



TEXTS ADOPTED

P9_TA(2024)0029

Policy implications of the development of virtual worlds - civil, company, commercial and intellectual property law issues

European Parliament resolution of 17 January 2024 on policy implications of the development of virtual worlds - civil, company, commercial and intellectual property law issues (2023/2062(INI))

The European Parliament,

- having regard to the Treaty on the Functioning of the European Union, and in particular Articles 4, 16, 26, 81, 114 and 118 thereof,
- having regard to the Berne Convention of 1886 for the Protection of Literary and Artistic Works,
- having regard to the Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks, as both amended on 28 September 1979 and updated in its twelfth edition (12-2023),
- having regard to the World Intellectual Property Organization (WIPO) Copyright Treaty of 1996 and the WIPO Performances and Phonograms Treaty of 1996,
- having regard to Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases¹,
- having regard to Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and

¹ OJ L 77, 27.3.1996, p. 20.

Regulation (EC) No 2006/2004 of the European Parliament and of the Council ('Unfair Commercial Practices Directive')¹,

- having regard to Regulation (EC) No 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to non-contractual obligations (Rome II)²,
- having regard to Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I)³,
- having regard to Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs⁴,
- having regard to Regulation (EU) No 1215/2012 of the European Parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (recast)⁵ (Brussels I Regulation),
- having regard to Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC⁶,
- having regard to Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure⁷,
- having regard to Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC⁸,
- having regard to Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the

¹ OJ L 149, 11.6.2005, p. 22.

² OJ L 199, 31.7.2007, p. 40.

³ OJ L 177, 4.7.2008, p. 6.

⁴ OJ L 111, 5.5.2009, p. 16.

⁵ OJ L 351, 20.12.2012, p. 1.

⁶ OJ L 257, 28.8.2014, p. 73.

⁷ OJ L 157, 15.6.2016, p. 1.

⁸ OJ L 119, 4.5.2016, p. 1.

execution of criminal penalties, and on the free movement of such data¹,

- having regard to Directive (EU) 2016/2102 of the European Parliament and of the Council of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies² ,
- having regard to Regulation (EU) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark³ ,
- having regard to Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC⁴,
- having regard to Regulation (EU) 2018/1807 of the European Parliament and of the Council of 14 November 2018 on a framework for the free flow of non-personal data in the European Union⁵,
- having regard to Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC⁶ (Copyright Directive),
- having regard to Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services⁷,
- having regard to Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information⁸,
- having regard to Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services⁹,
- having regard to the proposal for a regulation of the European Parliament and of the Council laying down harmonised rules on

¹ OJ L 119, 4.5.2016, p. 89.

² OJ L 327, 2.12.2016, p. 1.

³ OJ L 154, 16.6.2017, p. 1.

⁴ OJ L 295, 21.11.2018, p. 39.

⁵ OJ L 303, 28.11.2018, p. 59.

⁶ OJ L 130, 17.5.2019, p. 92.

⁷ OJ L 151, 7.6.2019, p. 70.

⁸ OJ L 172, 26.6.2019, p. 56.

⁹ OJ L 186, 11.7.2019, p. 57.

artificial intelligence (Artificial Intelligence Act) and amending certain union legislative acts (COM(2021)0206),

- having regard to the proposal for a regulation of the European Parliament and of the Council amending Regulation (EU) No 910/2014 as regards establishing a framework for a European Digital Identity (COM(2021)0281),
- having regard to the proposal for a regulation of the European Parliament and of the Council on harmonised rules on fair access to and use of data (Data Act), (COM(2022)0068),
- having regard to the proposal for a directive of the European Parliament and of the Council on liability for defective products (COM(2022)0495),
- having regard to the proposal for a directive of the European Parliament and of the Council on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive) (COM(2022)0496),
- having regard to Regulation (EU) 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance and amending Regulation (EU) 2018/1724 (Data Governance Act)¹,
- having regard to Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act)²,
- having regard to Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a single market for Digital Services and amending Directive 2000/31/EC (Digital Services Act)³,
- having regard to Regulation (EU) 2023/988 of the European Parliament and of the Council of 10 May 2023 on general product safety, amending Regulation (EU) No 1025/2012 of the European Parliament and of the Council and Directive (EU) 2020/1828 of the European Parliament and the Council, and repealing Directive 2001/95/EC of the European Parliament and of the Council and Council Directive 87/357/EEC⁴,
- having regard to Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-

¹ OJ L 152, 3.6.2022, p. 1.

² OJ L 265, 12.10.2022, p. 1.

³ OJ L 277, 27.10.2022, p. 1.

⁴ OJ L 135, 23.5.2023, p. 1.

assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937¹,

- having regard to its Resolution of 20 October 2020 on Intellectual property rights for the development of artificial intelligence technologies (A9-0176/2020)²,
 - having regard to Commission communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions entitled 'Making the most of the EU's innovative potential - An intellectual property action plan to support the EU's recovery and resilience' (COM(2020)0760),
 - having regard to its Resolution of 11 November 2021 on an intellectual property action plan to support the EU's recovery and resilience³,
 - having regard to 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',
 - having regard to the Commission communication of 11 May 2022 entitled 'A Digital Decade for children and youth: the new European strategy for a better internet for kids (BIK+)' (COM (2022)0212),
 - having regard to Rule 54 of its Rules of Procedure,
 - having regard to the report of the Committee on Legal Affairs (A9-0442/2023),
- A. whereas virtual worlds have not yet been widely taken up, although their deployment in a number of use cases in various sectors has raised general awareness and has attracted the attention of public authorities;
- B. whereas it is essential that we continue to promote and develop new technologies, recognising their transformative potential in fields such as education, culture, healthcare, gaming and many others, while addressing the risks that these new technologies may pose;
- C. whereas experts say it might still take 10 to 15 years for virtual worlds to reach their full potential and that their development can significantly impact the digital landscape in future years, bringing both opportunities and risks that need to be addressed;

¹ OJ L 150, 9.6.2023, p. 40.

² OJ C 404, 6.10.2021, p. 129.

³ OJ C 205, 20.5.2022, p. 26.

- D. whereas digital sovereignty is a means of promoting the notion of European leadership and strategic autonomy and is key to guaranteeing the EU's ability to shape and enforce legislation in the digital environment, ensuring ethical, sustainable and human-centric virtual worlds and safeguarding the fundamental rights and values of the EU;

Definitions

1. Notes that the concepts of 'metaverse' and 'virtual world' currently lack consolidated definitions;
2. Welcomes in this regard the proposal included in the Commission communication for a definition focusing on the main features of virtual worlds, as follows: 'virtual worlds are persistent, immersive environments, based on technologies including 3D and extended reality (XR), which make it possible to blend physical and digital worlds in real time, for a variety of purposes such as designing, making simulations, collaborating, learning, socialising, carrying out transactions or providing entertainment'; points out that many of the technologies referred to as 'virtual worlds' have existed for years; underlines that a future European strategy should be anchored in research, scientific evidence and societal relevance;
3. Stresses the key importance of promoting standardisation and interoperability for the full development of an ecosystem of interconnected virtual worlds;

An appropriate ethical and legal framework

4. Stresses that virtual worlds accessible in the EU should respect ethical values, principles and fundamental rights enshrined in the Charter of Fundamental Rights of the European Union¹ and existing EU legislation, namely on data privacy, security and safety standards, data sharing, content moderation, the fight against harassment and hate speech, cybersecurity, workers' rights, consumers' and child protection, accessibility requirements, respect for intellectual property rights, the protection of know-how and trade secrets, the prevention of online abuse and fraud, and on contestable and fair markets;
5. Recalls that virtual worlds should be developed and deployed in line with the general principle that what is illegal offline should be illegal online, ensuring that people's rights, with a strong focus on children, as users, consumers, workers, investors, rights holders and creators are fully respected;
6. Points out that, in particular, the following pieces of legislation already apply to different aspects of virtual worlds: the Digital

¹ OJ C 303, 14.12.2007, p. 1.

Services Act; the Digital Markets Act; the Data Governance Act; the Data Act; the proposed AI Act; the General Data Protection Regulation¹ (GDPR); the General Product Safety Regulation; the Unfair Commercial Practices Directive; the Markets in Crypto-Assets Regulation; European Digital Identity; the Directive on Copyright in the Digital Single Market; the Regulation on the EU Trade Mark; the Directive on the Protection of Trade Secrets; the European Accessibility Act; and the Web Accessibility Directive;

7. Highlights the importance of regularly monitoring compliance and ensuring effective enforcement of the applicable legal instruments in force; calls on the Commission to develop guidelines and best practices, in cooperation with different stakeholders, including representatives from civil society and consumer protection organisations, as well as academia, clarifying the legal obligations and responsibilities of each stakeholder involved in virtual worlds, such as platform operators, service providers, developers and users, under the applicable EU law;
8. Underlines that it is paramount that the Commission conducts regular fitness checks of the applicable legal instruments in force, namely regarding a possible review of the Unfair Commercial Practices Directive, Consumer Rights Directive² and the Unfair Contract Terms Directive³, and stresses that any future legislation on virtual worlds should avoid overlaps or inconsistencies, while filling gaps where needed;
9. Notes that some regulatory issues are nonetheless already apparent in the fields of private international, civil and intellectual property law, as specified in the sections below;
10. Highlights that recent research has shown that VR sensor data is as uniquely identifiable as a fingerprint scan and can be used to gain deep insights into users' personality and infer a variety of attributes such as age, gender, income, ethnicity, disability status, state of mind and emotions; believes that this raises significant ethical and legal concerns, in particular in connection with targeted behavioural

¹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC, OJ L 119, 4.5.2016, p. 1.

² Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council (OJ L 304, 22.11.2011, p. 64).

³ Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts (OJ L 95, 21.4.1993, p. 29).

advertising, that should be addressed; stresses that part of addressing these ethical concerns around the collection of vast amounts of personal data, including sensitive user data such as biometric and behavioural data, emotional reactions and haptic information, is to guarantee that users are aware of the data being collected and that consent for the collection of such data is not obtained only at the time of entry to the virtual world, but for each use case in line with the principles laid out by the GDPR, such as those of privacy by design and purpose limitation;

11. Stresses that, wherever the user's identification is not required by Union or national law, namely for liability purposes, and it is technically possible and reasonable, virtual worlds should enable the anonymous use of services as a way of providing a protective shield for privacy and effectively prevent unauthorised data disclosure, identity theft and other forms of abuse of personal data collected online;
12. Notes, in this regard, that the actions put forward by the Commission in its communication aimed at raising awareness, improving digital skills and literacy and increasing users' access to key technologies, namely by facilitating access to high-speed internet infrastructure and adequate equipment, are crucial to avoid digital divides and should be implemented as swiftly as possible in order to promote an inclusive and competitive digital society and to ensure that no one is left behind in this rapid technological development;

Private international law

13. Stresses that certain traditional territorial principles on applicable law and jurisdiction might prove inadequate to virtual worlds, whose non-territoriality is enabled by the use of decentralised technologies such as blockchain, and give rise to problems when it comes to ensuring the applicability of EU law and the protection of the rights of consumers and businesses;
14. Notes more specifically that, since anyone anywhere in the world can access virtual worlds, the 'mosaic criterion' established by the Court of Justice of the European Union, by which the injured party may seek compensation in the courts of the countries where at least a part of the harm occurred, might not hold; recalls, however, that the Court established an additional criterion whereby injured parties can claim compensation through the courts of the country in which they have their main interest and affirms that the codification of this criterion into the Brussels I Regulation could be considered;
15. Observes that the definition of 'consumer' in the Brussels I Regulation is currently based on a direct contractual relationship, which is missing for instance between the issuer of a non-fungible token (NFT) and the purchaser when the NFT is put on a secondary

market; notes that, consequently, in the event of a dispute with the issuer, the final purchaser would be deprived of the jurisdictional treatment that the Brussels I Regulation grants to consumers;

16. Calls on the Commission to take into account these and other potentially problematic situations and to assess the appropriateness of the existing provisions of private international law applicable in the EU, proposing appropriate amendments, where necessary, to guarantee that citizens and businesses do not have to systematically litigate in foreign courts or under foreign laws in order to enforce their rights, thus making sure that their rights under the EU regulatory framework are fully guaranteed, while bearing in mind the risk of forum shopping, in particular on the part of non-EU companies;

Civil law

17. Notes that the number and economic relevance of commercial transactions within virtual worlds is expected to increase over the next decade; stresses the need, in this context, to ensure that providers of virtual goods and services can be identified and held liable for any harm caused by their products;
18. Points out the concerns raised by the advertising techniques used when selling so-called virtual real estate, such as a building or a piece of land in a virtual world represented by an NFT, as users might be led to believe that they are actually acquiring property rights, when, in practice, they only obtain a licence to use the virtual 'land'; emphasises the importance of ensuring that the applicable terms and conditions are transparent, clear, fair and easy to understand, particularly as it has been shown that users often fail to read terms and conditions due to their dense and technical nature;
19. Recalls that liability rules should fully apply to virtual worlds and underlines the importance of putting in place effective measures to prevent and address any form of harmful behaviour and enforce the law in line with fundamental rights in virtual worlds, including, where appropriate and without prejudice to the right of seeking judicial redress, the establishment of reporting and dispute resolution mechanisms;
20. Is concerned that the use of avatars and decentralised systems, such as those built on blockchain technology, might make it extremely challenging to hold tortfeasors accountable; considers that the implementation of effective identity management systems is key in order to allow for their proper and timely identification and to combat fake identities, also taking into account the specificities linked to the governance of decentralised autonomous organisations (DAOs) and to collective liability; welcomes in this regard the

Commission's intention to study the added value of a possible legal framework for DAOs;

21. Recalls that avatars do not have legal personality so any issues regarding their legal capacity, rights, obligations and liabilities needs to be addressed with reference to the natural or legal persons using them; considers that, as virtual worlds evolve and become more complex, consideration should be given to the appropriateness of granting a specific legal status to avatars; considers that the avatar or the person behind the avatar should be identifiable and a know-your-business-customer principle should be applicable;

Intellectual property law

22. Underlines that the body of EU law on the protection of intellectual and industrial property rights, including copyrights, trademarks, patents, designs and trade secrets, fully applies to virtual worlds; stresses nevertheless that the development of virtual worlds poses new challenges when it comes to intellectual property enforcement, identification of infringers and issues concerning the conflict-of-law rules on applicable law and jurisdiction;
23. Recalls that platforms operators, service providers and users in virtual worlds are under the obligation to respect right holders' exclusive rights and their right to fair remuneration; highlights that the use of content protected by intellectual property rights (IPR), including in digital form in an electronic medium, such as an NFT, requires authorisation through licensing or assignment, unless it is covered by any exception or limitation to IPR protection (such as private copy, education, research, quotation, review, parody or pastiche); reiterates the importance in this regard of providers ensuring transparency as to the scope of licences, including territorial licences, so as to ensure that users are able to determine what uses of IPR-protected content in virtual worlds are covered by the licences they hold and that creators and right holders are able to receive accurate and proper reporting on the actual use of protected works;
24. Welcomes the update brought about by the twelfth edition of the 'Nice classification', which allows for the registration of trademarks in classes covering their use in virtual worlds; calls for a close follow-up on the concrete application of this classification; is, however, concerned about the use of NFTs referencing trademarks without the authorisation of their owners and calls for effective measures to be implemented to address these and other cases of infringement; welcomes in this regard the Commission proposal to develop a toolbox to fight counterfeiting;
25. Acknowledges the applicability of liability rules as laid down in the Digital Services Act and of the special regime established in

Article 17 of the Copyright Directive to cover the uploading of user-generated content; believes, however, that further clarification is needed on how existing rules should apply to online content-sharing services that make content available in virtual worlds and how they should be enforced;

26. Stresses that NFTs do not grant any IPR as such on the digital asset and signals the need for further clarity and transparency in order to avoid fraud and the frequent confusion between the right to the token itself and the right to the underlying protected content;
27. Notes that NFTs and other blockchain-based offers facilitate the continuous resale of assets based on copyright-protected works through online transactions and believes that appropriate and proportionate remuneration of authors for each resale of such assets needs to be ensured;
28. Recalls that, under the current rules, the outputs autonomously generated by AI systems might not be eligible for copyright protection, as the principle of originality is linked to a natural person and the concept of 'intellectual creation' presupposes the author's personality; recalls, further, the difference between AI-assisted human creations and outputs autonomously generated by AI; recalls that, while the current intellectual property framework remains applicable to AI-assisted creations, outputs autonomously generated by AI create new regulatory challenges for intellectual property rights protection, such as questions of ownership, authorship and inventorship, as well as appropriate remuneration and issues related to potential market concentration; welcomes the commitment set out in the IP Action Plan for the Commission to engage in stakeholder discussions on how to address the challenges raised by AI-assisted inventions and creations; calls on the Commission to consider broadening the scope for this dialogue in order to largely cover AI-related issues, including generative AI;

Accessibility and digital literacy

29. Emphasises that virtual worlds may provide opportunities for the provision of public services of general interest, to the wider benefit of citizens; underlines, however, that inclusion of and accessibility for all users in the EU must be ensured both in terms of cost and use of hardware and the understanding of software; notes that accessibility is particularly important when it comes to ensuring that vulnerable population groups such as elderly people, persons with disabilities, children and people living in rural and remote areas acquire the essential digital skills to participate in virtual worlds and should take into consideration aspects such as geographical location, gender, level of educational attainment and socio-economic background;

30. Adds, in this context, that digital literacy is of the utmost importance to ensure a safe and socially beneficial uptake and informed and responsible use of virtual worlds, to avoid user addiction, bias and discriminatory practices, to tackle disinformation, manipulation and abuse in the virtual environment and to promote democratic control;
31. Highlights the need to put in place effective educational measures to ensure broad literacy in relation to the virtual world among citizens and to upskill professionals in different fields, namely teachers, and to encourage and promote the development of European talent and technologies, while attracting more people, including more women, into science, technology, engineering and mathematics;
32. Recommends that the ‘virtual worlds toolbox’ intended for the general public, as outlined in the Commission communication, be developed further, in line with the recommendations of the Citizens’ Panel in order to help citizens better understand how to manage their virtual identities, their virtual creations, their virtual assets and their data, and to contribute to a comprehensive EU strategy for virtual worlds that is both sustainable and human-centric;
33. Welcomes, as noted by the Commission, the positive contribution of the EU open-source community in developing key features of virtual worlds, such as in relation to the use of distributed ledger technology and other technologies needed for the authenticity, management and security of virtual objects and identities;
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34. Instructs its President to forward this resolution to the Council and the Commission.