



# creating certainty for the metaverse

## POSITION PAPER OF THE SWISS METaverse ASSOCIATION ON LEGAL, TAX & REGULATION IN THE METaverse

April 2024 | This position paper is also  
available in Italian, French and German.

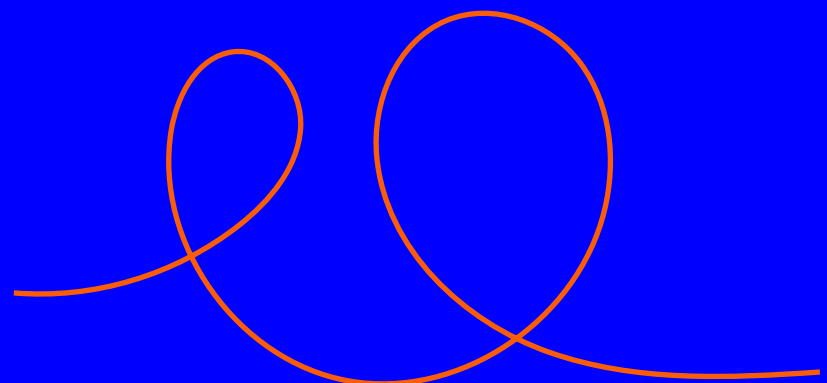
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# 1

# Introduction

The metaverse is a new digital layer applicable to any business, government, and social activities. It continues the seamless convergence of our physical and digital lives. It creates large, interactive, virtual spaces where persons can work, play, relax, transact, and socialize, thereby creating virtual communities.

The potential value of the metaverse for business and commercial purposes is estimated to reach ca USD five trillion by 2030 according to a report by McKinsey.<sup>1</sup> It is therefore a non-negligible growing and ineluctable reality.

As a working definition we shall revert to a relatively established version by Dr Richard A. Bartle for virtual worlds: "Persistent, computer-mediated environments in which a plurality of players can interact with the world and each other" (Bartle, 2009). Taking this into 2024, likely only the term player should be replaced by a more neutral expression.<sup>2</sup>

Today, the metaverse, being, ideally, a multitude of interoperable virtual spaces, is the latest step in the broader digitalization process. It differs from existing digital social spaces, sometimes referred to as Web 1.0 and Web 2.0, in that it creates 3D spatial representations, with expressional representations of actors (so-called "avatars"), which can be human controlled, or automated via artificial intelligence (AI). The metaverse is accessible 24/7 through technological devices, and develops close interdependencies with other technologies and innovations, such as cloud computing, quantum, VR/AR, artificial intelligence, blockchain etc.

Given the complexity of the theme, but also the strong correlation with other complex sets of technologies, taking AI or blockchain as an example, already a lot of regulation has been formulated or is in the process of being formulated across the world that is relevant to the metaverse.

As such, the authors do not advocate to reformulate all these topics into a new, all-encompassing metaverse regulation, but to provide a clear framework for policy makers and regulators to create legal certainty for the metaverse protecting participants, consumers, developers, and intermediaries involved in digital interactions in Web 2.0 and Web 3.0 solutions and data-driven economies, raise awareness of its need, identify key interdependencies, and also advocate for required regulation whenever there are white gaps that need to be filled.

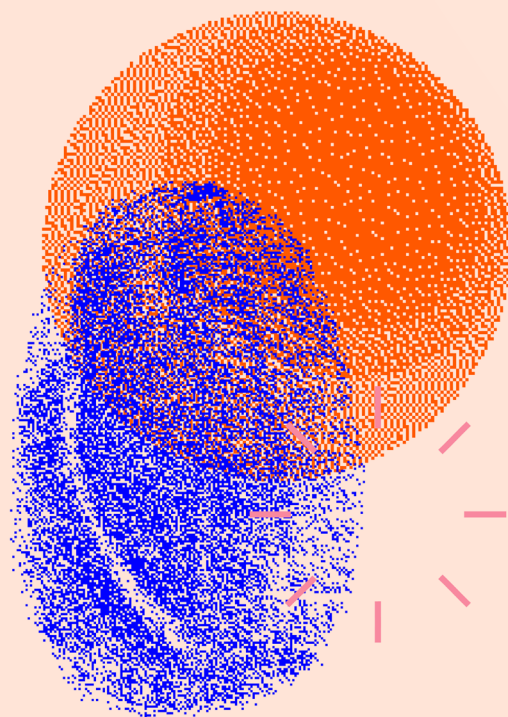
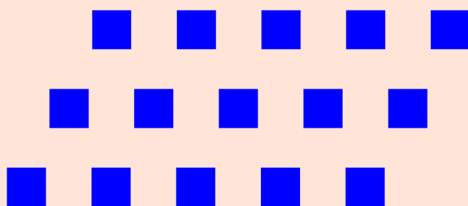
In this paper, we address the questions of whether, how and by what principles the legal and regulatory certainty for the metaverse should be created in Switzerland, both:

- i) to enable the use and development of sustainable and thriving metaverse projects and companies in Switzerland, and
- ii) to respond to potential risk exposures and dangers for participants and the broader society.

We suggest a "taskforce" at the Federal level, and specify short mid-term actions, to ensure that Switzerland anticipates metaverse developments, and turns them into enablers of positive economic and social developments.

The authors are representing the Swiss Metaverse Association (SMA), a Swiss non-profit public-private body, comprising a good sample of exemplary Swiss blue-chip companies, technology start-ups, law firms, public agencies, but also research and academia.

A draft version of this paper was reviewed by members of the working group "Regulation, Tax, and Legal Policy" and other valued members of the association as well as the association board, in February 2024. The authors would like to thank everyone for providing input and guidance.



# 2

## Principles for a Swiss Legal and Regulatory Framework

The evolution of the metaverse is a complex process, with different facets and various influences. The authors suggest a principle-based framework for regulation of the metaverse that is solidly based on a set of commonly accepted norms and principles in the Swiss legal system.

**Digitalization of Law** In a first priority, the basics of a “digitalization of law” need to be addressed, so that digital interactions become legally binding and can consequently effectively be enforced (i.e., via procedural and criminal law) or against the state (i.e., constitutional law). As a starting point, the very fundamental discussion whether data and tokens can be owned according to property law (Sachenrecht) and whether such assets are protected by procedural law, criminal law and constitution is required. In addition, there are also open questions in inheritance, contract, and corporate law regarding digital interactions. And finally, particularly in an international context, questions relating the application of law and place of jurisdiction have not been addressed yet.

**Sustainability** Switzerland should be recognized as the jurisdiction where sustainable metaverses are promoted and supported. It should be recognized as a globally leading market and jurisdiction, where the best and most successful business and projects thrive, while speculative and opportunistic metaverse initiatives, or initiatives without a positive economic and societal impact, are not welcome and discouraged.

**Inclusiveness** Swiss metaverse regulation needs to support and ensure that all activities in virtual worlds are being non-discriminatory and inclusive, i.e., allowing all citizens, who wish to access the metaverse to do so in a democratic and secure way respecting the rights of the individual, including its privacy.

**Responsibility** Just like with any digital content in Web 1.0 and Web 2.0, operators of metaverses need to assume full accountability for content, activities and actions therein. The regulatory framework should always be very clear as to who is personally and functionally accountable or responsible, and for what content or action, even in complex interactions involving interoperability.

**Evolutionary** Switzerland should pursue a framework which is integrated to the extent possible in the current laws and regulations, that is no metaverse acts. Adaptations and complements should be concrete in nature and driven by the recognition of concrete issues and the desire to provide an impactful solution.

**Pragmatism** Switzerland should pursue a framework which is principle-based and interpretative, allowing for pragmatic solutions without over-regulation and too much complexity, thereby creating a highly business and innovation friendly environment.

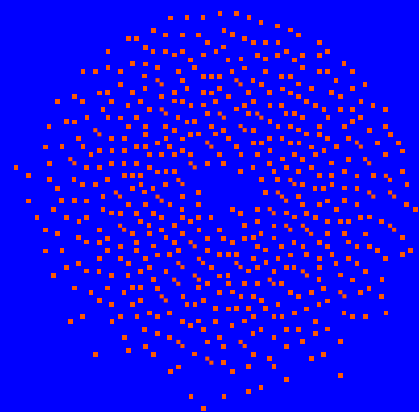
**Comprehensiveness** Switzerland should embrace an inclusive view of a metaverse framework, one that considers civil, penal, financial, tax and other laws, compliance issues, ethical and governance dimensions, the regulatory policy process, and self-regulation.

**Constructive** Switzerland should aim to establish legal certainty to encourage metaverse initiatives and facilitate entrepreneurial and users’ access to metaverse solutions.

**Tech Neutrality** In providing a legal framework and regulation for the metaverse, a strict neutrality vis-a-vis providers of technology and solutions should be maintained.

**Privacy/Confidentiality** Switzerland should anchor any metaverse-related regulatory initiative in the traditional values of preserving privacy - or confidentiality - and highest security.

**Prudential** The framework we advocate is one prudential in nature, that is one that puts great emphasis on preventing damage by offering guidance and discussion availability to entrepreneurs and players, as opposed to limiting the regulatory action on enforcing penalties ex post.



# 3

## Application Areas with Transformative Impact

From today's vantage point, four areas seem in focus for any metaverse related application and should be considered, when analyzing activities therein and current state of regulation versus desired future state.

### a

#### Private Activities, Communities & Leisure

While big tech companies have emphasized the strategic importance of the metaverse for their business, the origins and most initial use cases come from gaming and leisure activities. From this angle, much innovation and new use cases can be expected over the coming years. At the same time, in this area the complexity of regulation is very high, for example when leisure activities suddenly have a financial and business context or underage children create or participate in online economies.

### b

#### Business

Large scale metaverse applications in business are still scarce. But here clearly most investments are being made and growth rates are increasing. Some industries are adopting faster than others, for example in the luxury and fashion industry most of the leading brands have formulated their metaverse strategies and are amid implementations. Also, financial services is equally a sector with early adoption. It can be assumed that many other industry sectors over time will adopt metaverse applications and strategies.

### c

#### Public Sector

There are already today several use cases for political applications of the metaverse, from promotion, citizen engagement and dialogue, communal and local community building, and others. It is likely that metaverse solutions will be increasingly used also in the public sector, for political processes and administration.

### d

#### Education

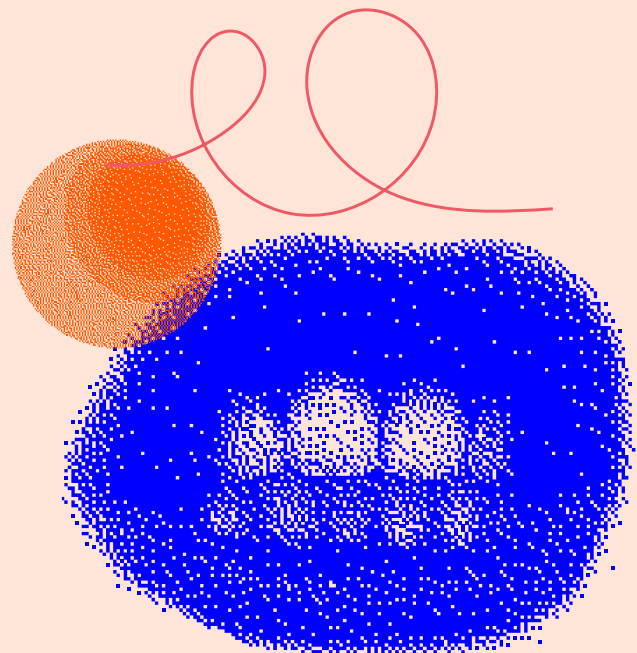
While Education extends both over the private business and public sector, the authors would still like to single it out as a separate category for metaverse applications in the future. The educational sector can benefit significantly from delivering education across social, geographical and - with the help of artificial intelligence - even language barriers.

# 4

## Relevance of Existing Regulation in Interdependent Technology Fields

Successful applications of metaverse are building on several relevant technologies, many of which come with their own set of regulations and challenges. Understanding these and considering both functioning frameworks, but also potential loopholes and gaps, form an integral part of a comprehensive regulation of the metaverse. Only a few key interdependencies are highlighted here:

- **Artificial Intelligence:** A complex and controversial area to regulate. First attempts have been made in many jurisdictions, but likely more work will be required. Given the strong interdependency with the metaverse, the AI regulation needs to be closely considered and applied to regulation of virtual worlds, where AI will be used for data mining, user-specific customization of content, generative content and populating the metaverse via automated bots/avatars (also called “non-player characters”).
- **Digital Business & Services:** Providing services via digital channels has been an area of regulation for the past 20 years. Initially the key focus was on eCommerce (selling physical goods via the Internet), but increasingly digital sale of digital goods, e.g., streaming services or paid content services, but also real-time advisory are becoming prevalent. Should such services be offered in metaverses, the relevant regulations apply.
- **Cloud & Edge Computing:** While today considered a standard, there are still several open issues, particularly around sensitive data, privacy/confidentiality of data, geolocation, and storage of data, that are very relevant for metaverse regulation. All metaverses are built on cloud storage, hence cloud and edge computing form one of the infrastructure layers for this new technology.
- **Blockchain & Digital Assets:** Not too long ago, this area was an almost unregulated space. Over the past five or six years, however, most of the jurisdictions, under the overall supportive stance taken by international regulatory bodies, have introduced legislation in the areas of blockchain and digital assets, including a comprehensive and much lauded Distributed Ledger Technology (DLT) Law as regulatory frameworks in Switzerland. At the same time, the new regulation has left various elements open, e.g., a proper delineation between civil law and financial infrastructure regulations and created numerous issues for the application of AML rules.
- **Gaming & eSports:** While the gaming sector has become a multi-billion CHF industry, the level of regulation is still relatively low, apart from age restrictions (PEGI, ESRB) and of course interesting legal battles around access to digital platforms and online shops, focusing strongly on commercialization strategies in virtual spaces.
- **Virtual & Augmented Reality:** VR and AR devices will become an important gateway into metaverse applications. While Meta, HTC and Apple have a fair share of the market, more solutions will be available over the coming years, while the devices will become better and cheaper, which in turn drives adoption. The recent launch of Apple’s new device shows that several regulatory questions are associated with these devices: When is it not appropriate to wear a VR/AR device? Do people have a right to know, if someone is recording or broadcasting with a device, while wearing it?
- **Quantum Computing & Supercomputing:** The emergence of large metaverse worlds, paired with embedded AI applications, calls for more computing power. With quantum getting to advance faster than it was predicted three to five years ago, we will soon have significantly stronger computing power to fuel large scale metaverse applications. At the same time, these areas are still very new and globally only few suggestions around regulation have emerged, predominantly around who may use computing power, and to what purpose. It is likely we will see more regulations here as well arriving in due time.



# 5

## Key Regulatory Focus Areas for the Coming Three to Five Years

While it is difficult to predict the exact speed and path of adoption of such a complex area as the metaverse, in the view of the authors there are several focus areas that need to be assessed and addressed as a matter of priority to create a strong metaverse legal and regulatory framework. The following list is not meant to be exhaustive but indicates the potential scope.

- **Digital Interactions:** Digital interactions need to become legally binding and effectively enforceable (i.e., via procedural and criminal law) or against the state (i.e., constitutional law). In this regard, there are still a lot of open questions in property, inheritance, contract, and corporate law regarding digital interactions.
- **Education Programs/Standards:** The conditions for the creation of a sustainable and attractive metaverse environment include the promotion of talents in metaverse matters, and the development of balanced awareness at the level of the users/consumers concerning the opportunities and the challenges of operating in the metaverse.
- **Data Privacy:** Metaverse workers are naturally subject to enormous personal data collection opportunities from the metaverse operators. Rules are needed to decide how to limit or not such collection opportunities and the use of collected data. The same issue concerns the much bigger population of users/consumers of metaverse.
- **Intellectual Property:** Operating a metaverse requires legal certainty concerning IP-related aspects such as protection of brand, patents, and copyrights, which should ideally receive a protection similar to the one prevailing in the current business universe.
- **Taxation:** Transactions in the metaverse, particularly when executed in cryptocurrencies, raise the issue of their taxation (for instance VAT and its reporting). Financial transactions imply a separate set of taxable events. Revenues gained in the metaverse which are spent in the metaverse raise the question of their taxation (taxable income, reporting). Wealth accumulated in the metaverse (e.g., land, property) raises the problem of how to integrate it in the taxable wealth of the real person behind the avatar. Cross-border aspects cut across these categories.
- **Digital Identity:** The metaverses raises the issue of protection of the digital identity of the avatars against theft and hijacking. The creation of deep fake avatars, and consequent identity theft, is arguably easier in the metaverse than in the real world, and those deep fakes can commit all sorts of illicit activities, such as extortion. We believe the solution is not only technical but foremost regulatory in nature, for instance through strong data confidentiality programs and protocols. Also, questions of criminal and civil liability are connected to the upcoming of digital identities.
- **Legal Entity & Licensing Regime:** We are familiar with the incorporation and licensing process of companies in the real world. How does this process translate or apply to the creation of companies in the metaverse? There may be unforeseen issues that need to be regulated to maintain also in the metaverse business environment a level playing field compared to current reality, and the necessary safeguards characterizing the current real-world process. There may be a need for action also in relation to corporate organizations particularly fit for metaverse, such as DAOs (decentralized autonomous organizations).
- **Digital Assets:** Tokens and the economics behind them (minting, management, distribution, functionalities etc.) often play a key role in decentralized metaverses, including as a means of exchange of value and of decision-making instruments. Switzerland already benefits from the certainty brought to the decentralized economy by the DLT Act. However, the DLT and metaverse spaces are highly dynamic, and we should continue to analyze where digital interactions and data-driven economies are treated differently from the provision of goods and services in the real world, and enrich the legal basis, as and if necessary and needed, based on a proper understanding of the specific functionalities of, architecture of, and users involved, in the metaverse.
- **Labor Law:** Legal entities that adopt, at least partially, the metaverse as a working environment, face the issue to determine the applicable jurisdiction. Attributing a jurisdiction is needed to clarify several aspects, including employment provisions, remuneration standards, social security, holiday rules, conflicts resolution practices, health and safety requirements, and data collection rules to preserve personal data of metaverse workers aligned with ordinary personal data collection.

With regards to these focus themes, the question arises: Do we already have enough legal certainty and are we well-regulated as per today? Are there immediate and specific issues to be addressed? How big is the urgency? How do we avoid over, or under-regulation especially compared to others? Are we too early to work on this, or are we too late already?

The SMA, working closely with the respective working groups in Swiss and international policy setting bodies and regulators, will continue to contribute to a measured regulation approach towards the metaverse. By advising and closely interacting with the Swiss legislative bodies, as well as competent authorities and prudential control, we aim to contribute to a favorable and well-regulated environment for all activities concerning metaverse.



# 6

## Conclusion: How to Make Switzerland an Attractive Home for Metaverse

The authors would like to emphasize that this exposé is not a description of status quo or an academic paper, but we collectively want to highlight key areas where Switzerland needs to focus on in the future with regards to the growing international emergence of the metaverse. It is our view that - together with Swiss policy makers - we can jointly pave the way:

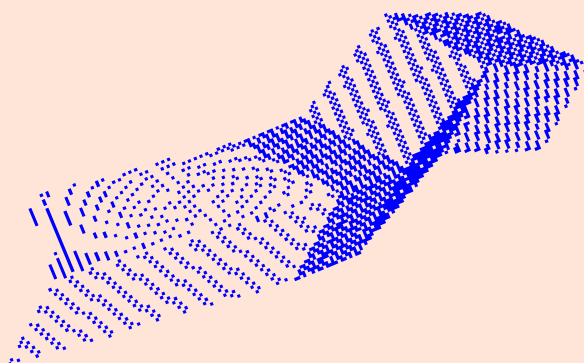
- 1.** Given the irrevocable emergence of the metaverse, jointly observe and engage with key areas and themes highlighted in this paper. Then, build capabilities at the federal level, both for policy setting, execution, and enforcement of rules.
- 2.** Strive to create an emerging, smart, principles-based legal and regulatory framework for the metaverse (as well and in parallel of adjacent and interconnected technologies such as AI, cloud, supercomputing etc.) in Switzerland, establishing thereby one of the emerging, globally leading places to “do business” around the metaverse.
- 3.** We also believe that in a first priority, the basics of a “digitalization of law” need to be addressed, so that digital interactions become legally binding and can consequently effectively be enforced (i.e., via procedural and criminal law) or against the state (i.e., constitutional law).
- 4.** In doing so, closely involve and leverage relevant industry associations, such as the Swiss Metaverse Association and the Swiss Blockchain Federation, as well as academia and impacted industries, to stay on top of rapid developments. Calling a dedicated “Metaverse Taskforce” at the Federal executive level, just as it was done with the topic of Blockchain, will help in setting a clear strategy and initial regulatory framework.

We believe it is important not to wait three to five years on the sidelines as observers, but jointly use the opportunity to pioneer stable legal, tax and regulatory frameworks, a welcoming economic, business, and social environment to build successful metaverse applications, attract talents from all over the world and contribute significantly to the Swiss economy with leading-edge exponential technologies.

At the level of the SMA to conduct a gap analysis regarding existing challenges of digital interactions and data-driven economies and propose specific changes to the law where it is necessary. To that purpose, we will commence with an analysis where digital interactions and data-driven economies are treated differently from the provision of goods and services in the real world. In our view, it is of utmost importance that such analysis is based on a proper understanding of the specific functionalities, architecture and users involved. Based on this digital functionality-based gap analysis, we can then develop proposals on how the law and regulation can be interpreted and if necessary be adapted and demand changes to the current law.

The direction is set and irreversible. Other jurisdictions, such as the EU, the UK, and the UAE, are already somewhat advanced in the regulatory process and effort to structure and frame these emerging metaverse spaces. In February 2024, the BIS (Bank for International Settlements) issued a research paper, calling for public policy action to prevent virtual environments and money from becoming fragmented and dominated by powerful private firms, as a consequence of metaverse developments.

To conclude, the Swiss Metaverse Association will remain the first port of call for citizens, organizations, and the industry at large for any questions, ideas, but also positive and negative experiences and examples that could all help to create a smart regulatory framework. Finally, the authors are convinced that over time, the metaverse and its applications will become a current normal, without much excitement, just as it has happened in Web 1.0, Web 2.0, the Blockchain, Biotech and other examples where technological innovation has simply become a part of everyone’s everyday life. Onwards & Forwards!



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## Footnotes

1) McKinsey & Co., Value Creation in the Metaverse, Report, June 2022 [LINK](#)

2) An alternative, more detailed definition has been introduced by Matthew Ball in 2021:  
"The Metaverse is a massively scaled and interoperable network of real-time rendered 3D virtual worlds and environments which can be experienced synchronously and persistently by an effectively unlimited number of users with an individual sense of presence, and with continuity of data, such as identity, history, entitlements, objects, communications, and payments." [LINK](#)

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