5RIGHTS FOUNDATION

5Rights response to consultation on "*An EU initiative on virtual worlds: a head start towards the next technological transition*"

Children have specific rights that apply wherever they are. Digital technologies, including for virtual worlds, need to be safe and respect children's rights, by design and default. The legislative framework governing the design, development and operation of virtual environments must be comprehensive, tech-neutral, rights-centred and outcomes-based. Enforcement must be strong and consistent. The European Commission should assess any gaps in the existing EU regulatory environment to ensure all providers and operators of any products or services that are likely to be accessed by or impact on children in a virtual environment incorporate child-centred design, with effective and streamlined oversight and accountability mechanisms. This should include a one-stop-shop EU regulator for systemic breaches of fundamental rights in virtual environments.

Context

As virtual reality, augmented reality, extended reality, metaverses and other immersive technologies develop and become more common and accessible, children increasingly use and/or are present in these virtual worlds. Consequently, children are increasingly exposed to several risks arising from the development and uptake of these technologies, as well as at risk of missing access to their potential benefits and positive repercussions.

Research estimates that the metaverse may generate up to $800 million by 2024 and $5 trillion in impact by 2030 – the equivalent of the Japanese economy.[1] There are however many indications that virtual worlds pose specific risks to the safety, security and privacy of users, notably of children. In a recent study, the European Parliament identified several risks posed by the metaverse to children, notably in terms of misuse of their personal data, "especially worrying" mental and physical health implications, risks to their social relationships and exposure to abuse, harassment, bullying, racism and pornographic content.[2]

Against this backdrop, **children's rights and their best interests, as recognised in the UN Convention on the Rights of the Child and elaborated in its General comment 25 on children's rights in relation to the digital environment**, as well as enshrined in several EU policies and legislations such as the General Data Protection Regulation (GDPR), the Digital Services Act (DSA), the Audio-visual Media Services Directive (AVMSD) or the

[1] *Metaverse may be $800 billion market, next tech platform*, Bloomberg Intelligence, 2021, available at https://www.bloomberg.com/professional/blog/metaverse-may-be-800-billion-market-next-tech-platform/ ; and *Value creation in the metaverse*, McKinsey Company, 2022, available at https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/value-creation-in-the-metaverse

[2] European Parliament Research Service, "Metaverse Opportunities, risks and policy implications", available at https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)733557

European strategy for a Better Internet for Kids (BIK+), **should be prioritised with respect to commercial interests in the development, regulation and governance of virtual worlds**.

Risks

The digital world has not been developed with children in mind and poses a wide range of systemic risks to their safety and the enjoyment of their rights.[3] The persuasive design features that characterise most of the services where children spend most of their time[4] have the potential for far greater impact in virtual environments – delivering more data, reach and engagement for corporate entities, and more invasive and impacting experiences for all users, and especially children.

The known risks for children in virtual environments include:

Addiction: the most successful online platforms are addictive by design, aiming to extend user engagement. Children are particularly susceptible to these techniques and studies consistently find around 40% of children saying they are addicted to the internet. Immersive technologies by their very nature heighten the disconnect between users and the offline world and, unregulated, are likely to amplify the growing trend of child addiction to digital products and services.

Heightened sensory experience: the use of haptic technologies (beyond text and image interaction) creates a different sensorial experience with the potential to intensify feelings of emotional and physical distress e.g. if a child's avatar is physically assaulted or if a stranger whispers into their avatar's ear.

Unsolicited/unwelcome interactions: Cases of users receiving unsolicited attention and invasions of their avatar's personal space have been widely reported. For examples, it was discovered that 'Nazi sex parties' could be accessed by children on Roblox,[5] the UK police reported cases of child sexual abuse in the metaverse,[6] and research has shown reports of widespread child sexual exploitation and abuse in virtual worlds.[7]

Reporting and moderation: It is more difficult to moderate 3D/virtual environments and there are questions around the ability of users to document/track instances where something goes wrong for reporting purposes.

Data collection and tracking: If interconnected virtual worlds require an interplay of assets, experiences, and common APIs, data sharing may be the foundation upon which they operate. Open platforms where multiple companies can access user data and device APIs present many threats to data privacy. Experiences in virtual worlds are also likely to generate more data about user's haptic information (touch, voice, movement etc).

Profiling: Access to sensitive data, such as emotional reactions and haptic information, could lead to new and intrusive ways of profiling, with potentially very harmful impacts.

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[3] See for example https://www.riskyby.design/introduction

[4] See 5Rights, Disrupted Childhood: The Cost of Persuasive Design: https://5rightsfoundation.com/uploads/Disrupted-Childhood-2023-v2.pdf

[5] "*Nazi sex parties hosted on children's game Roblox*", The Times, 16 February 2022, consulted at https://www.thetimes.co.uk/article/nazi-sex-parties-hosted-on-childrens-game-roblox-s9vktzxx0

[6] "*Paedophiles are abusing children in the metaverse, say police*", The Times, 22 February 2022, consulted at https://www.thetimes.co.uk/article/paedophiles-are-abusing-children-in-the-metaverse-say-police-70jrvfd2m

[7] Gaming and the Metaverse: The alarming rise of online child sexual exploitation and abuse within the new digital frontier - November 2022, UNICRI, available at https://unicri.it/Publication/Gaming-and-the%20Metaverse

Avatars and anonymity: virtual worlds are inhabited by avatars, but there are questions around identity verification/pseudonymity and 'real age' rules. Police are already seeing evidence of the metaverse providing an environment facilitating and encouraging child sexual abuse and are concerned about groomers using the metaverse to identify and target children.

Body image and mental health: The use of avatars is likely to exacerbate problems associated with the 'filter' effect of social media beautifying features, creating unrealistic body ideals and pressure to look a certain way, which is particularly dangerous for children, as well as increasing exposure to dangerous content that's related to suicidality.

Behavioural/cognitive effects: Virtual reality has a 'time warp' effect leading to concerns about excessive use. The effects of VR and other virtual worlds on cognitive development in children are not yet known.

Commercial/economic exploitation: There are concerns that the transnational nature of virtual worlds will undermine national employment protections, which will be harder to enforce.[8] The metaverse may pose legal dangers for workers, including children who could exploited for their labour.

Physical impact: Many users experience motion sickness when using VR headsets and reports of dizziness, nausea and headaches, eye, head and neck fatigue are common. If used to excess, the metaverse can reduce physical activity and lead to a rise in obesity and other physical health problems, which can create a vicious cycle where the person then wants to spend more time "escaping" the real world.

It should however be noted that the most important risks to children posed by virtual worlds may still be unknown and unpredictable. It is crucial for the European Commission to recognise that this is an emerging technology that should not be regulated based on a prediction and/or an exhaustive list of risks but based on a pre-emption of risks by design.

Priorities & Recommendations

As prescribed by article 24 of the Charter of Fundamental Rights of the EU, all action of the EU should be informed by the respect, protection and promotion of children rights, which are codified in the UN Convention on the Rights of the Child as elaborated in its General Comment 25 on children's rights in relation to the digital environment. These instruments a should therefore inform and be the framework for the development of all initiative on virtual worlds, which should recognise the specificity of children, their needs and vulnerabilities like other EU policies and legislation on the matter, notably the GDPR, the DSA, the AVMSD, the proposed AI Act and the BIK+.

The Final Recommendations of the European Citizen's Panel on Virtual Worlds identify eight values and principles for European virtual worlds. These include: the need for virtual worlds to be human centred and hold the values of health, transparency, inclusion, education and literacy, as well as safety and security at their core. However, children are only mentioned once throughout the 23 recommendations (and simply as one example among other vulnerable groups). Children should instead receive special consideration due to their specificities: they have specific rights, which respond to their specific needs and vulnerabilities. Children's bodies and brains are in development, thus so are their

[8] Metaverse vs employment law: the reality of the virtual workplace, 7 February 2021, The Financial Times, consulted at: https://www.ft.com/content/9463ed05-c847-425d-9051-482bd3a1e4b1

sense of reality, agency, autonomy and responsibility. This is why their rights are additional to the human rights on which they are based, but are equally universal, inalienable, indivisible, interdependent and interrelated. Therefore, the EU initiative on virtual worlds should at least complement the Panel's recommendations as follows:

- Human-centred virtual worlds should also be required to be child-centred, recognising the presence of children in these environments and prioritising their best interests.
- Safety and security should not only be at the centre of European virtual worlds but also be ensured by designed and by default in all virtual worlds likely to impact or interact with children.
- Health as a pillar of the development of virtual world should include specific considerations regarding the development of children.
- Transparency as a principle of virtual worlds should always be upheld through the provision of age-appropriate information, as well as access to algorithms and data (broken down based on age or age groups) for regulatory oversight.
- The principle of inclusion should consider the needs of children in all their diversity, including based on their developmental stages.

Furthermore, the initiative will need to go beyond all these recommendations in order to ensure that European virtual worlds deliver on their potential for children and cater for their rights and needs. Since with this initiative the EU seeks to "foster a common approach to the virtual worlds and Web 4.0", it should ensure that children's rights are prioritised in its vision and that such common approach ensures the highest standard of safety, security and privacy for children, by design and default, as well as seeks to foster age-appropriate applications and experiences in virtual worlds, able to promote children's rights with regards to their education, empowerment, participation and play. Any EU approach to virtual world should in particular:

- Ensure consistent and coherent application and enforcement of existing legislation protecting children's rights online with regards to children's presence in virtual worlds, notably the GDPR, the DSA and the AVMSD, as well as applicable consumer protection law such the General Product Safety Regulation and the Unfair Commercial Practices Directive. This should be done primarily by:
    - Ensuring that there are no gaps, loopholes or exceptions (e.g. based on size, intended audience, type of service, public/private governance, etc.) in EU rules applicable in and to virtual worlds, and that gaps and/or inconsistencies in enforcement and application of existing rules – if any – are duly closed through swift regulatory action at EU level.
    - Ensuring that oversight and enforcement is streamlined under an EU-level one-stop-shop regulator, with a strong mandate to proactively investigate and address systemic breaches of fundamental rights in virtual environments. Users, including children, should know where to turn for redress. In instances involving violations of children's rights, the precautionary principle should apply and the burden of proof for compliance should be on the provider or operator, not the child or guardian.
    - The European Commission should assess any gaps in the existing EU regulatory environment to ensure all providers and operators of any products or services that are likely to be accessed by or impact on children in a virtual environment incorporate child-centred design, with effective and streamlined oversight and accountability mechanisms. This should include a one-stop-shop EU regulator for systemic breaches of fundamental rights in virtual environments.

  - Ensuring the compliance of companies and entities working in the metaverse with existing legal frameworks, and/or their update as appropriate. In particular, in compliance with the DSA, this would require at the very minimum providers of digital services to write their terms and conditions in a way that children can understand and all online platforms to ensure a high level of privacy, safety and security for children using their services.

- Require providers and operators any virtual worlds or features thereof likely to be accessed by or impact on children to prioritise children's rights and the best interest of the child over commercial interests.
- Require providers and makers of virtual worlds to commit to and uphold the highest available standards in terms of age-appropriate design of online services.
- Require providers and makers of virtual worlds to assess and recognise the presence of children on their service and adopt safety by design principles in the development of their products, notably ensuring that:
  - all users under 18 are considered as children in virtual worlds;
  - all children's rights apply in virtual worlds, wherever the child is – and not only within online environments intended for them;
  - protections for children's rights include risk assessments covering all risks (the 4Cs: Content, Contact, Conduct, Contract) and risk mitigation plans;
  - the responsibility for safe design lies with the provider – not children, parents or carers;
  - any safety by design requirements are tech neutral and outcome based – focused on results and allowing the flexibility that companies may require to ease compliance and innovate.
- Any EU measures, principles and actions empowering people to engage in a secure, confident and responsible manner, so that they benefit from virtual worlds which respect EU values and rules, should provide children with adequate protection of their specific rights, notably their digital identity, data, assets, cultural diversity, equality and non-discrimination, as well as the promotion of their right to education, participation and play.
- Ensuring that the need to develop virtual worlds that cater for the vulnerabilities of needs of children is considered in measures encouraging investments in research, innovation, deployment, integration and scaling up of virtual worlds and their enabling technologies.
- Ensuring EU leadership in virtual worlds' development, standardisation and interoperability by fostering the uptake of, and compliance with, EU-wide age-appropriate design codes and other industry standards seeking to guarantee the highest level of safety and privacy online for children throughout the value chain.