



Designing Better Mobile Working Environments

Ergonomic guidelines for inclusive, safe and effective technology-enabled workplaces



Chartered Institute
of Ergonomics
& Human Factors

INTRODUCTION

The spirit of the Display Screen Equipment (DSE) Regulations, created more than 30 years ago, is to help protect the health of people working with computers in work environments.

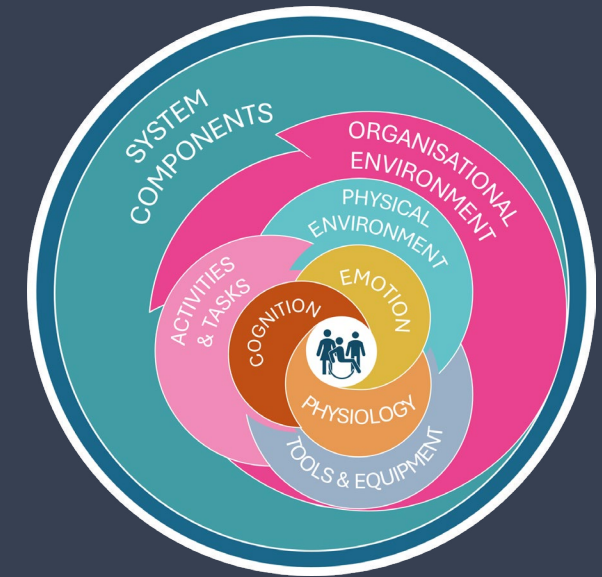
The refreshed and complementary guidelines in this document can be used to enhance the wellbeing of the whole organisation as well as the individual, regardless of the location. Getting it right first time saves time and money, and things to consider include:

- An opportunity to positively influence the physical, mental and social wellbeing of colleagues through preventative design measures, be it job design, software or the nature of the environment.
- Embracing change with adaptable tools that align with equality, diversity and inclusion and sustainability and complement other evolving organisational goals and external health initiatives (such as WELL, Fitwell) to ensure high levels of safety, wellbeing and performance.

- A holistic systems approach that can adapt with changes in technology, working practices, location and our understanding of health and wellbeing, including neurodiversity and accessibility.
- A means to measure, compare and reduce health and wellbeing risks through the monitoring of absenteeism, nature of ill health, spend on alternative equipment and employee feedback.

Traditionally, responsibility has been fragmented between key stakeholders, be it human resources, health and safety, occupational health, incumbent or external ergonomists, facilities management and interior and product design providers.

The purpose of this document is to encourage a more joined-up approach to ensure holistic, long-lasting productivity and wellbeing. There are recommended actions for ergonomic risk management, equipment provision, education and ongoing monitoring to meet legal duties. By sharing common goals across the disciplines at all levels, a human factors approach can yield measurable positive impacts.



Ergonomics and human factors is a scientific discipline and profession that applies theory, principles and data to design systems that optimise human wellbeing and overall system performance. It is a holistic, evidence-based approach focused on understanding how humans interact with products, tasks, environments and organisations.

CIEHF



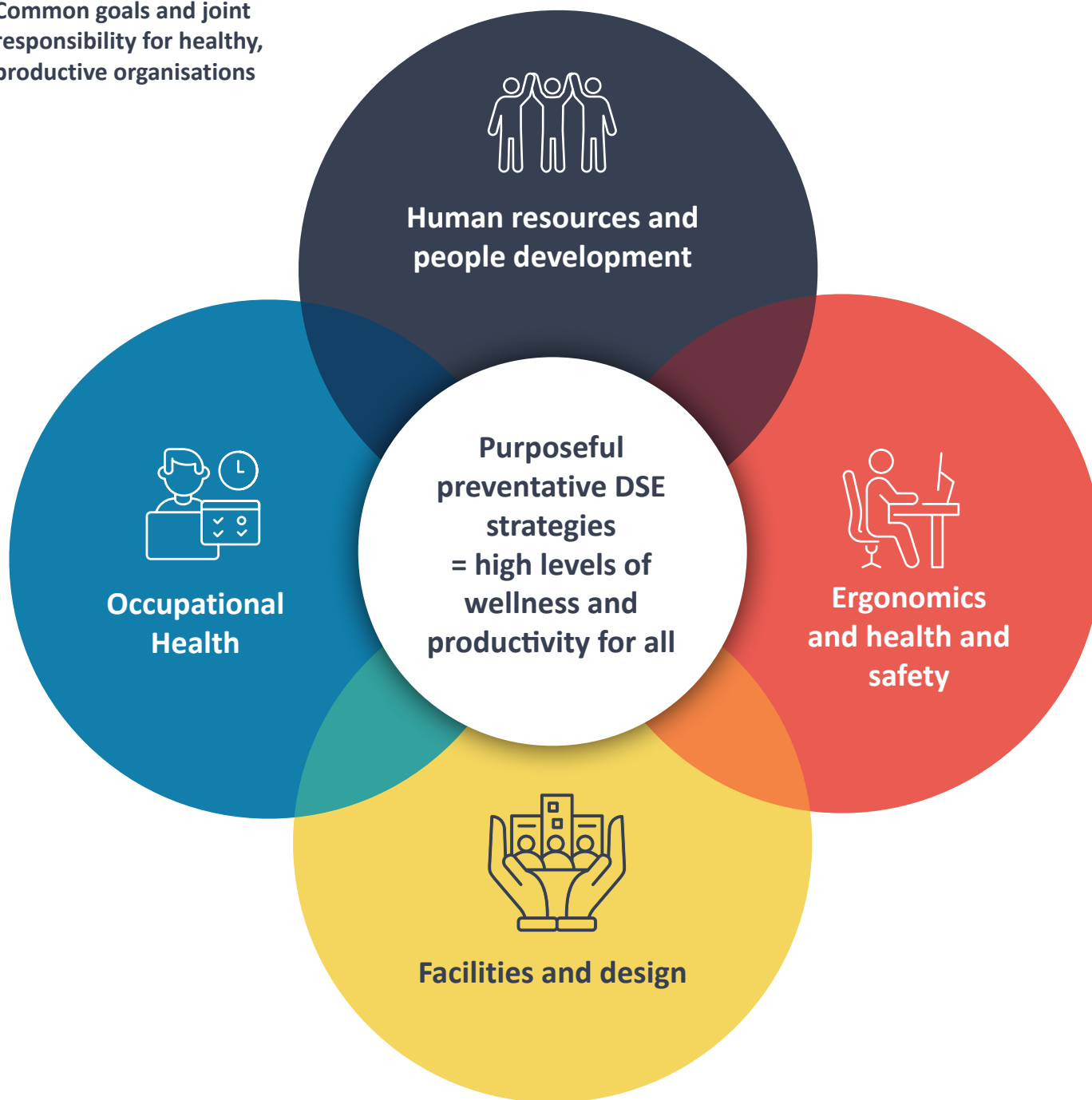
INTRODUCTION

The Further Reading section of this document includes links to further advice and can serve as a foundation for developing your own corporate procedures and policies.

This guide should be read alongside the more detailed publication '*Mobile Working Risk Management System*' by Ed Milnes and Sarah Tapley (CIEHF 2018).



Common goals and joint responsibility for healthy, productive organisations



CONTENTS

1. Overview and health risks
2. Guide for decision-makers deploying hybrid working
3. Action plan for practitioners and managers to address current working arrangements
4. Flexible and inclusive workplace checklist
5. Checklist for managers designing flexible and inclusive workplaces
6. Further reading
7. Glossary of terms



OVERVIEW AND HEALTH RISKS

1

1. OVERVIEW AND HEALTH RISKS

The work landscape has undergone a significant transformation in the past 10 years, with hybrid work becoming more prevalent than ever, fuelled by the advancement of mobile technology. In addition, a social movement around our differences at work has been enhanced by more meaningful policies promoting diversity, equity, inclusion and belonging (DEIB).

This shift towards more flexible, inclusive work arrangements has created an exciting and challenging opportunity for health practitioners, facilities management, designers, policy makers and leadership to embrace and interpret existing standards in a new

light to ensure they support all employees to do their best work, wherever they might be.

While mobile working has many advantages for both employer and employee, there is increasing evidence to suggest health and wellbeing risks still prevail, although they have changed, whatever the technology and setting for extended periods. Prolonged use of laptops, tablets and phones, without proper set-up and behavioural adaptations, can lead to neck ache, headaches, back pain, shoulder discomfort, finger and wrist pain and eye strain. Constant connectivity can also contribute to anxiety, stress and disrupted sleep.

Training, awareness and a positive culture that encourages communication between individuals and their managers, as well as collaborations between all key stakeholders who influence the work experience, can have a positive effect for both employer and employee.

The DSE regulations don't just cover risk and best practice at the workstation – any work that involves interacting with devices away from allocated workstations is also covered, be it elsewhere in the office, third-party offices and co-working, at home or remotely.





GUIDE FOR DECISION-MAKERS DEPLOYING HYBRID WORKING

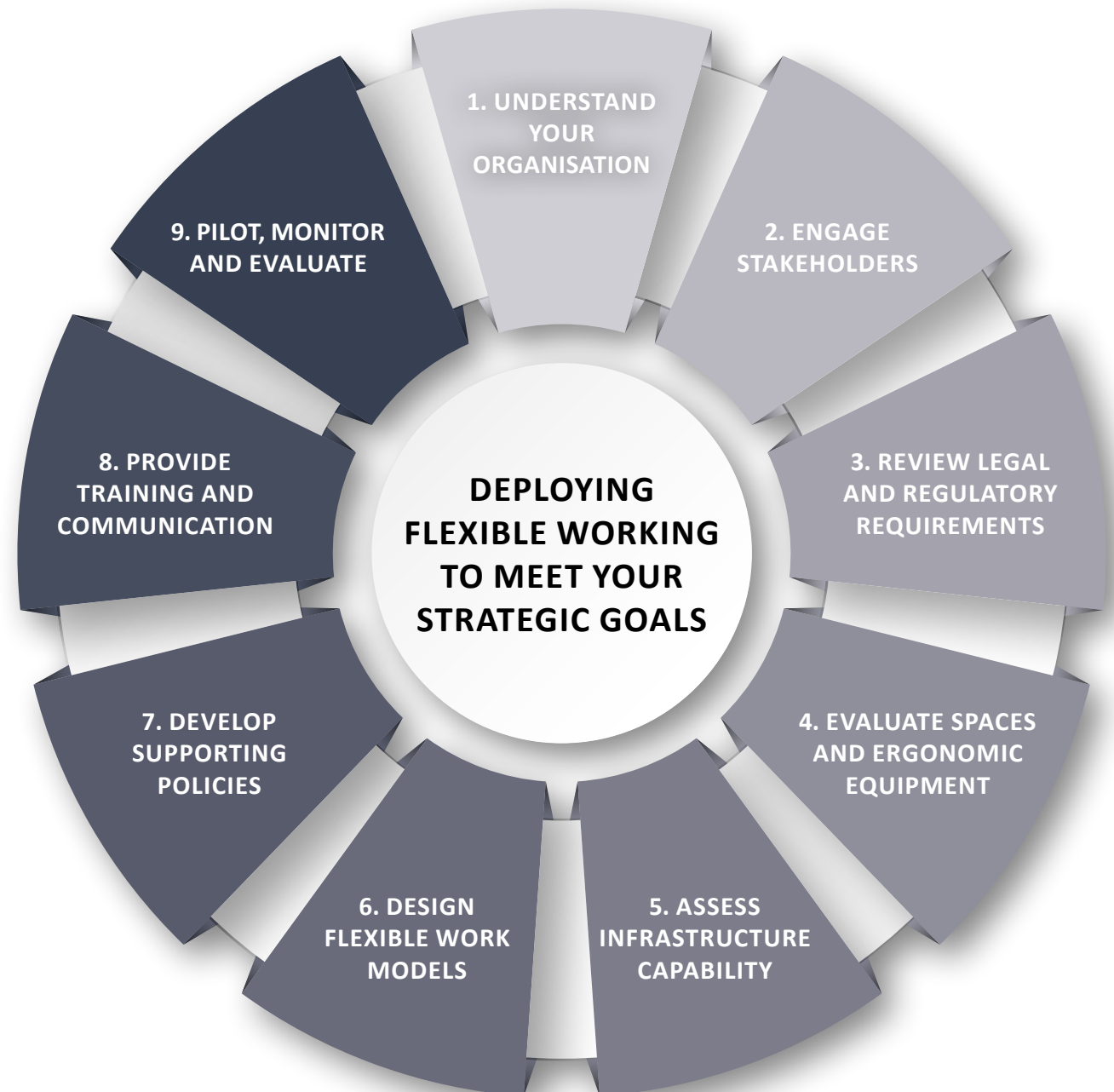
2

2. GUIDE FOR DECISION-MAKERS DEPLOYING HYBRID WORKING

Ensure you adopt suitable working practices that also meet your strategic goals.

To consult effectively on an implementation strategy for suitable working options for your organisation, you'll need to cover several key areas and regularly review them.

Here's an example of a structured breakdown of what's needed.



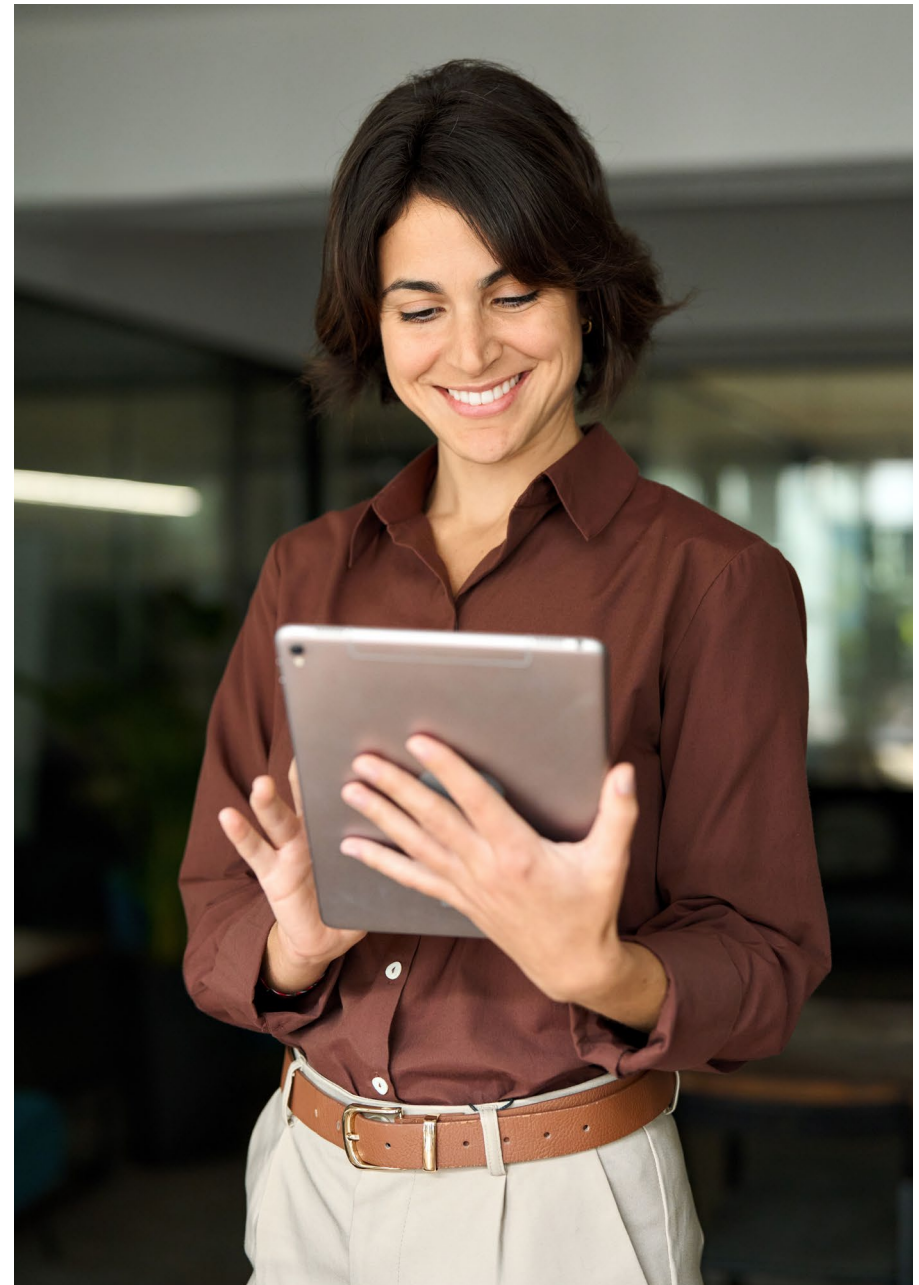
2. GUIDE FOR DECISION-MAKERS DEPLOYING HYBRID WORKING continued

1. Understand your organisation

- **Business model, culture and objectives:** What kind of organisation are you? What do you wish to achieve to attract and retain your staff?
- **Operational needs:** Which roles or tasks can be carried out away from an actual office and which need physical presence in the workplace? How might these differ with individual needs?
- **Current work arrangements:** What's in place and what's working or not working?
- **Managers:** Discuss how the teams work, how they manage their teams, including diverse needs, and assess current issues and try to foresee future needs.
- **Employees:** Conduct surveys, interviews or focus groups to gather preferences and needs.
- **Ergonomists:** Provide guidance and information and encourage collaboration for proactive strategies working across all stakeholders to improve efficiency, health and wellbeing, from design through to behavioural and awareness training.

2. Engage stakeholders

- **Leadership:** Understand vision, policies, concerns and financial implications.
- **HR:** Discuss policies, contracts, equality, diversity and inclusion, and wellbeing.
- **IT:** Assess technology capabilities for remote access, collaboration, training, accessibility and security.
- **Architects/Workspace designers:** Conduct occupancy surveys and encourage early collaboration for design and wellbeing improvements including accessibility and wayfinding.
- **Occupational health:** Analyse data on current health trends and concerns.
- **Facilities/Health and safety:** Understand and review office usage, space planning, wayfinding, compliance, maintenance and current issues.
- **3. Review legal and regulatory requirements**
 - **Health & Safety at Work Act:** Ensuring safe home, office and mobile working conditions.
 - **Display screen equipment (DSE) regulations:** For everyone working in technology environments.
 - **Equality Act 2010 and amendment regulations (2023):** To ensure inclusive adjustments.
 - **Data protection (such as GDPR):** Securing all data handling.
 - **Contractual implications:** Permanent changes to work locations and hours, contract and visitors.
 - **Flexible working regulations:** Recognising a way of working that suits an employee's needs.



2. GUIDE FOR DECISION-MAKERS DEPLOYING HYBRID WORKING continued

4. Evaluate spaces and ergonomic equipment

- **Spaces to support flexible working**

Space planning to ensure flow and wayfinding, clearly identified zones for privacy and collaboration.

Quiet zones which might include pods, high-back sofas, acoustic screens or rooms for focus.

Meeting spaces for virtual and face-to-face conversations without disturbing others.

Workstations, dedicated or shared equipment with appropriate adjustability and space to work productively.

Regenerative, first aid, wellbeing and social spaces easily accessible, including parent and faith facilities if appropriate.

- **Equipment**

Laptops with size, weight and required connection consideration balancing portability and usability.

Tablets and smartphones for less prolonged use only.

Portable accessories to enhance posture such as headsets, tablet or laptop stands and risers, external keyboards and input devices.

Anti-glare/privacy screen protectors and blue light filters where necessary.

Appropriate backpack with wide padded straps for loads more than 5% body weight.

Wheeled bag especially for loads more than 10-15% body weight.

Inclusion and accessibility software and accessories for navigation, sensory needs and self-regulation.

5. Assess infrastructure capability

- **Technology:** Include digital collaboration tools, assistive technology and any needs for off-site work.

- **Office space:** Assigned or hot desking policies, booking systems, team zoning, accommodating reasonable adjustments and wayfinding.

- **Connectivity:** Secure and stable internet for all office and remote working areas.

6. Design suitable flexible work models for your organisation. Options could be:

- **Fixed hybrid:** Such as three days in an office, two days remote.

- **Flexible hybrid:** Team-based or task-based.

- **Remote-first or office-first approach:** This will require significant real estate considerations.

- **Team coordination:** Define presence expectations and plan to limit empty office time.

- **Inclusion:** Ensure remote workers are not disadvantaged in training, visibility or advancement.

7. Develop supporting policies

- **Mobile work policy:** Expectations, eligibility and approval processes.

- **Flexible work policy:** Core hours, location, school runs and avoiding heavy commute times.

- **Expense and equipment reimbursement policies:** Obligation to assist both home and work, important that tax implications are considered.

- **Health, safety and wellbeing policies:** Ensure that they cover hybrid contexts.

- **Maintenance and assessment:** For equipment, spaces and accessories.

- **Data protection policy:** Including cyber security.

8. Provide training and communication

- **Managers:** Training on remote supervision, inclusion and performance management.

- **Employees:** Guidance on ergonomics, time management, technology use and how to gain support.

- **Change management:** Communicate clearly, involve all stakeholders in design and testing, allow feedback.

9. Pilot, monitor and evaluate

- **Trial period:** Test hybrid models with defined KPIs (productivity, engagement).

- **Feedback loops:** Regular surveys and check-ins.

- **Adjustments:** Use insights to refine strategy before full roll-out.

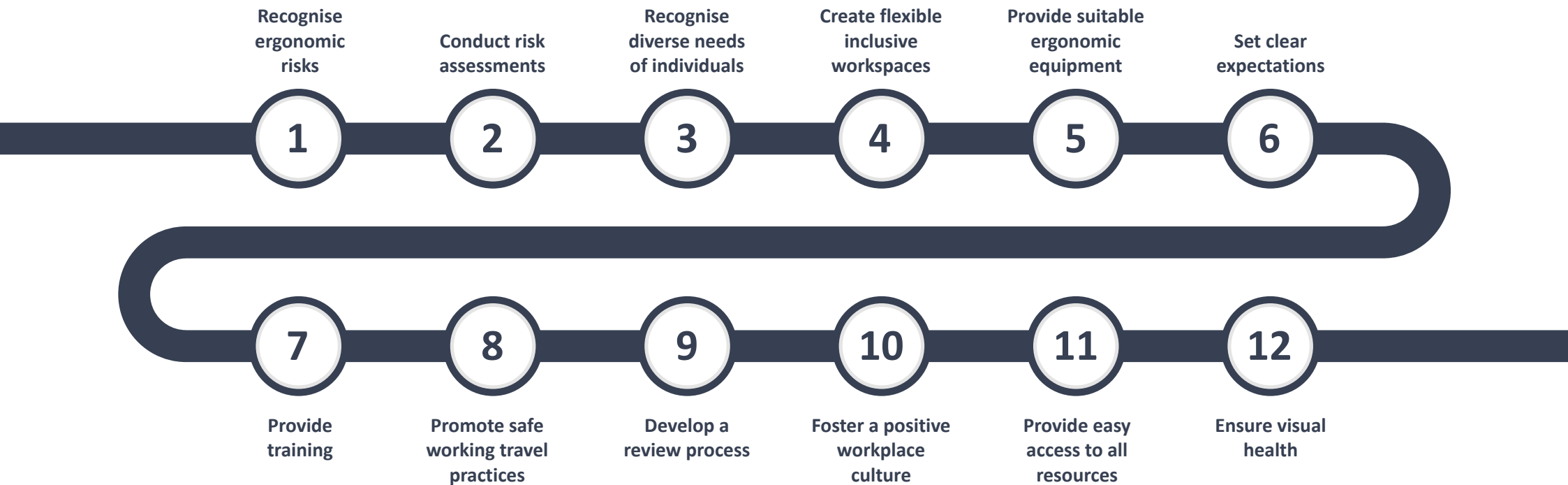


A woman with curly hair is sitting on a train, looking down at a laptop. She is wearing a white blouse and has earphones in. A large, semi-transparent number '3' is overlaid on the right side of the image. The background shows a cityscape through the train window.

3

**ACTION PLAN FOR PRACTITIONERS
AND MANAGERS TO ADDRESS
CURRENT WORKING ARRANGEMENTS**

3. ACTION PLAN FOR PRACTITIONERS AND MANAGERS TO ADDRESS WORKING ARRANGEMENTS



1. Recognise ergonomic risks in offices, home, transient and shared work settings (such as musculoskeletal strain, digital eye strain and fatigue and stress).
2. Conduct risk assessments including all mobile work environments, remote and offshore, including DSE and ergonomic issues.
3. Recognise diverse needs of individuals including accessibility and neurodiversity in line with your EDI policy.
4. Create flexible inclusive workspaces and workstations in office spaces to support the tasks undertaken.
5. Provide suitable ergonomic equipment for all employee work environments.
6. Set clear expectations around mobile working schedules and remote work environments.
7. Provide inclusive training and information on appropriate workstation set-up, work practices and posture habits.
8. Promote safe working travel practices and movement breaks during mobile work.
9. Develop a review process to identify changes in roles or equipment or when employees report discomfort.
10. Foster a positive workplace culture and encourage early reporting where employee wellbeing, productivity, inclusion and personal adjustments are prioritised.
11. Provide easy access to all resources and ensure they are easily digestible.
12. Ensure visual health to reduce eye strain with a suitable eye screen or eye-test process and screen fatigue training, including set-up and breaks, such as the 20-20-20 rule (for every 20 minutes spent looking at a screen, take a 20-second break to look at an object located at least 20 feet away).



Planning is key – have a baseline and re-measure to check for improvements. It's iterative and ongoing and requires care and consideration.

A man with a beard and short dark hair, wearing a blue button-down shirt over a white t-shirt, is sitting at a wooden desk. He is smiling and looking at a laptop screen. His left hand is on his chin, and he is wearing a black smartwatch. On the desk, there is a dark cup, a smartphone, and some papers. In the background, there is a bookshelf with books and decorative items, and a window with sheer curtains letting in soft light.

FLEXIBLE AND INCLUSIVE WORKPLACE CHECKLIST

4

4. FLEXIBLE AND INCLUSIVE WORKPLACE CHECKLIST

The nature of mobile work means many individuals can choose a wide variety of environments to suit their activity and their personality.

1. Define the purpose of each zone

Design suitable office areas with clear intent to suit different work modes appropriate for the tasks required:

- **Focus zones:** Quiet, individual workstations with flexible ergonomic set-ups.
- **Collaboration zones:** Flexible spaces for group work, with whiteboards or digital displays.
- **Social zones:** Lounges or cafés for informal interactions and breaks.
- **Private pods/areas:** Enclosed meeting spaces internally and externally.

Use signage and layout cues to reinforce zone purposes and encourage mindful use. Provide training and on-site support.

2. Support accessibility, different workstyles and neuro inclusion

Design inclusively to support a range of physical, sensory and cognitive needs:

- Provide low-stimulation areas with soft lighting, minimal noise and calming décor.
 - Offer adjustable lighting and sound masking for sensory regulation.
 - Ensure clear demarcation of pathways and routes and hazards.
 - Use colour-coded areas to support orientation and clarity.
 - Include adjustable equipment, spaces and thermal regulation for flexibility and comfort.
- Involve all employees at the design stage.

3. Prioritise ergonomics in all areas

Whether it's a hot desk, a touchdown space or a permanent seat:

- Ensure appropriate easy-to-use adjustable chairs, desks and screen-positioning items are available.
- Supply a range of input devices such as external keyboards and mice.
- Include cable management at every station.
- Provide additional privacy screens, footrests and document holders.
- Ensure good access to support in all areas.
- Ensure ongoing maintenance of all areas.

Create 'ergonomic grab stations' with loanable accessories and other support staff and resources in each area.



4. FLEXIBLE AND INCLUSIVE WORKPLACE CHECKLIST

4. Enable technology use

- Ensure high-speed Wi-Fi with good coverage.
- Provide easy access to power.
- Equip meeting spaces with mobile-ready video conferencing tools (cameras, mics, screens).
- Offer smart booking systems for desks, rooms and pods.
- Provide lockers or storage for workers.
- Provide easy-to-access tech support.

Consider using occupancy sensors to monitor space utilisation and guide future layout changes.

5. Foster connection and collaboration

- Avoid isolating mobile or remote workers by:
 - Ensuring digital inclusivity in meetings.
 - Using virtual whiteboards and collaborative platforms.
- Encourage in-office days or themed co-working sessions.
- Ensure a range of training options so all employees can use technology effectively.
- Allow personalisation of mobile work patterns where possible.
- Include 'touchdown' areas for quick, informal interactions when staff are in the office.

6. Design for movement and breaks

- Include wellness or calm zones with plants (or other biophilia), soft seating and ambient lighting.
- Ensure clear well identified walking routes and access to natural light and outdoor/ green spaces.
- Place break areas away from desks to encourage micro-breaks.
- Position meeting rooms, break areas or printers to encourage natural movement.

7. Review

- Gather feedback regularly from teams on:
 - Comfort
 - Noise
 - Layout
 - Collaboration effectiveness
- Adjust based on usage data and feedback.



CHECKLIST FOR MANAGERS DESIGNING FLEXIBLE AND INCLUSIVE WORKPLACES

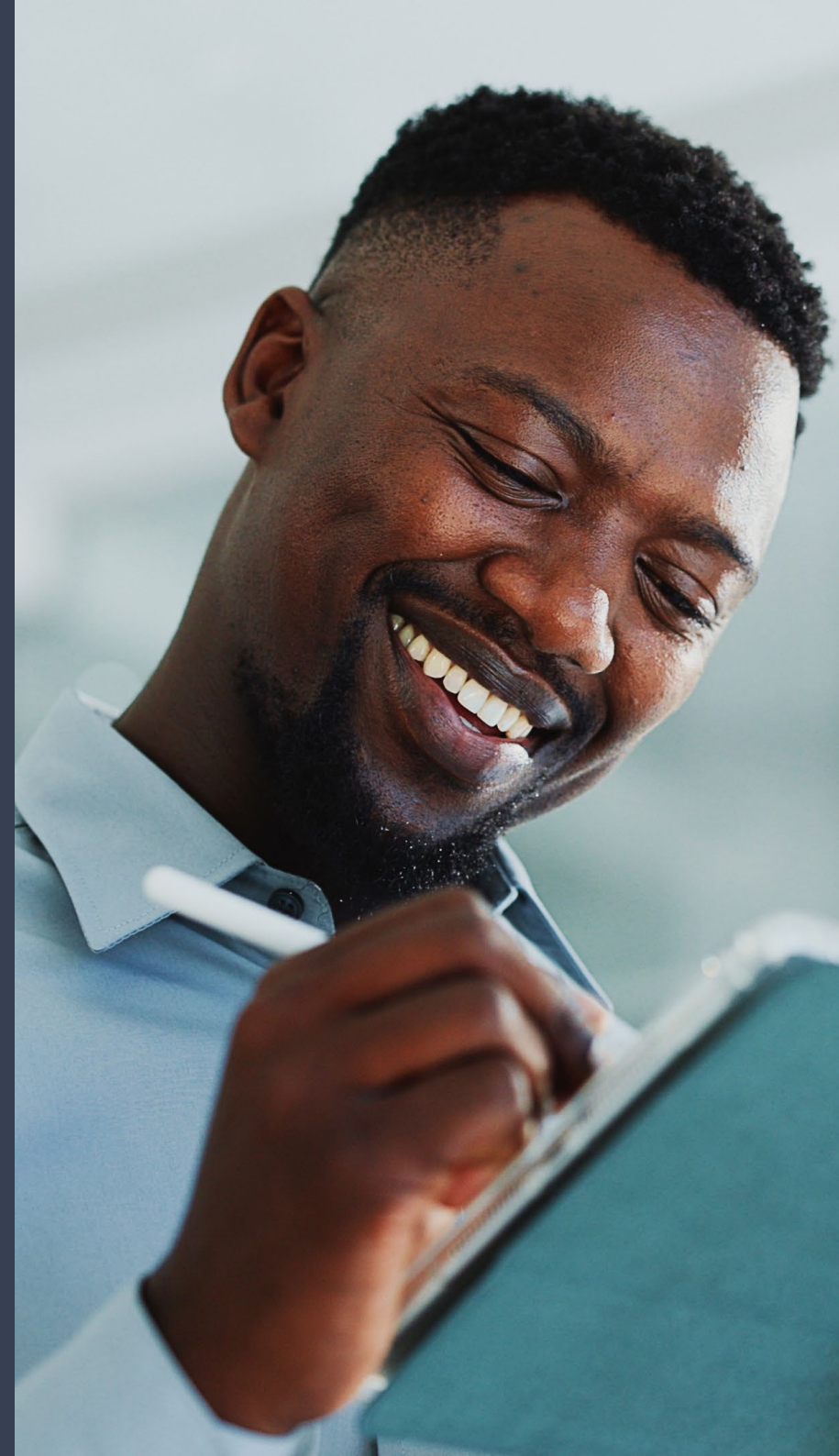
5



5. CHECKLIST FOR MANAGERS DESIGNING FLEXIBLE AND INCLUSIVE WORKPLACES

Use this checklist to ensure your organisation is taking appropriate steps to manage ergonomic risks for flexible workers:

- ☐ Have employees completed a DSE assessment for all working environments they use, including home, mobile and office set-ups?
- ☐ Is suitable ergonomic equipment provided (chair, keyboard, laptop stand, assistive technology, additional monitor, headset etc)?
- ☐ Are employees aware of movement break guidance based on their tasks and set-up quality?
- ☐ Have employees received training or resources on ergonomics appropriate for their work pattern?
- ☐ Are there mechanisms to review workstation set-ups when role changes or concerns are reported?
- ☐ Is there a process to raise ergonomic and other concerns or request adjustments?
- ☐ Are line managers trained to spot early signs of discomfort, stress or poor set-up?
- ☐ Is screen fatigue addressed (20-20-20 rule, lighting adjustments)?
- ☐ Are employees encouraged to pre-plan mobile work locations to avoid risk?
- ☐ Are flexible policies embedded in onboarding and team communication processes?
- ☐ Are you and your team aware of the Equality Act?
- ☐ Is your organisation's equality, diversity and inclusion policy being adhered to in terms of fairness, respect and inclusion?
- ☐ Are inclusive behaviours and avoiding unconscious bias being practised?
- ☐ Are reasonable DSE adjustments for neuro differences such as ADHD and dyslexia being made in the form of assistive technology or sensory avoidance/seeking measures?





FURTHER READING

6

6. FURTHER READING

If you need some help to get started, you can find a list of ergonomists and consultancies on the CIEHF website: ergonomics.org.uk/about-us/find-a-consultant.html

CIEHF's Mobile Working Risk Management System, a comprehensive checklist and guidance for managing risk from mobile and flexible working: <https://ergonomics.org.uk/resource/mobile-working-risk-management-system.html>

CIEHF's Working from Home, a four-stage guide to helping you with setting up your workspace and creating the right environment: <https://ergonomics.org.uk/resource/working-from-home-infographic.html>

DSE Top Tips, a series of short videos outlining valuable knowledge and quick fixes for typical DSE setups: <https://vimeo.com/showcase/11704910>

Leesman's Making Hybrid Work, research about flexible working: <https://www.leesmanindex.com/articles/making-hybrid-work/>

UK Government's Flexible Working Regulations 2014: <https://www.legislation.gov.uk/uksi/2014/1398>

UK Government's rules on flexible working: <https://www.gov.uk/flexible-working>

HSE's guide to working safely with display screen equipment: <https://www.hse.gov.uk/msd/dse/>

HSE's leaflet to help you comply with the DSE Regulations: <https://www.hse.gov.uk/pubns/indg36.PDF>

An ACAS guide to requesting home or hybrid working: <https://www.acas.org.uk/requests-for-home-and-hybrid-working>

UK Government's guidance about the Equality Act 2010: <https://www.gov.uk/guidance/equality-act-2010-guidance>

About the CIEHF

The Chartered Institute of Ergonomics & Human Factors (CIEHF) is a professional member organisation for ergonomists and human factors specialists. We accredit education and training courses and recognise quality ergonomics services. Our activities raise awareness about the broad scope and positive impact of the discipline in all aspects of life and work.



7

GLOSSARY OF TERMS



7. GLOSSARY OF TERMS

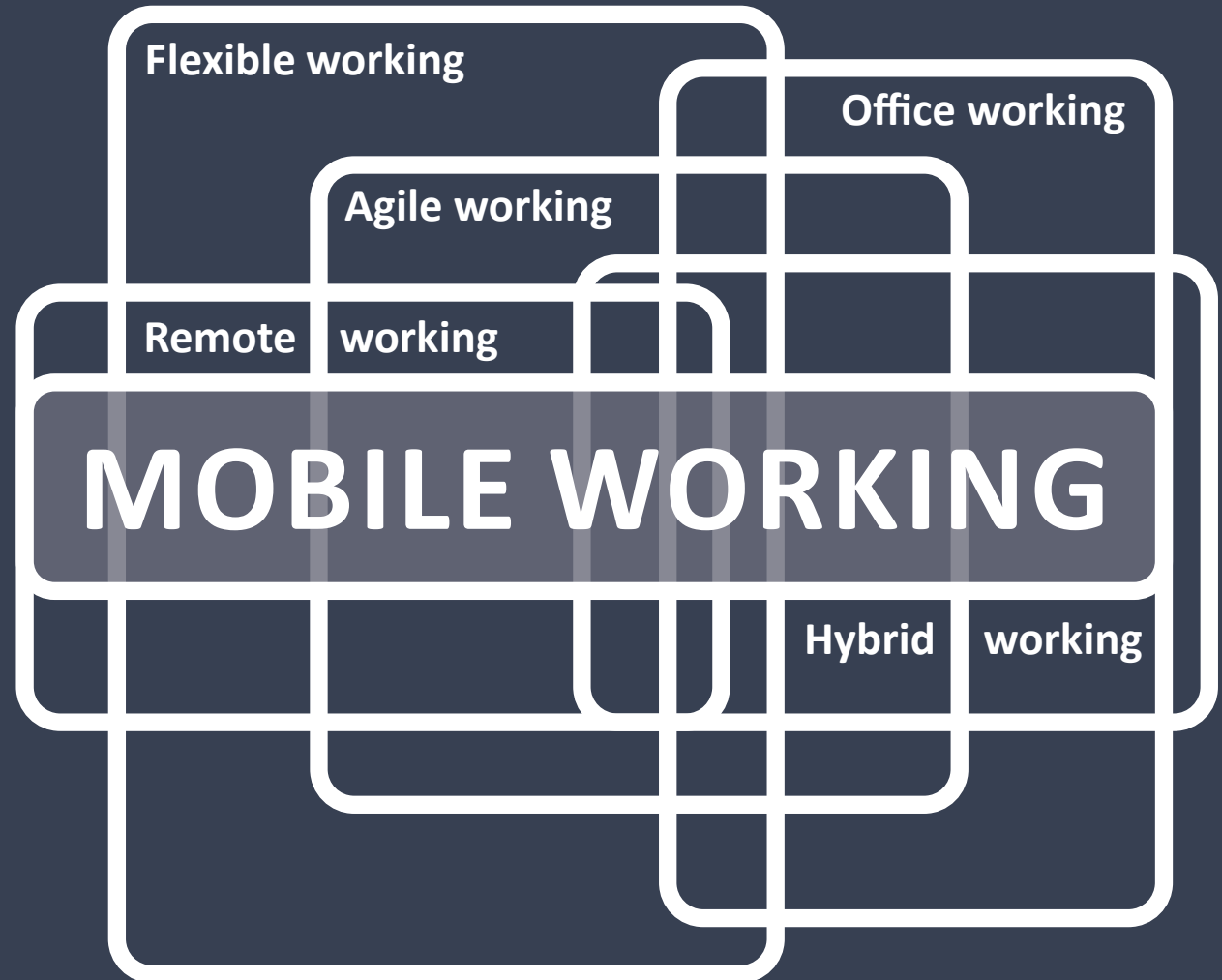
A range of terms are used for different flexible working practices, or different aspects of flexible working. To help clarify what we mean by mobile working, these other terms are outlined below:

Agile working – Using the physical workplace and technology to support people in working how, where and when they work best. Agile work may be in the office (or other designated workplace such as a school, university or hospital), at home or while travelling, etc. Agile working is about the overall approach taken to achieving results.

Remote working – Working away from your office or other designated place of work. This may include being embedded in client organisations / offices, or working from home. Nomadic working is using the digital workspace to work and earn from wherever you want to be in the world. Work may be carried out in a wide range of environments from the beach to offices.

Hybrid working – A combination of working in the office and remotely, normally on designated days, be it at home or a third space. The pandemic accelerated the implementation of hybrid working and it has remained a popular way of working due to employees having greater flexibility over where they work and employers having the opportunity to reinvent the workspace.

Mobile working – Occurs during all these types of work, i.e. how we physically interact with mobile devices while working (our actions, postures, work duration, etc), how our work tasks and environment affect the way we interact with our devices and how we carry and transport our mobile devices when we are not actually using them.



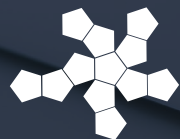
ACKNOWLEDGEMENTS

Jim Taylour: Chartered Member of the Chartered Institute of Ergonomics & Human Factors

Nichola Adams: Technical Member of the Chartered Institute of Ergonomics & Human Factors, Registered Member of ACPOHE, the Association of Chartered Physiotherapists in Occupational Health and Ergonomics

Katharine Metters: Chartered Member of the Chartered Institute of Ergonomics & Human Factors, Chartered Member of the Institution of Occupational Safety & Health, Member of the Chartered Society of Physiotherapy

Laurence Jones: Member of the Chartered Institute of Ergonomics & Human Factors



Chartered Institute
of Ergonomics
& Human Factors

