



Health and Safety: Policies for the workplace of the future

David Cabrelli: Professor of Labour
Law, University of Edinburgh, UK

Dr. Richard Graveling: IOM,
Edinburgh





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(1) Introduction

- New technological changes:
 - Automation, robotics and digitalization, e.g. virtual reality (“VR”) and augmented reality (“AR”);
 - Algorithms in the workflow; and
 - Increasing sophistication in surveillance and monitoring of workers.



(1) Introduction

- Those giving rise to new patterns for the organisation and delivery of work:
 - “Bogus self-employment”, including “zero-hours” and “NGMH” contracts;
 - “Gig” economy and “platform” working;
 - Teleworking; and
- Other health and safety risks.



(2) Health and safety risks: Table 1

| New Work Trends | <u>Potential</u> Health and Safety Risks | <u>Actual</u> Health and Safety Risks |
|----------------------------|---|---------------------------------------|
| Automation, etc. | (1) Psychosocial harms (2) physical collisions in “shared” workplaces & (3) MSDs | |
| Algorithms in the workflow | (1) Psychosocial harms & (2) physical collisions in “shared” workplaces | |

(2) Health & safety risks: Table 1 (con)

| New Work Trends | <u>Potential</u> Health and Safety Risks | <u>Actual</u> Health and Safety Risks |
|-----------------------------|--|--|
| Surveillance technologies | Psychosocial harms | |
| Bogus self-employment, etc. | Psychosocial harms | H&S acquis does not cover these forms of working |

(2) Health & safety risks: Table 1 (con)

| New Work Trends | <u>Potential</u> Health and Safety Risks | <u>Actual</u> Health and Safety Risks |
|--------------------------------------|--|--|
| "Gig" economy and "platform" working | Psychosocial harms | H&S acquis does not cover these forms of working |
| Teleworking | Psychosocial harms | |

(3) Gaps in H&S acquis

- 24 OSH Directives & WTD
- Legislative gaps in light of health and safety risks of new technological changes:
 - Health and safety effects of automation, the use of robots in the workplace, “fluidity”, algorithms, surveillance currently under-researched topics
 - If expert research identifies evidence of psychosocial risks, consider new Chemical or Physical hazards Directive devoted to psychosocial harms in general or adjust H&S Framework Directive



(3) Gaps in H&S acquis

- Legislative gaps in light of health and safety risks of new patterns for the organisation and delivery of work:
 - If scientific evidence strong enough for legislation to address psychosocial harms caused by bogus self-employment, “zero-hours”/NGMH, “gig” economy, etc. contracts and telework, explore new Chemical or Physical hazard-specific Directive devoted to psychosocial risks or alternatively, modification of the existing H&S acquis



(3) Gaps in H&S acquis

- Legislative gaps in light of health and safety risks of new patterns for the organisation and delivery of work:
 - Existing H&S acquis only covers “workers”. Consider expanding to include bogus self-employed, “zero-hours”/NGMH, etc. Could be addressed in any future review of these Directives, including the H&S Framework Directive.



(3) Gaps in H&S acquis

- Other legislative gaps:
 - MSDs in general
 - Emergence of green technologies and alternative energy sources changing working practices (e.g. increased lone working) and workplace exposures (e.g. electromagnetic fields)
 - CMD and nanoparticles and nanomaterials



(4) Conclusions

- Some evidence for following health and safety risks:
 - Psychosocial risks of “always on” culture, long and short term immersion in VR and AR, use of algorithms in the workplace, bogus self-employment, “zero-hours”/NGMH, “gig” economy, etc. contract working and teleworking
 - MSDs in context of automation and “shared” workplaces
- But evidence sporadic and incomplete



(4) Conclusions

- Recommendation for expert research assessment of emerging health and safety risks
- Once research evaluated, consideration of modification to 24 OSH Directives and WTD to address clear health and safety hazards



Details of authors

- Professor David Cabrelli: david.cabrelli@ed.ac.uk; <https://www.law.ed.ac.uk/people/professor-david-cabrelli>
- Dr. Richard Graveling: richard.graveling@iom-world.org; <https://www.iom-world.org/research/our-scientists/dr-richard-graveling/>

