Advancing innovation for human-centred autonomy tomorrow with BERTHA

Welcome to the latest BERTHA update!

Over the past few months, we've advanced our human-centred vision for automated mobility through **research, validation, and community engagement**.

Highlights include presenting our probabilistic Driver Behavioural Model (DBM) at RTR 2025, showcasing real-time physiological monitoring at EUCAD 2025, completing the Mid-Term Review with CINEA, co-organising the SPADE workshop at IEEE IV 2025, publishing our first scientific papers and releasing AIT's Driver Typology Quick Assessment Tool to bring driver style modelling closer to practice.

Together, these milestones strengthen BERTHA's path towards **safer, more predictable and socially accepted automated driving**.

Find out more about the BERTHA project

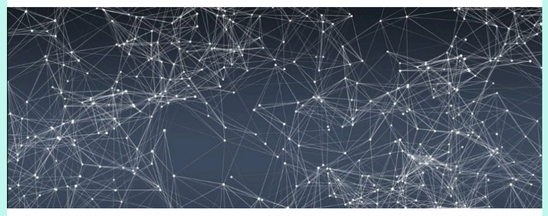
Our project partners | Our work packages | Deliverables, resources & publications

What have we been doing?

BERTHA's first professional publication: Human-centred autonomy at RTR 2025

BERTHA's first professional publication distils our showing at RTR 2025: the pilot of a probabilistic Driver Behavioural Model, one adaptable model spanning five use cases, informed by 4,700 drivers and eight behaviour archetypes, with a path to open-platform deployment and early engagement with standardisation bodies and Euro NCAP.

Learn more



Our first scientific paper: Stress signals for safer autonomy

BERTHA's first scientific publication shows how ECG-derived heart rate variability (HRV) can objectively assess acute stress using the Cold Pressor Test, tracking baseline, stressor and recovery phases. The study reports sympathetic activation and age-related differences, with indications that controlled breathing shaped some HRV responses, insights that can inform driver monitoring and more human-centred automated driving.

Learn more

Know your driver type: AIT's rapid assessment

Discover AIT's Driver Typology Quick Assessment Tool: a rapid, probabilistic way to classify real-world driving styles (e.g., cautious, assertive) and feed BERTHA's Driver Behavioural Model towards more human-like, predictable automated driving. Take the quick test and see your profile!

Take the test

Good practice #1: Joining forces for CCAM

BERTHA is working hand in hand with sister initiatives to push trustworthy, human-centred CCAM, from joint workshops and roundtables to shared practice on behaviour modelling, ethics and data. These exchanges strengthen Europe's mobility ecosystem and help turn research into interoperable, socially accepted automation.

Learn more

BERTHA in motion

Human-centred tech on show at EUCAD 2025

At EUCAD 2025 in Ispra (13-15 May), BERTHA presented human-centred advances: project roll-up and overview video, plus live demos of driver-monitoring equipment capturing real-time physiological signals to inform predictable, human-like automation, led by IBV at the BERTHA stand.

Learn more

Online Mid-Term Review: Progress and next steps

On 4 June 2025, BERTHA held its online Mid-Term Review with CINEA Project Officer Andrea Arcelli, presenting DBM progress (probabilistic BBN approach), CARLA integration and validation scenarios. Strategic feedback helped shape the priorities for the next phase: model refinement, transparent validation and stakeholder engagement.

Learn more

BERTHA's first workshop: SPADE at IEEE IV 2025

On 22 June 2025, BERTHA co-organised its first workshop, SPADE – Secure, Privacy-Aware Naturalistic Driving Data for Future Mobility, at IEEE IV 2025 in Cluj-Napoca. Led by BERTHA partners (CVC & DFKI), the full-day programme covered human-centric modelling, driver monitoring, scalable data collection and privacy-aware frameworks, directly supporting BERTHA's path to safer, predictable and socially accepted automation.

Learn more

Celebrating two years of BERTHA

On 16-17 October 2025, the consortium gathered at VEDECOM's facilities in Versailles to mark two years of BERTHA: work-package reviews, hands-on demos (driving simulators, a walking platform and VEDECOM's AV), collaborative workshops and alignment on year-3 priorities, including real-world validations and stakeholder engagement.

Learn more

Season's greetings form the BERTHA team

As we wrap up 2025, thank you for supporting our human-centred journey toward **safer, more predictable and socially accepted automated mobility**. From physiological signals to probabilistic driver models, every insight brings autonomy closer to the way people actually drive.

Wishing you Happy Holidays, and a safe, Happy New Year, hoping for a 2026 of rigorous behavioural modelling, transparent validation, and deeper CCAM collaboration.

BERTHA

Keep updated! Visit our website and follow us on social media

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