Potential OSH implications
ICT-ETs facilitate and drive

- New work equipment and tools
- New ways of organising and managing work
- Changes to the working environment
- Changes in workforce characteristics
- Changing responsibilities for OSH
- Different skills, knowledge and info. needs
Work equipment and tools

• Automation and autonomy
• Internet of all things
• Advanced manufacturing
• Wearable devices
• Artificial intelligence
• AR, VR and ‘natural’ Human Machine Interfaces
• Customisable, complex, integrated
• Ever changing and advancing
Implications (work equip. & tools)

• Hazardous environments
• Situational awareness
• Better access to work
• Risk and work intensification
• Cognitive demand vs task deprivation
• Ergonomics / sedentary work
• Constant monitoring / privacy
• Cyber-security
Business structures

• Management by algorithm / app
• Micro high turn-over enterprises
• Asset-light (work equip. and offices)
• Low profit margins
• Decentralised and/or local
• Consumer customisation
• Collaborative employment
Employment Status

- (pseudo) self employed
- Casual, multiple employers

Hierarchies

- AI boss, own boss, flatter, remote

Relationships

- Peer support, knowledge transfer
- Collective bargaining
Workforce characteristics

• Dispersed
• Diverse
• Multi-disciplinary
• Autonomous
• New
• Nomophobic
Implications of new ways of working

• Workers OSH needs diverse
• Workplaces non-controlled / non-standardised
• Working time non-controlled / non-standardised
• Lone working
I just finance the workspace - OSH* is not my problem

I just run the Platform - OSH* is not my problem

I just fix the machines - OSH* is not my problem

I just buy the products - OSH* is not my problem

There's no employers or managers round here - OSH* is not our problem

Hmm... do we have a problem??

I just design the templates - OSH* is not my problem

* OSH = “occupational safety & health”
Skills, knowledge and information

- ICT skills
- Personal and inter-personal
- Life-long and self-directed
- Knowledge transfer
- Deskilling
- Corporate memory
Summary of OSH implications

- Opportunities to reduce OSH risks
- Opportunities to better manage OSH
- Existing risks in new contexts / sectors
- Ongoing trends for recognised emerging risks
- Some new and potential as yet unknown risks
- Psycho-social and organisational factors very important
Presents OSH challenges for

• Business management of OSH
• Education and training
• Regulation
• Inspection
• Health surveillance
• Occupational health services
• Worker representation
• Research