NEWS RELEASE

REPLY: Roboverse Reply Drives EU-Funded Fluently Project Aiming to Enable Human-Robot Social Collaboration Using the Latest AI Advancements

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TURIN, Italy--(BUSINESS WIRE)-- **Reply**, a global systems integrator and consulting firm, announces that **Roboverse Reply**, the Reply company specialising in robotics integration, is leading the EU-funded **"Fluently"** project. The project aims to create a platform that fosters real social collaboration between humans and robots in industrial settings by leveraging the latest advancements in AI-driven decision-making.

The goal of this three-year project is to develop a platform and a wearable device for industrial workers and robots that will allow machines to interpret speech, content and tone more accurately and convert gestures automatically into robot instructions, and to build a training centre called "Fluently RoboGym", where industrial workers and robots can train to interact smoothly in the production process.

Practical use cases for human-robot collaboration relate to future critical value chains in European industry that involve high physical loads but also high demands on human experience and skill, such as the disassembly and recycling of lithium cell batteries, inspection and maintenance processes in the aerospace industry, and the refurbishment of complex industrial parts through additive manufacturing.

Twenty-two partners are involved in the project, including the **Swiss university SUPSI**. Anna Valente, Head of the SUPSI Laboratory for Automation, Robotics, and Machines and a member of the Swiss Science Council, adds: "The Fluently project aims to train robots to become team players that support human workers to the best of their abilities. As scientific and technical coordinators, we conceived Fluently to become a key milestone in advanced human-robot collaboration while establishing a best practice and a proof of concept of more inclusive and

interactive ecosystems."

The project has successfully completed its first year of development and achieved initial milestones. The team is now focusing on three main working packages:

- Fluently unit design, which consists in the design of Fluently's device, software testing and integration into wearable strap and robotic systems;
- Development of AI models, which include architecture design, edge computing, Robo-Gym model training and human-robot teamwork support;
- Robo-Gym design and implementation, which consists in defining Robo-Gym specification and objectives and the development and building of three training areas.

The Fluently system will rely on innovative technologies to ensure seamless communication between humans and robots. Natural language processing, hands-free remote collaboration equipment, physiological signal monitoring and eye tracking are some of the topics that will be researched and integrated during this project.

"We are proud to coordinate the innovative Fluently project that brings together partners from both academia and industries to develop an empathetic robot platform that can interpret speech content, tone and gesture making industrial robots accessible to any skill profile," said Filippo Rizzante, CTO of Reply. "Robots equipped with Fluently will constantly support with the humans' physical and cognitive loads, but will also learn and build experience with their human teammates."

Reply

Reply [EXM, STAR: REY] specialises in the design and implementation of solutions based on new communication channels and digital media. As a network of highly specialised companies, Reply defines and develops business models enabled by the new models of AI, big data, cloud computing, digital media and the internet of things. Reply delivers consulting, system integration and digital services to organisations across the telecom and media; industry and services; banking and insurance; and public sectors. **www.reply.com**

Roboverse Reply

Roboverse Reply specialises in the integration scenarios around Robotics and Reality Capture with Mixed Reality, where Cloud or On-Premises Infrastructures require Enterprise-Ready solutions. Roboverse Reply solutions include AI Skills with sensor-based anomaly detection, Fleet Management for Internet of Robotic Things, Digital Twins and Business Logic to deliver end-to-end support for the customers. The Roboverse Reply platform enables Autonomous Preventive Inspection to prolong the lifespan of your infrastructures and interactive telepresence, crucial for Safety and Security purposes. **www.roboverse.reply.com**

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