Press Release: INDUX-R Project Accelerates Towards Pilot Phase Following 4th Plenary in Geneva

The European **INDUX-R** project successfully concluded its 4th Plenary Meeting in Geneva, marking a critical transition from advanced technological development to large-scale pilot activities and validation of its Extended Reality (XR) applications.

The consortium confirmed significant progress across key technical areas, including:

- **XR Core Technologies:** Advancements in creating **personalised, deformable avatars** and **4D reconstruction** methods. Novel room and object reconstruction techniques, including Photogrammetry and **Gaussian Splatting, were successfully benchmarked and integrated.**
- **Audio & Interaction:** Successful development of **Speech Enhancement and Speech-to-Emotion APIs** to support dynamic user interaction. The system features optimised **acoustic modelling** for the **OmniConference** application, alongside advancements in **real-time softbody XR interactions** and deep learning-based **avatar auto-rigging**.
- 5G communication & Orchestration: The consortium confirmed successful end-to-end live testing of the 5G communication network and advanced features within the Scene Orchestrator, validating the system's readiness for intensive multi-user testing.

The meeting's main focus shifted to Work Package 4. **Small-scale dry runs** for use cases—including the AR/VR conference and industrial "X-ray vision" and VR training—are scheduled to commence this quarter, moving the project closer to large-scale operational validation. A phased evaluation strategy, including KPI tracking, is now fully in motion.

Key Action Points:

The consortium agreed to urgently accelerate the integration of all technical components. Partners committed to **increasing scientific journal publications** in the coming period. Furthermore, the consortium reaffirmed its commitment to **open-sourcing key results and datasets via Zenodo**, while ensuring full compliance with the ethical guidelines and emerging regulations like the EU AI Act.

The next Plenary Meeting is scheduled for **late April/early May in France**, and will be combined with **intensive dry runs** for Use Case 5 (NOMADE Cars sports immersion), signifying the project's full shift to validation.

About INDUX-R:

INDUX-R (Transforming European INDUstrial Ecosystems through eXtended Reality enhanced by human-centric AI and secure, 5G-enabled IoT) is a Horizon Europe-funded initiative involving partners from across Europe. Its mission is to redefine how people interact, train, and collaborate in professional environments through cutting-edge XR applications rooted in ethical development.

Read more on INDUX-R website https://indux-r.eu/