is the biggest EU Research and Innovation programme. The programme is the world's greatest investment in research and innovation and has a total budget of nearly €80 billion. The National Contact Points provide information and guidance for you who are interested in participating in Horizon 2020.