



French Presidency's statement on immersive technologies

June 22

On June 21 and 22, 2022, **the French Presidency of the Council of the European Union organized**, together with the European Commission, **the European Digital Assembly, a two-day event dedicated to the future of digital industries in Europe.**

The Digital Assembly discussions underscored that the global digital environment, significantly transformed by the impact of web 1.0 and 2.0, **was on the cusp of a major transition**, due to current developments in metaverse and immersive technologies, **that will impact the structure of European economies and societies.** Immersive technologies will influence the way we work, produce, purchase online, socialise, create, learn and travel. It could therefore raise new challenges for policy-makers, notably in terms of protection of human rights and dignity. Such evolutions of the internet, along with the development of immersive technologies, are currently being defined under the concept of "metaverse". **A metaverse is expected to be a permanent digital world in which users can immerse themselves to virtual or augmented reality using an avatar to interact in real time with other users and environments.**

Virtual spaces and immersive technologies offer new opportunities that could improve European industries' competitiveness, particularly in the domains of innovation and education. In addition, if the specificities of these sectors are considered and preserved, such technologies could expand the democratisation of culture and heritage thanks to an array of interactive, collaborative and creative possibilities. Eventually, if interoperability and openness are preserved, they could mainstream tokenization and decentralized ledger technologies in Europe.

It is essential to develop metaverse and immersive technologies in line with European values, fundamental rights and existing regulation, while articulating and safeguarding public interests as well as citizens' rights in Europe. In addition, they emphasised the need for Europe to be a regulatory leader and to remain an example for other parts of the world. However, **It is crucial to avoid unnecessary or excessive regulatory measures that could unduly constrain, hinder technological development or disproportionately hamper innovation in Europe.**

Europe, with its manufacturing and creative industry, leading scientists and cutting-edge tech firms, has a major role to play in the emergence of this next generation of immersive technologies. They discussed the EU's competitive advantages both in software and hardware technologies, as well as know-how and promising talent in various areas (AI, photonics optical innovation, digital twins, processing and storage capacities, blockchain, immersive technologies, tokenisation and so on). In addition, **European innovation, industry, expertise, talents and culture – the strengths that have long bound our nations together – will drive the European Union's success in immersive technologies** in order to expand a knowledge-based society that is cyber resilient and creatively oriented.

Following the discussions that took place during the Digital Assembly, the French Presidency of the Council of the European Union suggests to work on the following principles:

To foster the development of immersive technologies in Europe in order to ensure an open strategic autonomy and the functioning of the internal market

The objective of the Union should be to become a global leader in the research and development of secure, trustworthy, interoperable and human-centred immersive technologies and metaverses, while keeping a high level of consumer and data protection. **The Union should therefore address, where appropriate, harmful strategic dependencies, in order to secure its supply chain in critical areas and maintain its industrial and technological leadership.**

Further actions could be considered:

- to **foster research and development**, as well as **private investment in both hardware and software for immersive technologies** (virtual and augmented reality, photonics, headsets and haptic feedback suits, etc.) **and network infrastructures** (graphics processing units, cloud services, multi-user navigation, etc.) for the development of metaverse in Europe ;
- to **further strengthen and widen the European semi-conductors ecosystems**, through *inter alia* the European Chips Act, in order to achieve 20 % of the global market share by 2030 ;
- to **develop innovative use-cases for metaverses and immersive technologies**, in order to support different industry to seize the opportunity on metaverses and immersive technologies, through existing EU funding programmes (e.g. Digital Europe), by considering linking them to objectives in upcoming work programmes ;
- to **actively contribute to international standardisation initiatives** in order to develop metaverses and immersive technologies that remain fair, trustworthy, predicated, open and accessible, in line with European fundamental values ;
- to **promote interoperable and human-centric realization**, through digital commons and open source platforms, as well as decentralized ledger technologies ;
- to **develop and expand digital education and training for future careers** in the metaverse and immersive technologies ecosystem ;
- to **boost the appeal of Europe's digital ecosystem to attract international talents, develop and retain European talents**. Such measures should draw on initiatives recently undertaken such as Scale-Up Europe and the Digital Skills and Jobs Coalition.

To reaffirm the need to develop metaverse and immersive technologies in line with European values, fundamental rights and principles

Metaverse and immersive technologies could intensify existing internet trends (e.g. the emergence of filter bubble, need for more liability, the spread of hate speech and illegal content, disinformation or an increased market concentration, etc.). In recent years, **the Union has achieved major legislative milestones regarding personal data protection** (with the General Data Protection Regulation – GDPR) **as well as a high level of consumer protection, the unlocking of digital markets** (with the Digital Markets Act) **and the guarantee of safe and responsible digital services** (with Digital Services Act). In addition, sectorial instruments, such as **the regulation on addressing the dissemination of terrorist content online, the directive combatting child pornography and the directive on copyright** in the DSM were adopted. Accordingly, **EU law in the digital area must be the basic regulatory foundation applicable in the metaverse and to future immersive technologies.**

Innovators should commit to an ethical approach and pledge to comply by design with EU regulations. The following actions were discussed:

- to respect the fundamental European rights and principles such as: **(i) empowerment; (ii) solidary and inclusion; (iii) freedom of choice; (iv) participation in the digital public space; (v) safety and security; and (vi) sustainability** ;
- to cooperate with researchers in order to **examine the ethical, environmental, social and mental health impacts** of virtual worlds in our societies and on consumers, such as the use of data including physical and emotional responses), dark patterns, AI or cybersecurity ;
- to **adopt a human-centric, thriving and balanced approach**, notably by respecting privacy and confidentiality, promoting data portability and taking a data sharing approach ;
- to **consider and examine appropriate responses to new dangers** (traffic accidents, etc.) and **possible harmful conducts** (abuse of avatars, etc.) in the metaverse. Therefore, innovations should work, in **coordination with national and European cyber agencies and national law enforcement authorities** in order to **prevent cybercrimes, data breaches or cyberattack in virtual words**, in order to ensure the security and the integrity of European citizens ;
- to **comply with the rules on fair competition in line with the Digital Markets Act**, in order to fight monopolisation, provide transparency, and avoid uncompetitive behaviour ;
- to **adopt best efforts for responsible and accountable moderation activities**, in line with the Digital Services Act and other applicable laws, in order to make sure that metaverses remain safe spaces, especially for minors and vulnerable categories ;
- to **ensure the use of NFTs, smart contracts, digital identity and digital credentials, as well as crypto-assets are compliant with European rules such as the Markets in Crypto-assets (MiCa) Regulation**, while ensuring high levels of consumer protection;
- to **foster responsible and diligent action for a sustainable technological environment**, in line with the Paris Agreement and the global climate action agenda, by prioritising energy-efficient digital infrastructures and eco-design.

To champion immersive technologies and metaverse to support Europe's culture and diversity to benefit to European citizens

Eventually, **the Union should take full advantage of the possibilities of metaverse and immersive technologies for the promotion of its innovative and creative industry**. In parallel, the Union should make sure that metaverse and immersive technologies do benefit to all European citizens, regardless of age, ethnicity, gender, social and economic capital or place of residence.

Further actions could be considered:

- to **encourage the production and the promotion of cultural and creative content, with respect to intellectual property rights** ;
- to **promote and protect the cultural and linguistic diversity of European contents** ;
- to **encourage cultural and public institutions to invest in the metaverse**, for instance through the creation of digital twins ;
- to **ensure that the value created from these immersive environments generates significant benefits for all Europeans**: consumers, creators, cultural institutions and entrepreneurs alike;
- to **promote conditions for strategic assets of European tech firms** by protecting Europe's innovative and creative output through intellectual property rights, and support businesses facing barriers to access to new technologies.