**PRESS RELEASE**

**ΙNDUX-R: A Human-Centric XR Ecosystem Transforming European Industry**

INDUX-R, a bold new European initiative, is reimagining the future of industrial innovation through a human-centric Extended Reality (XR) ecosystem. The project aims to harness cutting-edge XR technologies to empower individuals, address real-world challenges, and deliver high-value products and services across key industrial sectors.

Driven by both **market demand** and **societal needs**, INDUX-R places humans at the core of its vision. From early-stage user involvement to final validation, the project ensures that technological advancements are **ethically sound**, **inclusive**, and **aligned with European values**.

### **Scientific and Technological Breakthroughs**

INDUX-R focuses on concrete breakthroughs integrated into robust technological enablers. These include:

* **Digitisation and creation of XR assets**
* **Realistic animation**
* **Light-field head-mounted displays (HMDs)**
* **XR media streaming**
* **Egocentric perception**

To support multi-user XR experiences, the project will implement a **highly scalable, zero-touch 5G architecture** and a **secure, interoperable IoT network**, designed to handle fluctuating demand and minimize resource waste.

### **Real-World Use Cases**

INDUX-R’s innovations will be demonstrated in five application-driven use cases that span diverse industrial domains:

* **LiveMediaXR Omniconferences (UC-1):** Hybrid event participation (on-site, online, and on-demand) in immersive, interactive XR environments.
* **X-ray Vision for Industry 4.0 (UC-2):** Real-time monitoring and predictive analytics for industrial processes, enhancing productivity and safety.
* **Virtual Medical Education (UC-3):** Multi-user surgical training simulations in highly realistic, immersive virtual operating rooms.
* **4D Cultural Tourism (UC-4):** Large-scale 3D and 4D reconstructions of historical sites, enabling virtual cultural exploration and heritage preservation.
* **NOMADE Sports Immersion (UC-5):** Immersive spectator experiences in motorsport events, bringing remote audiences closer to the action.

### **A New Era of Human-Centric Innovation**

INDUX-R sets out not only to deliver breakthrough XR technology but also to **create replicable models** that can scale across sectors. The initiative stands at the crossroads of science, society, and industry—demonstrating how immersive technologies can drive **economic growth**, **cultural inclusion**, and **sustainable digital transformation** in Europe.

As the INDUX-R ecosystem evolves, it aims to leave a lasting impact on the way we **work**, **learn**, and **interact**, pushing the boundaries of what’s possible when **technology enhances human experience**.

More information on our official website <https://indux-r.eu/>