



SC1-DTH-03-2018: Adaptive smart working and living environments supporting active and healthy ageing

Specific Challenge: Demographic change and the ageing of the population create new heterogeneous challenges for age-friendly living, recreational and working environments such as a shrinking workforce and increasing numbers of workers with functional impairments, chronic conditions, care duties or re-integration in and later retirement from the labour market.

Digital solutions can support older individuals in being and staying actively involved in professional life for longer by designing fit for purpose working environments and by enabling flexible management of job-, leisure- and health-related activities considering their needs at the workplace, at home and on the move, with a particular focus on social inclusion, health needs and job retention.

Scope: Proposals should develop and validate digitally enabled adaptive services and solutions ¹ leading to smart work environments for older adults, supporting them to remain actively involved in professional life, helping them to sustain and renew their work and personal life related skills and support independent active and healthy lifestyles while taking into account reduced capabilities due to age-related health risks and conditions.

Proposals should be based on trans-disciplinary research, involving behavioural, sociological, psychological, medical and other relevant disciplines, including gender and cultural aspects. Proposals should convincingly describe the planned progress beyond state of the art in development and integration of unobtrusive, adaptive solutions for age-friendly living and working environments, addressing the needs of employees in specific and various sectors and workplaces².

Proposals should build on active user engagement (e.g. employee participation at the workplace) in order to ensure the understanding of user needs, safeguarding ethics, privacy, security and regulatory aspects (e.g. labor law). Attention theft and impeding physical activity by ICT should be avoided.

Concepts should aim at realistic and verifiable benefits for flexible and sustainable job longevity measures and the consortium should include the necessary stakeholders to validate all relevant issues. The validation should take place in real settings (at workplaces and at home as required). The approach should demonstrate improvements in quality of life and/or improved health and safety for older adults, better management of aging workforce leading to a win-win for employers and employees, health and social system efficiency

¹ Proposals should make use of the European global navigation satellite systems Galileo and EGNOS (Geostationary Navigation Overlay Service), if relevant.

² A Workplace is a location, which can be inside or outside, virtual or physical, and can include an office, factory or home – where a person's primary occupation takes place.



gains, business and financing models and organisational changes required for service delivery.

The Commission considers that proposals requesting a contribution from the EU between EUR 3 and 4 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts. Participation of SMEs is encouraged.

Expected Impact: Proposals should present methodologies and metrics as appropriate for measuring progress with significance towards the expected impact in:

- Independent living, and quality of life of older persons compared to current state of the art, enabling older persons to stay actively involved in work life for longer or return to work after severe disease;
- Enhanced health and safety working conditions and quality of life of older persons at work compared to the current situation, enabling older persons to be able to contribute at an appropriate level for a longer period of time;
- Evidence of user-centred design and innovation, new intuitive ways of human-computer interaction, and user acceptance;
- Potential cost-effectiveness due to enhanced self-care, life-style, age-friendly and skills conducive work environments and socio-economic benefits;
- Competitive advantage for European industry through flexible and sustainable work arrangements for an ageing workforce;
- Global leadership in ICT based innovation for active and healthy ageing including the occupational environment.

Type of Action: Research and Innovation action