EU-OSHA’s Foresight activities - Digitalisation and Occupational Safety and Health (OSH)

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The European Union body responsible for the collection, analysis and dissemination of relevant information to serve the needs of those involved in safety and health at work

In Bilbao (Spain), since 1996

http://osha.europa.eu
Anticipating new and emerging OSH challenges

Background to EU-OSHA’s Foresight work:

- A mandate from the Community Strategies for OSH since 2002

- EU Strategic Framework on Health and Safety at Work 2014-2020
  - Calls on EU-OSHA to “Anticipate possible negative effects of new technologies and changes in work organisation on workers’ health and safety”

- A priority in EU-OSHA’s Multi-annual Strategic Programme 2014-2020

- 2 EU-OSHA’s foresight projects:
  - Impact of new technologies on the safety & health of workers in green jobs in 2020?
  - Impact of digitalisation on the safety & health of workers in 2025?
Foresight on emerging OSH risks associated digitalisation by 2025

Method: Foresight base on scenario-building

- **Scenario-building: a tool for strategic futures thinking**
  - Doesn’t assume the future is pre-determined
  - Provides insight and stimulates debate into ways to shape the future

- **Scenarios of plausible, possible futures**
  - Help gain insights into long-term developments
  - To understand what decisions could help avoid/ encourage these futures

- **Participatory:**
  - EU-OSHA’s stakeholders actively involved
  - Interviews & workshops with multi-disciplinary experts and policy-makers

- **Multidisciplinary**
  - Mainstreaming OSH into other disciplines
  - Societal, technological, economical, political context taken into account
Green jobs… safe jobs?

- Environmental considerations may lead to risk shifting towards workers
- Rush towards greening the economy: we forget to do things properly
  - Consider OSH when spending stimulus money – procurement
  - Systematic workplace risk assessment, together with workers
- Education/skills required and workers’ training
  - Workers are in new green jobs before skill needs are identified
- For a green job to be truly sustainable, consider the entire life-cycle of a technology
  - From manufacturing, transport, installation and maintenance to recycling.
Know more on:

- The foresight report on OSH in green jobs
- The summary of the report and the scenarios
- The cartoons featuring the new and emerging OSH risks in the scenarios

EU-OSHA also investigated in more depth the OSH issues associated with specific areas highlighted in the foresight study:

- E-fact on OSH and small-scale solar energy applications
- E-fact on OSH and green buildings
- OSH and wind energy: read the report and the summary e-fact

All available at:
EU-OSHA’s work on Digitalisation and OSH

Beside the scenario-building Foresight study:

- **Overview on and policy developments in the Online Platform Economy in the EU and impact on OSH**
  

- **Expert Discussion papers on “The future of work” to raise awareness and stimulate debate**
  

- **Major OSH Overview on Digitalisation and OSH in 2020-22**

- **EU Healthy Workplace Campaign on Digitalisation and OSH 2023-2024**
Four broad types of platform used in provision of labour:

1. Non-manual high-skill online workers (e.g. Upwork or PeoplePerHour)
2. Non-manual low-skill online workers (e.g. Clickworker or Amazon Mechanical Turk)
3. Manual driving or delivery workers working offline but managed online (e.g. Uber, Deliveroo, or Lyft)
4. Manual service/maintenance/construction workers working offline but managed online (e.g. Taskrabbit, Helpling or Myhammer)
Online platforms: Potential benefits?

- **Flexibility**
  - Possibility to combine work/life demands
  - Supplementary income
  - No fixed location
  - Easier access to employment

**However…**

Perceived importance of different job attributes (*British Social Attitudes Survey No.33*)

- **Hyper-mobile labour**
  - Multiple, simultaneous jobs

- **Job insecurity**
  - Most are actively seeking more regular types of work
  - 92% rate job security as ‘very important’ or ‘important’ in a job
Potential OSH effects of online platform work

- **OSH risks associated with the work activities themselves**
  - Risk of injury, exposure to dangerous substances, ergonomic risks, etc. (particularly in certain types of job, e.g. cleaning, transport, construction);

- **Psychosocial risks associated with online work:**
  - Work intensity resulting from continuous real-time evaluation and rating of worker performance
  - Pressure to be friendly, efficient and serviceable at all moments
  - Lack of support and risk of isolation
  - Harassment and violence from clients
  - Highly precarious employment

- **Additional risk factors: poor access to OSH services**
  - Poor access to OSH services- training, occupational healthcare and surveillance, labour inspection
  - Less likely to be covered by collective preventive measures
  - General employment law guarantees may not apply
To what extent does/should employment law, including OSH, apply?

- In most jurisdictions, OSH regulation where an ‘employment relationship’ exists
  - Reality of the relationship, subordination/control, nature of work, remuneration?

- Challenges associated with online platforms
  - dynamics
  - strategies
  - atypical features

- Currently, mostly decided in a reactive, case-by-case manner by judiciaries

- A variety of regulatory and policy approaches:
  - Stepping up enforcement of existing rules.
  - Application of ‘employment’ to online platform work.
  - New category of ‘independent worker’ or a presumption of employment.
  - Providing specific protection for online platform workers

->>> France proactive with adoption of specific law providing some basic protection for online platform workers

A challenge to stay abreast of this fast-changing area!
Disruption of the parcel delivery sector

“We have long had major concerns about labour standards in the broader parcels sector… All too often we are competing with players in the delivery industry who are able to avoid NI charges and the UK’s minimum employment standards through labour models that are unfair and insecure.”

Moya Greene, the Chief Executive of Royal Mail Group
Future of e-retail from an OSH perspective

~ 15% annual growth in EU
Impact in terms of OSH

- **Drivers of change: speed of delivery and price**

- **Estimated 30% of shop-based jobs to be lost by 2025 in UK**

- **Musculoskeletal Disorders (MSDs)**
  - Frequent repetitious picking
  - Rates imposed by a process
  - Poor postures (handling from high or low shelving for example)
  - Prolonged pushing and pulling trolleys or roll cages
  - Lifting heavy items

- **Psychosocial**
  - Time pressure: High demands - high pick rates targets
  - Low influence over work:
    - Pace of work, the route taken, rest breaks
    - Pick-by-voice and wrist mounted RF units
    - Constantly monitoring against targets, countdown to the next pick!

- **Delivery risks**
  - Many of the above, plus traffic accidents, air quality, isolation…
Amazon ‘fulfilment centre’
Additive manufacturing
Egg Project – Michiel van der Kley (NL)
“Desktop” 3D-printer: Ultimaker (NL)

Costs around 1,000 Euros
OSH challenges

Additive Manufacturing

- Decentralised, local manufacturing in micro companies, by self-employed, free-lancers, etc.
  - OSH responsibilities?
  - Workplace risk assessment?

- Distributed hazards, more challenging to control

- New groups of workers exposed to manufacturing hazards (such as dust)
  - Adequate training?

- Items are one-offs - OSH standards are difficult to define and enforce

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Performance enhancing drugs

Nootropics (English pronunciation: /ˈnoʊ.əˌtrɒpɪks/ noh-ə-TROP-iks), also known as smart drugs and cognitive enhancers, are drugs, supplements, and other substances that improve cognitive function, particularly executive functions, memory, creativity, or motivation, in healthy individuals.

Wikipedia 2018

UE-OSHA’s session
“Cognitive enhancers and OSH”
http://www.lisbonaddictions.eu/lisbon-addictions-2019

Save the date: 23–25 October 2019
Expert Discussion Papers on “The future of work”

- **Crowdwork** - Prof. Huws, University of Hertfordshire, UK (2015)
- **Robotics** - Dr. Adj.Prof. Kaivooja, University of Turku, FI (2015)
- **Additive manufacturing** - Junte, Journalist, NL (2017)
- **Monitoring of workers** - van den Broek, Utrecht University, NL (2017)
- **The future of the (e-)retail sector** - Carter, HSL, UK (2018)
- **Performance-enhancing drugs** - Prof Bloomfield & Dale, Lancaster University, UK, (2018)
- **Management by Artificial Intelligence** - Dr. Moore, Leicester University, UK
- **Big Data for inspection efficiency** - Dr Dahl, SINTEF Technology and Society, Norway
- **Social innovation in the context of digitalisation** - Saunders, Copenhagen Institute for Future Studies, Denmark
- **Exoskeleton** - Dr. Wischniewski, BAuA, Germany

Thank you for your attention!

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