Virtual worlds: opportunities, risks and policy implications for the Single Market

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The Committee on the Internal Market and Consumer Protection adopted an own-initiative report by Pablo ARIAS ECHEVERRÍA (EPP, ES) on virtual worlds – opportunities, risks and policy implications for the single market.

The transition to Web 4.0 and the development of virtual worlds may be a significant part of the future of digitalisation and may be one of the significant potential building blocks for the completion of the digital single market.

The report welcomes the Commission communication of 11 July 2023 entitled ‘An EU initiative on Web 4.0 and virtual worlds: a head start in the next technological transition’ and stated that any strategy must be **sustainable and human-centric**, while protecting the values of the European Union.

Internal market and consumer protection

Although the European Commission’s communication does not yet indicate the need for precise legislative action, Members stated that it is nevertheless important to make a **careful assessment** of all the issues relating to the development of virtual worlds and their effective coverage by existing legislation. They considered that a clear, comprehensive, regulatory framework is of vital importance, particularly when the technology reaches maturity.

Members also considered that the Commission should conduct **regular checks** on the adequacy and consistency of the legislative framework of the digital single market, to address new opportunities, risks or other issues that may arise with virtual worlds and where necessary, put forward legislative proposals. The outcome of such checks should be made public. The Commission should draft a report on this subject every two years and forward it to Parliament and the Council.

The Commission should also pay attention to the potential emergence of problems in the Web 4.0 that already exist in the Web 3.0, such as the proliferation of disinformation, spread of illegal content, digital identity theft, cybercrime, infringement of intellectual property rights, cyberterrorism, misuse of personal data, manipulative behavioural or addictive design of digital services, fraud, online terrorist content, sexual abuse of minors and cyberbullying.

Members pointed to the significant economic potential of virtual worlds, and the **growing needs for investment** in the necessary infrastructure and in related research, innovation, and re-and up-skilling. They stressed that the overall costs of such investments should aim to have a neutral impact on final consumer prices. They acknowledged the need to increase available resources at EU-level to fulfil these objectives.

The Commission should closely monitor also the rapid development of AI technology and its impact in the digital ecosystem.

The report stressed the importance of investing in and promoting the acquisition of **adequate skills** to ensure the availability of skilled and talented workers to fill new jobs in areas such as the architecture of virtual worlds within the EU. It also considered it important to create attractive conditions for retaining European talent, attracting talent from abroad and encouraging entrepreneurship and innovation within the

EU. Given the potential of virtual worlds in industrial and professional environments, Members stressed the need to guarantee respect for labour rights and a high level of protection for workers.

The report stressed the need for the EU to become a driving force in shaping virtual worlds into ecosystems that respect and promote EU values, fundamental rights and the **highest level of consumer protection**.

Members stressed the importance of:

- promoting a **level playing field** that favours the growth of European small and medium-sized enterprises and the emergence of competitive European businesses, as well as decentralised and interoperable ecosystems;

- guaranteeing the **openness, inclusiveness and accessibility** of virtual worlds, so as to encourage greater participation by people with disabilities in the new digital environment;

- giving careful thought to the possible configuration of the digital environment, on the understanding that in some cases anonymity may be preferable;

- paying special attention to the data protection implications of user-generated content, as well as the processing of sensitive data such as biometric and behavioural data, emotional reactions and haptic information, while ensuring an innovation-friendly environment;

- paying particular attention to **addictive design** and manipulative behaviour in these virtual environments;

- setting up **educational programmes** to help children and young people adapt to technological change and adopt a healthy, balanced approach combining traditional social interaction with time spent in the virtual environment, also giving parents the tools they need to supervise their children's activities.

The Commission is called on to conduct an evidence-based assessment of how to ensure that the infrastructure and devices needed to support the development and functioning of virtual worlds, and the transition from Web 3.0 to Web 4.0 are delivered to consumers, including in **remote areas** and lower-income households.

Sustainability

The report noted the potential for virtual worlds and Web 4.0 to make a positive contribution to the fight against climate change and for environmental sustainability, for example by facilitating remote working, thereby reducing commuting and associated carbon emissions. The development and deployment of virtual worlds should take into account the impact on the environment; highlights the importance of raising consumers’ awareness about the environmental impact and sustainability of these new technologies, including electronic waste.

Members recalled the need to use, accelerate and incentivise technological advances to reduce the energy consumption and environmental footprint of the activities related to the production, use and development of virtual worlds, such as advanced recycling techniques and renewable energy sources.