

Finnish Institute of  
Occupational Health

# Working hours - tracking the current and future trends

Prof. Mikko Härmä, MD, PhD

@MikkoHaermae

Symposium in Dortmund, June 2, 2023



## **Working hours - tracking the current and future trends**

1. Driving factors for changes in working hours
2. Past, current and future trends
3. Future research challenges

# Driving factors for changes in the time and spaces of work

1. Globalization and continuous business restructuring challenging the established forms of the organization of paid work
  - The old working time regime: working times were *standardized* and *institutionalized*
  - The new working time regime: *deregulation* of collective norms, *diversification* of the length and pattern of working time, increase of *work intensity*, and blurring of the limits of work time and leisure

# Driving factors for changes in the time and spaces of work

## 2. The rise of the information society

- new technology makes it possible to break the traditional division between work and leisure

## 3. Climate change

- will influence the industrial restructuring globally and risk the sustainable working and living conditions

## 4. Demographic change

- challenges national economies and puts more emphasis on ageing employees

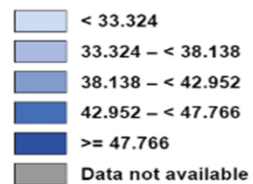
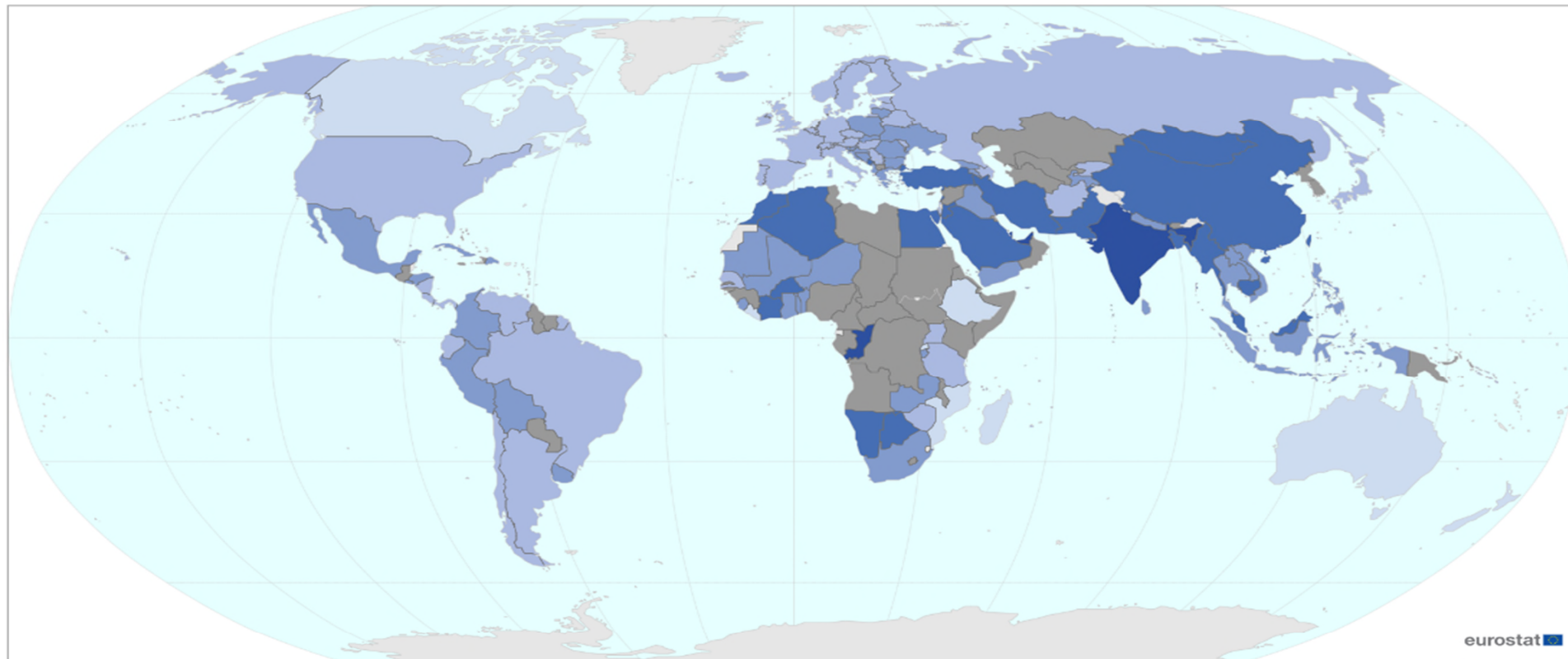
## 5. COVID-19 and the future pandemics

- will change the working practices in relation to the temporal and spatial configuration of work

# History of Working Time

Date	Event
1784	Ten-hour day proposed (England)
1802	First Factory Act (Health and Morals of Apprentices)
1843	Ten-hour Day Act (normal working day)
1841	French law limiting the hours worked by children in mines (not applied in practice).
1842	The first child labour law introduced in the USA. This regulated working hours in Massachusetts.
1844	British Factory Act: maximum working day of 12 hours for adults and 6.5 hours for children.
1847	Ten Hour Act
1899	Eight-hour day for all government workers – Puerto Rico.
1917	New revolutionary government in Russia orders universal eight-hour day.
1919	Spain introduces national eight-hour day law.
1919	ILO Convention agreed a maximum 8 hour day and maximum weekly hours of 48. ILO eventually became part of The UN.
1921	ILO Convention 14: weekly rest breaks in industry
1935	ILO Convention 47: 40-hour week
1936	French laws provided two-weeks paid vacation each year and a 40-hour week.
1948	ILO Convention 89: night work for women (revised Convention 4)
1970	ILO Convention 132: holidays with pay (revised)
1975	EC Council Recommendation on the 40-hour maximum working week and 4 weeks paid holiday. (75/457/EEC)
1993	EC Directive on working time (93/104/EC). 48-hour week limitation (averaged), but with voluntary opt out
1997	EC Directive on part-time work
1998	Revised EC Regulation on working and rest time (transport)
1999	EC Directive on seafarers' hours of work
2000	EC Directive on working time in civil aviation
2003	New consolidated Working Time Directive (2003/88/EC).
2015	European Court of Justice Decision concerning the working time of mobile workers with no fixed workplace.

# Average weekly working hours globally (ILOSTAT)



Source: ILOSTAT

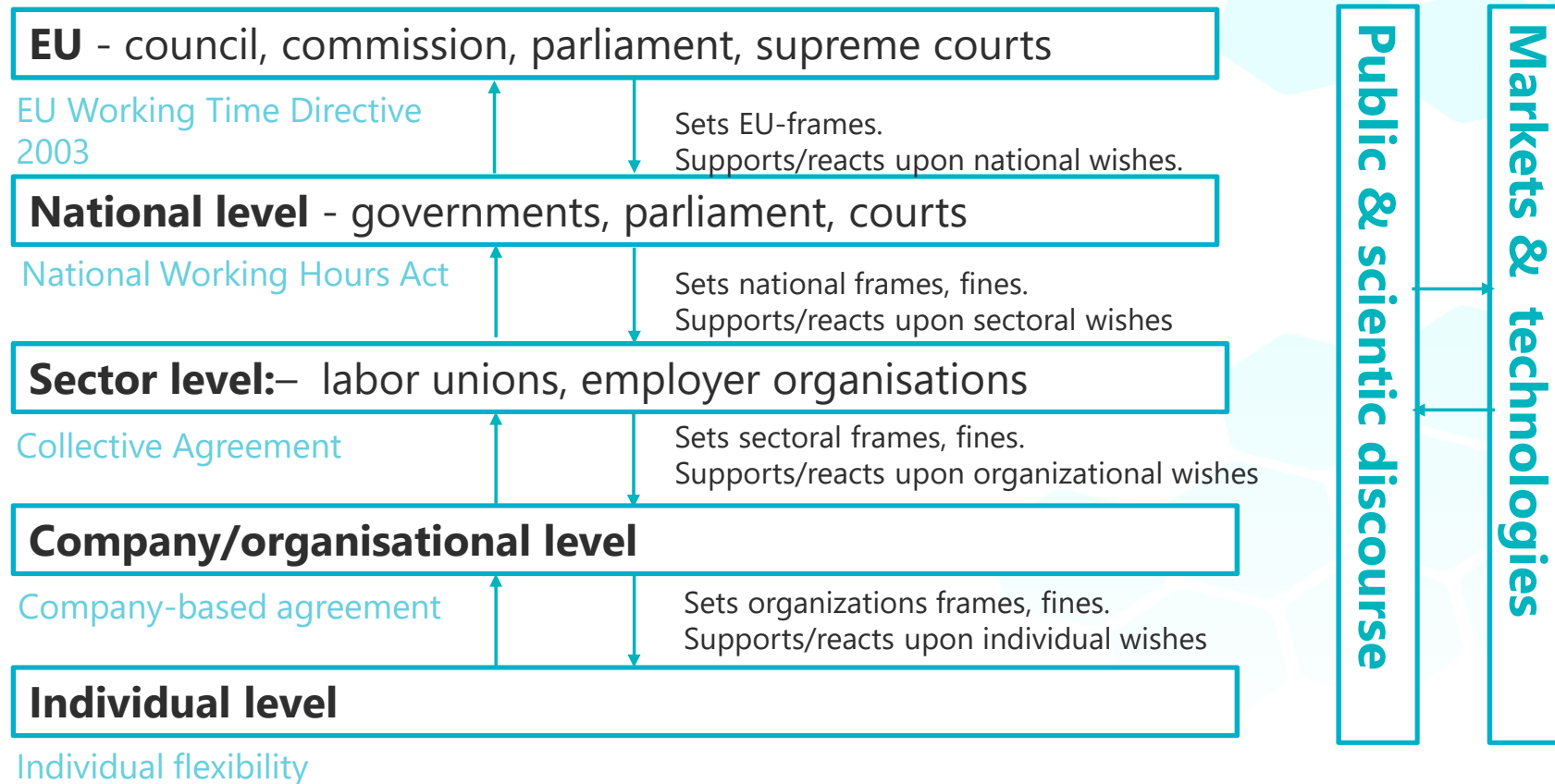
Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat  
Cartography: Eurostat – IMAGE, 06/2021

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the European Union

## Past, current and future trends of working hours: duration

- In general, working hours are generally less regulated, or fully unregulated outside Europe.
- Although paid working hours in the more developed countries have declined dramatically during the last hundred years, *the length of working time has remained a topic of political debate* having associations with wealth, productivity and social equity
- long working hours, over 48-55 hours a week, are associated with safety and health risks, as well as negative effects on work-family integration and personal relationships.
- *The association of long working hours with health may depend, however, on regional and cultural differences*
- the longer the work hours are, the more willing people are to reduce them and vice versa!

# Actors and mechanisms shaping working hours in EU





# Policy-relevant trends in working hour dimensions in Europe



Anttila et al. 2015.  
European Sociological  
Reviews

## Past, current and future trends of working hours: *timing*

1. In long run, a clear increase in the *global demand to work around the clock*. Industrial restructuring brings new sectors to 24/7 while e.g. industry is automatized
2. Due to the high prevalence of shift work (around 20%), and the associations with several serious health risks, *any changes in the prevalence night and shift work will have a major influence on health and safety – and work-life interaction*
3. Since women entered the labor force, work-life balance has emerged as an important issue. *Working hours are still gendered* with there is strong division to men's and women's working hours. *The effects on health and wellbeing depend also on gender.*
4. *The health risk of shift work are associated to the length of average working hours - having implications to the diversification of global health risks (the average working hours can be around 70 hours/wk in developing countries but mostly < 40 hours/wk in Europe)*

## Past, current and future trends of working hours: tempo

1. *High work tempo* or intensity is often conceptualized as high job demands
2. Increased work tempo/intensity has often been reported in many countries during the last decades. *The sources of work intensification* are manifold – e.g. demands for higher productivity - but can also be associated to the recent needs to shorten the weekly working hours (e.g. the 4-day working week)
3. High time pressure *increases employees' negative emotions, stress and fatigue, and these reactions may spill over into family life*. High time pressure at work is also associated with early retirement intentions

## Past, current and future trends of working hours: *autonomy*

1. *Working time autonomy* is a key feature in the overall job quality, health and social well-being, which *is expected to become more common*. In addition to autonomy, it is also important to consider how predictable and fragmented the working hours are. Working time autonomy is much lower in shift work and in irregular work patterns.
2. The current *COVID-19 crisis* with massive shift to teleworking (up to 50% and over) increased working time autonomy for some years, but *transition backwards or at least to “hybrid work” is taking place*. It is good to remember that extensive telework has also risks that relate to blurred work–life boundaries and mostly emotional exhaustion.
3. *Work hour and employment unpredictability concerns especially young, lower educated and/or those in elementary occupations*. Among young labour market entrants and emerged digital platforms as ‘employers’, unpredictability can refer to new types of on-call work without pay during waiting time.

## Adaption to the future trends of working hours

- After the current COVID pandemic, *health care systems in many countries are overloaded due to accumulated “undone” diagnostic and clinical work.* The “treatment debt” and possible future pandemics *can increase the work demands of the social and health care sectors*— possibly reflected also to more demanding working hour patters.
- *Polarization of the working life:* unequal distribution of work hours in the form of under- or over-employment may have negative economic and social consequences
- *Working time reduction* is used to fight against unemployment ( *kurzarbeit*) to adapt to economic shocks. In general, shorter working hours *should be targeted at least for specific groups* in the future.

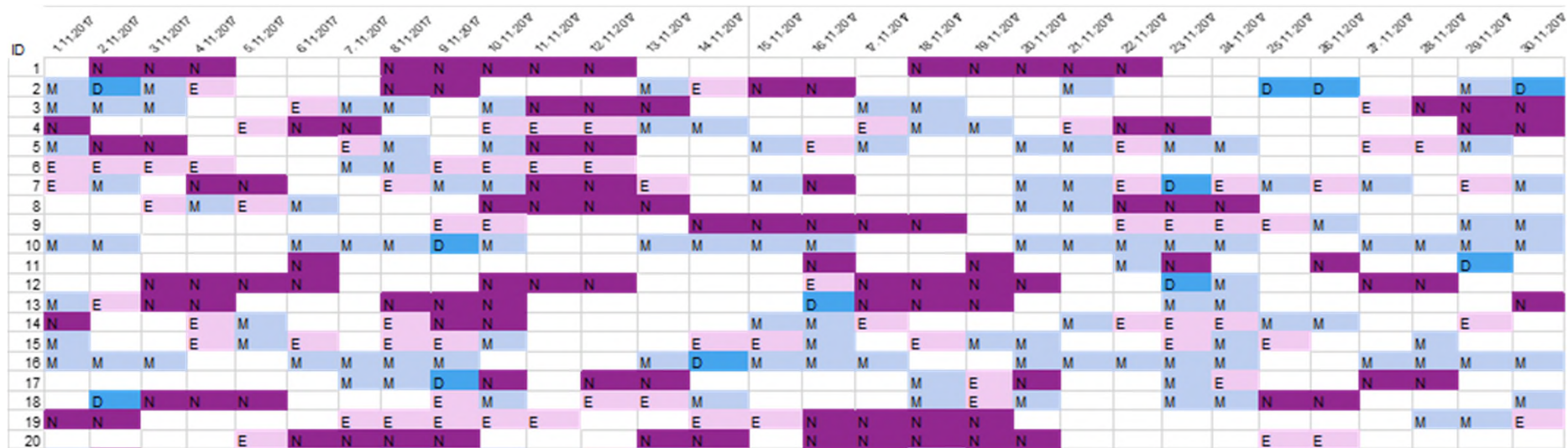
## Adaption to the future trends of working hours

- *Insecure employment*, such as zero-hour jobs, on-call work without pay during waiting time, multiple job holdings and platform work, pose new questions for workers' economic well-being, health and caring responsibilities.
  - insecurities may increase economical pressure to take double jobs => long and irregular working hours?
  - typical among immigrants, low educated and in elementary occupations
- *Ageing employees* with later mandatory retirement age may *face increasing challenges due to working in demanding working conditions, like in shift work*. The higher number of older shift workers will emphasize the needs to optimize their working hour models.
- For young people, postponement of childbearing is common until securing their foothold in the insecure labour markets.
- *The use of future incentive policy for both young people* (maternity leave and families with young children) *and aging workers will become more important*.

## Adaption to the future trends of working hours

- *The prevalence of shift work* is influenced by the global and country-specific changes in technological and social changes.
  - We do not know, whether globalization will continue as an increasing trend – or will it wane due to an increased need for protection against global competition and interaction, influenced by political crisis.
  - *Any major changes in the number of employees, or hazards in economics will also change the way how work will be organized.*
- One apparent trend in hot climatic countries may be the shift of outside work tasks from daytime to night-time. However, it is probably more important that *climatic change will update the industrial processes, future transportation needs and can increase emigration from hot and poor countries* due to their economical and political instability. Immigration policy will be on focus.

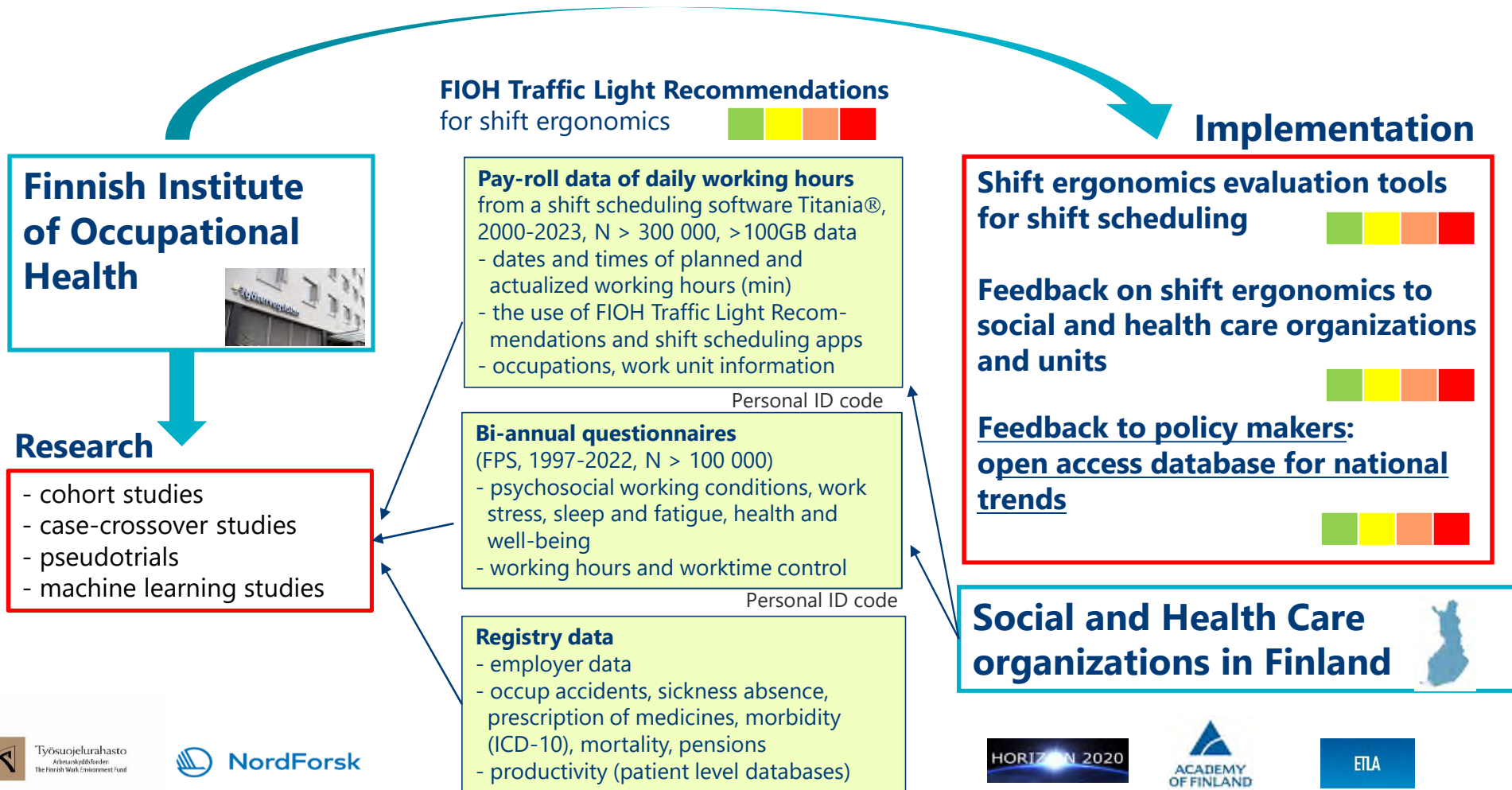
# Example of the visualization of irregular working hour in the health care sector



N in purple = night shifts, E in light purple= evening shift, M in pale blue = morning and D in bright blue= day shifts. Having time off is indicated with white.



# Working Hours in the Finnish Public Sector (WHFPS) Research & Implementation Model



# FIOH Traffic Light Recommendations for shift ergonomics

	Recommended	Increased workload	Overload	High overload
<b>1. Length of the working hours</b>				
1.1. The length of working hours between 2 free days (h)	≤40	>40 - 48	>48 -55	>55
1.2. The length of work shifts (full-time work, h)	4-9	>09 - 12	>12 -14	> 14
1.3. No of consecutive workdays (full-time work)	3-5	6 or 2	7	≥8 or 1
<b>2. Timing of working hours</b>				
2.1. No of work shifts starting before 06:00 (in 4 weeks)	0-2	3-6	7-11	≥12
2.2. No of consecutive evening shifts	0-3	4	5	≥6
2.3. No of night shifts (3 hours btw 23-06 in 4 weeks)	0-2	3-6	7-11	≥12
2.4. No of consecutive night shifts	0-2	3	4-5	≥ 6
<b>3. Recovery</b>				
3.1. No of <11 h quick shift intervals btw 2 free days	0	1	2	≥3
3.2. No of <11 h quick shift intervals (in 4 weeks)	0-1	2-4	5-11	≥12
3.3. The length of free time after last night shift (h)	>48	28-48	11- ≤28	<11
3.4. Weekly rest time (Mon 00:00-Sun 24:00, h)	>48	35-48	24- ≤35	<24
<b>4. Social aspects of working hours</b>				
4.1. No of free weekends (Sat-Sun in 4 weeks)	2-4	1	0	
4.2. No of single free days (in 4 weeks)	0-1	2-3	4	≥5
4.3. No of split (<4) shifts (in 4 weeks)	0	1	2-3	≥4
<b>5. Worktime control</b>				
5.1. Possibilities for shift wishes	yes		no	

## Working hours - tracking the current and future trends

“Overall, working time is a central question for the organization of production. It is also a central question of everyday life of workers and their families. The contemporary trends pose risks for personal, family and social life, material well-being, and health and safety.

At its best, however, the new post-industrial working time regime may provide more autonomy and time for recovery to employees as new technologies and changes in business structures release opportunities for greater individual autonomy over how, when, where and for how long time paid work is performed”

Anttila, Härmä and Oinas 2022

# Thank you!

@MikkoHaermae



ttl.fi



@tyoterveys  
@fioh



tyoterveyslaitos



tyoterveys



Tyoterveyslaitos

