

EMERGING-52 — consortium structure and partners sought

Adaptive human-AI collaboration at the industrial workstation · initiated by EEC Service, UAB (Lithuania)

Call	HORIZON-CL4-2027-02-DIGITAL-EMERGING-52- two-stage — human/AI collaboration for the workforce of the future (RIA)	Deadline	Stage 1: 2 February 2027. Stage 1 is evaluated blind on excellence and impact; the consortium is assessed at Stage 2
Scale	€4–6 million per project · lump sum · TRL 4–5 rising to 6	Must have	TRL 6 shown in a relevant industrial environment · SSH contribution · a business case

The concept

A closed loop at the industrial workstation: **measure** the operator, **interpret** the signal as stress, workload and fatigue in real time, **adapt** an AI co-pilot's level of autonomy to that state, and **act** through the machine itself — with the operator always in authority and the data governed under the AI Act regime that worker-state monitoring falls under. In the wider ecosystem, the aim is industrial jobs in which AI-based human-machine interaction supports well-being, inclusion, up-skilling and knowledge sharing, and machines that adapt to the people who work with them. The work would contribute to the Made in Europe and AI, Data and Robotics partnerships and the Apply AI Strategy, and build on earlier EU projects in extended reality.

Current structure

Role	What it covers	Country	Status
Coordination	Overall management, EC liaison, lump-sum administration	—	OPEN · priority
Human-AI orchestration	Adaptive co-pilot; autonomy levels and handover (WP3 lead)	Italy	Engaged · drafting
Worker-state measurement	Sensor-agnostic interpretation of the cardiac stream (WP4 lead) — EEC Service	Lithuania	Initiating partner
Digital twins / process optimisation	Simulation of the line; process optimisation around the pilot	Spain	Confirmed as partner
Robotics / physical-AI integration	Carrying adaptation into robots and industrial systems (WP5 lead)	Sweden / Egypt	Interest confirmed
Data governance and compliance	Consent, provenance, security; GDPR and AI Act assurance (WP6 lead)	Greece	Interest confirmed
Edge / near-sensor AI	Processing at the sensor; data minimisation at source	Netherlands	Soft-confirmed
Human factors / SSH	Use cases, ergonomics, ethics, field validation (WP2 lead)	Portugal	In discussion
Application / human-performance layer	Measured state into up-skilling and improvement	Netherlands	In discussion
Affective-neuroscience validation	Independent construct validation of the interpretation model	Italy	To be confirmed
Manufacturing use case	Real production site where the solution reaches TRL 6 (WP7)	Lithuania	OPEN · candidate identified
Multimodal signal fusion	Fused physiological, gaze and task data	—	OPEN
Standardisation	Contribution to relevant European and international standards	—	OPEN

Partners we are looking for

Coordinator An organisation that has coordinated Horizon Europe RIAs — ideally in Cluster 4, manufacturing, AI or robotics — with capacity to lead a two-stage lump-sum proposal before 2 February 2027. Ideally confirmed in October.	Manufacturing use case A European manufacturer with real assembly or handling tasks, where the solution is demonstrated in a relevant environment (TRL 6). EEC Service would handle participant recruitment, consent, occupational-health oversight and on-site measurement.
Multimodal signal fusion A research group in physiological or multimodal signal processing, to extend interpretation beyond the cardiac stream to EEG, skin conductance, gaze and task context — research the project would undertake.	Standardisation A partner active in standards bodies relevant to AI and human-machine systems, to carry project results into standards work.

Where EEC Service stands. Sensor at TRL 5, certified for EU electrical safety and EMC as a non-medical product. The interpretation layer runs on a chest-strap ECG or our own optical finger clip; equivalence between input sources and independent validation of the interpreted state are project work, not current claims. This is our first Horizon Europe cycle.

Partners are shown by role and country. Organisations are named only once each has agreed to be named. Nothing here is a commitment of a seat, a work package or a budget share.