



EUROPE'S
VIDEO GAMES
INDUSTRY

ISFE reply to the European Commission's call for evidence: Initiative on virtual worlds: a head start towards the next technological transition

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Executive summary

- The 'metaverse' is still a concept under development, with the existence of many competing visions. As a nascent, and still largely undefined technology, the 'metaverse' should be allowed to develop until everyone can arrive at a workable and consensual definition. Any attempt to define the 'metaverse' *ex ante* is premature.
- ISFE strongly supports measures designed to enhance digital skills education, support measures for the video games sector, and a multilateral approach to standardisation on the 'metaverse' at a global level.
- The existing legal framework in the EU will already largely apply to the 'metaverse'. 'Virtual worlds' are not a new phenomenon for the video games sector, and elements of these will likely feature within the 'metaverse(s)'.
- Interoperability faces substantial legal and technical hurdles, and should not be legally imposed at such an early stage.

1. ISFE welcomes the opportunity to express its views on the topic of virtual worlds and the metaverse(s). In particular, ISFE welcomes that the European Commission is taking an innovation-focused approach, putting important topics such as skills and education in focus. Skills and education are strategic components if Europe wants to be competitive at a global scale in the innovations and technologies that will be spurred by virtual environments. Europe should strive to allow European-grown companies to become key players in future technological and creative innovation, where access to a skilled workforce will play an important role.
2. The Commission rightly acknowledges that the EU has future-proof legislation in place, by way of recently adopted or existing legislation. The EU's legislative acquis in the digital sphere already covers areas related to 'metaverse(s)', including:
 - In terms of consumer protection, the Consumer Rights Directive, the Unfair Commercial Practices Directive, the Digital Services Act and the Digital Content Directive ;
 - In terms of competition, EU Competition law and the Digital Markets Act;
 - In terms of copyright, the 2001 Copyright Directive and the 2019 DSM Copyright Directive;
 - In terms of data protection, the General Data Protection Regulation and the ePrivacy Directive;
 - In terms of cybersecurity, the NIS2 Directive;

Furthermore, the EU institutions are currently scrutinising proposals such as the AI Act, the Data Act, the Cyber Resilience Act, among others, which will have an impact on the function of virtual worlds once they are adopted.

3. The existing legal framework must be properly applied within virtual worlds, in all respects. An imperative for the video games sector, as for all creative sectors, is that IP rights will be properly enforced in virtual worlds. Member States must also ensure legal protection for technological protection measures, which are applied to copyright content (including video game content) to enable new means of enjoying content, and also the continued availability of injunctions against intermediaries whose services are used to infringe copyright.
4. Europe has the ability to lead in the area of virtual worlds: it has a strong creative and technological basis, but it should amplify efforts to support SMEs with innovation potential and draw benefits from existing talent and knowledge in the video games sector, where in particular, virtual worlds are not a new phenomenon. To ensure that companies remain innovative, progress and grow, they need access to a skilled talent pool. **A talent pool 'pipeline' takes time to achieve, and therefore a holistic approach and strategy is required, starting at primary and secondary school levels, encompassing higher education, where links between educational institutions and industry need to be established to ensure that there is a direct relationship between the supply and demand of and for skills.** Technologies such as VR, XR, game engines, haptics, but also expertise developed for and/or by the video games sector are key building blocks for digital skills and for the 'metaverse(s).

Virtual worlds in games

5. Virtual worlds are not a new concept for the video games sector: beginning in 1974, with the creation of *Mazewar*,¹ the notion of a virtual world began, albeit nowhere near the sophistication and popularity it eventually grew into. In the mid-late 1990s/early 2000s, with the advent of increased access to the Internet, MMORPG² titles such as *UltimaOnline* (1997), *EverQuest* (1999), *EVEOnline* (2003), *World of Warcraft* (2004), *Final Fantasy XIV* (2010), *The Elder Scrolls Online* (2014) became popular, and several of these games still retain substantial popularity today, decades after their release. In these games, with varying levels of detail, the player assumes the role of a character (often in a fantasy or science-fiction world) and takes control over many of that character's actions. MMORPGs are distinguished from single-player or small multi-player online RPGs by the number of players able to interact together, and by the game's persistent world (usually hosted by the game's publisher), which continues to exist while the player is offline and away from the game. Beyond MMORPGs, the breadth and availability of such permanent, immersive, and shared experiences have increased in recent years: the online platform *Roblox* (2006), games such as *Fortnite* (2017), and *Animal Crossing: New Horizons* (2020) have become increasingly popular.
6. Video games and online platforms, especially online games such as those mentioned above, offer a space for all to communicate and exchange, regardless of their origin, age, or status. They often lead to the development of substantial communities, and generally enjoy substantial bridging

¹ [Maze War, the First Networked 3D Multi-User First Person Shooter Game](#)

² Massively multiplayer online role-playing game

social capital,³ promoting social cohesion, as recent research illustrates.⁴ Studies have found that video games can contribute to social well-being by providing social interaction and a sense of community, in which players can work together to investigate, compete, and solve problems. During the pandemic, when other forms of shared entertainment were scarce, video games provided virtual socialisation and a sense of routine, allowing players to stay in touch with friends and family while being physically isolated.⁵ These findings are echoed by the UK National Literacy Trust,⁶ which found in 2020 that video games encourage the development of positive communication and experience-sharing among children, also in 'real life': 3 in 4 (76.3%) of UK children talk to their friends about video games compared to only 3 in 10 (29.4%) who discuss books. The study also notes that UK children said that playing video games helps them to build social connections both in 'real life' and online.

7. These virtual worlds are creating – and will continue to create – new forms of engagement, not only with video game players but also with non-video game players.

The European Commission identifies a number of building blocks of the metaverse. ISFE will address these in the coming paragraphs, focusing on what ISFE believes are the most important areas, as far as the video games sector is concerned.

Principles and actions for people's empowerment in virtual worlds: safety, responsibility and digital identity.

8. ISFE welcomes the adoption of a principled approach for people's empowerment in virtual worlds. Our sector understands the importance of establishing practical measures and safeguards to ensure that people in digital environments can engage safely and in a responsible manner.
9. The European video games sector has undertaken a number of initiatives, such as establishment of the PEGI system, which goes beyond mere compliance with the law and sets self and co-regulatory standards to create a safer digital environment and to empower parents and carers through the use of parental control tools and through family dialogue. The PEGI system is part of the industry's commitment to protect minors and encourage responsible behaviour where children are concerned. Signatories of its Code of Conduct must ensure that online environments are free of unsuitable content or conduct.
10. The video game industry is also at the vanguard in the development of sophisticated and robust parental control tools on a variety of devices and software applications. These tools allow parents, for instance, to set up accounts for their children and to confirm user age and identity for logged-in or subscription-based services. They support a direct child-parent interaction encouraging parents to accompany their children in their online activities and to help them engage safely and securely in the online world.

The call for feedback points to the importance of creating the right environment for investments in research, innovation, deployment, integration and scaling up of virtual worlds-enabling technologies, facilitating access to finance for EU start-ups/SMEs and nurturing the EU cultural and creative sectors.

³ Bridging social capital is a type of social capital that describes connections that link people across a societal divides (such as race, or class, or religion). It is associations that 'bridge' between communities, groups, or organisations.

⁴ [Online-only friends, real-life friends or strangers? Differential associations with passion and social capital in video game play; The role of social identity and online social capital on psychosocial outcomes in MMO players](#)

⁵ [Online Gaming and Prolonged Self-Isolation: Evidence from Italian Gamers During the Covid-19 Outbreak](#)

⁶ National Literacy Trust – [Video games and literacy](#)

11. As mentioned above, video games companies and technologies originating from the sector are likely to play a key role in the development and roll-out of the metaverse. It is therefore essential that the innovative potential of video games companies is adequately supported in EU and national public support schemes, including through existing instruments such as Horizon Europe, Digital Europe, InvestEU or national recovery and resilience plans.
12. These R&D and innovation schemes are important in supporting strategic partnerships between public institutions and private operators. The video games sector has a track record of collaborating with public institutions and other private entities to leverage the technological innovations it brings. For example, a [collaboration](#) between Epic Games and the Swedish Department of Transport allowed the latter to create a virtual twin of the region surrounding Stockholm, allowing for the visualisation of the impact of certain transport policies on the environment, the population, and the State.
13. Today's digital economy is already witnessing the use of virtual technologies, particularly in the area of video games but also increasingly in the business environment through use cases such as virtual glasses, digital twins, IoT, etc. In our view, virtual technologies can play a key role in accelerating the broader uptake of digital applications in Europe and can therefore contribute to Europe's path towards its 2030 Digital Decade targets. Nevertheless, this uptake may well be gradual, as the technologies required to achieve a fully-fledged and mature metaverse are still being developed and will need some time to be deployed and become widely available. The metaverse will require countless new technologies, protocols, companies, innovations, and discoveries to work, and it will consist of many elements and opportunities.
14. Strengthened support for the video games sector can be achieved through:
 - a. The expansion of R&D funding instruments to cover video games. Video games are an under-exploited driver of innovation in ICT: e.g. cloud computing, cryptology, network technology, digital business models, user interfaces, virtual and augmented reality etc. Consequently, ISFE is of the opinion that these public support opportunities should also apply to video games. Additionally, video games and immersive experiences should be referenced in Horizon Europe calls that may prove relevant for the sector.
 - b. Awareness-raising of existing and upcoming EU innovation schemes: Many video games companies are unaware of the existence of certain R&I support schemes, or of the rules applicable to the attribution of funding and reporting, such as the Horizon Europe programme. The European institutions have a role to play in conducting strategic discussions with Europe's video game stakeholders to identify areas of critical importance for innovation, and to ensure that EU R&I instruments are accessible and easy to apply for by any appropriate company, including SMEs, as these may lack resources for complex application processes.
 - c. The ability of Member States to provide support measures to their local sector, and adequate support to innovation under Creative Europe: A review of the General Block Exemption Regulation (GBER) to include video games, which is currently the only cultural sector not included, would give flexibility to Member States to support the sector in a more efficient manner. This is detrimental for games studios in countries where no specific public support is yet available. This also applies to reviews of already approved state aid, such as when France had to notify the European Commission on its review of the Credit d'Impôt Jeu

Video in February 2022. Including video games as a category of its own in the GBER would facilitate public support for the sector, bringing certainty to studios present in Member States currently considering adopting support measures, as well as providing the right incentives for value and innovation to remain in Europe.

The importance of skills development to support EUs talent pool

The Commission stresses the development of the business case for safe, sustainable and fair virtual worlds, and how these can help boost the sustainable competitiveness of our industries, and what it takes to promote an effective uptake of virtual world solutions by EU businesses and the public sector. In particular, it mentions that the initiative could include key cross-cutting enablers such as the appropriate governance models to ensure EU leadership in virtual worlds development and standardisation, nurturing the talent pool needed and support skills development for technology specialists and creators, as well as the need for structured and sustained foresight of key technologies.

15. New emerging technologies require new specialist digital skills. Being successful is highly dependent on the ability to access a strong and diverse talent pool allowing the recruitment of a skilled workforce for every unfilled position. Our sector is therefore strongly committed to improving the provision of digital skills in education and training, in particular by upskilling teachers through adequate training and support, and ensuring that education institutions foster the digital transition and maintain a continuous dialogue with industry stakeholders.⁷
16. To illustrate this point in practice, if current growth trends continue and nothing is done to increase the talent pool through education, [Sweden will be lacking 25,000 game developers by 2031](#), according to the Swedish trade body for the video games sector, Dataspelebranschen.⁸ In terms of job numbers, Sweden is one of the major hubs for video game development in the EU alongside Germany, Poland, France, Spain and Romania.
17. The growing need for, and chronic shortage of, advanced and specialist digital skills are a major concern for many digital industries, including ours. ISFE therefore welcomes the draft proposals for Council Recommendations on “the key enabling factors for successful digital education and training” and on “improving the provision of digital skills in education and training”, as well as the adopted Recommendation on Blended Learning as important tools that will help Member States to ensure universal access to inclusive and high-quality digital education and training, and address shortages in information technology professions by adopting inclusive strategies. **We call on the Commission to complement these Recommendations with measures to facilitate the recruitment of worldwide talent in Europe, for instance by reducing immigration bureaucracy or developing a European Strategy for remote working conditions.** This will ensure that Europe can attract the best talent, a key aspect in securing leadership in the development of virtual worlds.

The consultation calls for an ecosystem based on openness, interoperability and EU values, indicating that it will take a proactive approach for the EU to shape the global development of this rapidly emerging ecosystem based on openness, interoperability and EU values. The texts indicate that parallel work on a performant and resilient infrastructure for connectivity, will be undertaken.

⁷ European Schoolnet – [Games in Schools](#)

⁸ Dataspelebranschen – [Talent, Education and the Art of making Games](#)

18. ISFE understands the European Commission's intention to take a proactive approach to shape the development of the ecosystem of virtual worlds based on the EU's values, as well as promoting the guiding principles of openness and interoperability. **We strongly encourage the European Commission to take a coordinated approach with the EU member states as regards contributing to important international standardisation efforts, such as ['The Metaverse Standards Forum'](#), as well as other related initiatives within the OECD and other international organisations such as the ITU and ISO.**
19. One of the supposed characteristics of an eventual 'metaverse' is interoperability, meaning the ability for users to move across and between digital worlds with relevant data, digital assets and identities. The question whether such interoperability is desirable in every circumstance is a matter yet to be determined. **ISFE cautions against the legal imposition of interoperability in virtual worlds, particularly in their early stages, as this could greatly hamper innovation.**
20. It should also be noted that 'virtual worlds' in the field of video games have been, and continue to be, a key driver of demand for Internet access. This reinforces the notion that content, and connectivity go hand in hand in a virtuous cycle, rather than one free-riding off from the other. It is important that network infrastructure continues to be deployed, both by private and public actors, as it is key to ensure the EU's metaverse ambitions can be realised. Moreover, the uptake of new technologies such as the metaverse will likely not happen overnight, but rather in a gradual fashion. Therefore, ISFE does not anticipate an explosive traffic growth on digital networks. This is in accordance with trend of stabilisation or even slow-down of traffic growth on telecommunication networks as currently established (data traffic growth on fixed lines has been declining since 2015 - with a glitch during the pandemic - and was below 20% in 2021⁹ and mobile traffic growth rates have slowed down to below 10% in Western Europe).¹⁰ Current FTTH and mobile networks should for the foreseeable future be able to deal with the workloads.
21. Therefore, **ISFE's members do not support the introduction of network fees in the EU**, as we believe this will harm content innovation relating to the metaverse and innovation relating to network infrastructure, to the detriment of EU consumers and citizens.
22. Moreover, we see that the majority of data traffic goes through fixed broadband and Wi-Fi.¹¹ There is no reason why this should be different for virtual technologies. As a result, we are concerned by the fact that the weakest connectivity link for realising greater uptake of virtual technologies will be in-house connectivity, and as such, next generation Wi-Fi will have a significant role to play in facilitating the delivery of VR and AR based services on-premises. **We therefore strongly plead for the EU to continue allowing usage of the upper 6GHz band for unlicensed spectrum, and to defend Wi-Fi usage at WRC23.** Greater usage of unlicensed spectrum will also further help telecom operators to limit capital expenditure.

⁹ Communication Chamber – [Patterns of fixed traffic growth, 2021](#)

¹⁰ Ericsson – [2022 Mobility Report](#)

¹¹ Cisco – [Annual Internet Report \(2018–2023\) White Paper](#)

About ISFE

The [Interactive Software Federation of Europe](#) (ISFE) represents the video games industry in Europe. ISFE's membership comprises 19 major publishers and national trade associations in 15 countries throughout Europe. Our national associations in turn represent hundreds of games companies across Europe that produce and publish interactive entertainment and educational software for use on personal computers, game consoles, portable devices, smartphones and the Internet. The video games sector represents one of Europe's most compelling economic success stories: In terms of consumer spending, the European video games market was worth an estimated €23bn in 2021. The industry now includes over 5,100 European game developer studios and publishers that generate an estimated combined annual turnover of more than €12bn, and employs over 90.000 people across the continent.

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