



EUROPEAN COMMISSION
DIRECTORATE-GENERAL
TAXATION AND CUSTOMS UNION
Indirect Taxation and Tax administration
Value added tax

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**VALUE ADDED TAX COMMITTEE
(ARTICLE 398 OF DIRECTIVE 2006/112/EC)
WORKING PAPER NO 1060**

**QUESTION
CONCERNING THE APPLICATION OF EU VAT PROVISIONS**

ORIGIN: Commission
REFERENCES: Articles 2, 9, 47 and 58
SUBJECT: Initial VAT reflections on non-fungible tokens

1. INTRODUCTION

The Commission services wish to discuss with the VAT Committee the VAT treatment of Non-Fungible Token (hereafter “NFT”).

NFTs have been around for two decades already but the ecosystem, and trade volume, have grown exponentially in the last years. This growth has stimulated interest among state revenue agencies, some have already taken a stand, but overall there are many questions regarding the VAT treatment of NFTs supplies. Therefore, for the sake of legal certainty, it is highly desirable to reach a common position on the VAT implications of the different supplies linked to NFTs.

To determine the VAT treatment of a supply, it is necessary to examine its nature from a VAT standpoint. Where the nature of most supplies is settled in legislation, the nature of NFTs is not yet settled and therefore the VAT treatment of related supplies is also unsettled.

This Working paper intends to describe the NFT environment so as to address NFT related recent questions and concerns.

This paper is the result of thorough research, however certain technical aspects remain at this stage unclear and may need to be made more precise or adapted.

2. SUBJECT MATTER

2.1. Generalities

Before analysing NFT supplies from a VAT perspective, the concept of NFT itself and the workings of NFT supplies need to be spelled out.

Among the various tokens in existence, one can find the non-fungible token. The acronym NFT stands for Non-Fungible Token.

There is no definition of NFT in the EU legislation. One would therefore need to revert to a descriptive analysis of the “subject”, of its features and uses.

An NFT is a digital unit (commonly referred to as a token) on a distributed ledger. It consists of an identification code and metadata.

The identification code is used to identify the token.

The metadata refers to what the NFT represents: the asset. It might contain a number of elements such as a certificate of authenticity, the NFT’s name, a description of the NFT, an URL when appropriate. For example, for a digital portrait painting NFT, the metadata could contain the image URL and the painting rarity traits like the identification of the person painted, the colours of the hair and of the eyes and the type of clothes. Through their metadata, NFTs are the digital presentations of their related assets.

NFTs are powered by programmes stored on a distributed ledger that run when predetermined conditions are met (known as “smart contracts”). In particular, smart contracts are used when the NFTs are created and sold. They record the metadata, assign

and reassign ownership of the token when transferred or resold and ensure that the information stored is transparent and immutable.

2.2. Launch

The process of launching an NFT, of uploading it (that is of writing the token with its metadata) in the digital ledger is called “minting”. Such writing involves the process of validating transactions and recording information. It is our understanding that this happens within a proof-of-stake consensus (PoS) rather than within proof-of-work consensus (PoW). Minting results in costs since writing data onto a digital ledger requires the payment of a fee (often called “gas fee”) for computation and storage.

Alternatively, it is possible to defer the minting of an NFT until its first sale (this is referred to as “lazy minting”). A lazily minted NFT is not written onto the digital ledger until someone buys it, at which stage it is put on-chain and transferred to the buyer’s wallet. Lazy minting is used by creators to avoid the prefinancing of the minting costs.

2.3. Storage

NFTs are often referred to as being “on-chain” or “off-chain”. This reference designates the method of storage of the NFT’s asset.

On-chain NFTs are fully hosted on a digital ledger. It means that the token (including amongst other the data, the smart contract, the metadata and the hashtag of the generated NFT) and the asset are written and stored on the digital ledger.

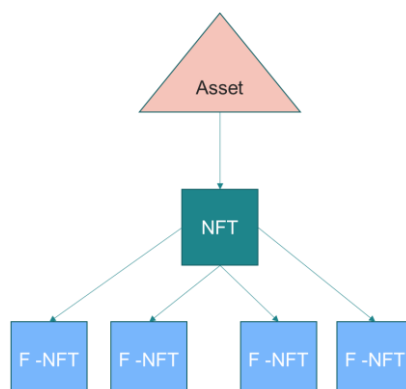
Off-chain NFTs are only partially hosted on a digital ledger. It means that the token is created and stored on the digital ledger, but their assets are stored outside of the digital ledger (off-chain) notably on cloud servers but one can also think for example of a warehouse for physical assets. The off-chain location where the NFT asset is stored may be indicated in the NFT metadata.

As on-chain storage is very expensive, most NFT assets are stored off-chain.

2.4. Fractionalisation

An NFT cannot be divided, it can only be bought, sold and held as a whole.

However, fungible tokens tied to an underlying NFT, referred to as “F-NFT”, can be created so that they represent collectively the indivisible original NFT and provide each holder with a percentage of ownership of the original NFT.



2.5. NFT’s related assets

NFTs enclose metadata pointing to an asset. The asset can be either digital or physical but NFTs are most commonly used for digital assets like GIFs, music, collectibles, art, tweets, virtual real estate. Yet, beyond these use cases, NFTs are extending to real world use cases which translate into physical items being represented through NFTs. For example, real-life goods such as sports cards have been tokenized by creating NFTs that represent the ownership of these goods or in the same vein, NFTs are used in supply chains to authenticate products and maintain traceability.

3. COMMISSION SERVICES’ OPINION

The purpose of the present paper is to analyse, and launch discussions on, the VAT treatment of transactions linked to NFTs with a view to agreeing to a common approach that would help to build a coherent practice in this area across the EU.

3.1. Setting the scene

The key supplies linked to NFTs, the VAT treatment of which should be considered are the following:

- Making and uploading NFTs onto a digital ledger, known as “minting”;
- Buying and selling NFTs, known as “trading”;
- Receiving NFTs as a reward, known as “earning”.

Each transaction linked to an NFT may be subject to a different VAT treatment. The analysis of the VAT implications should include the following steps:

- Qualification as a taxable supply – assessment as to whether the supply falls within the scope of the VAT, i.e. whether:
 1. it is a supply of goods or services,
 2. a supply is made for consideration,
 3. the supply is made by a taxable person acting as such.
- If within the scope, identification of the type of the supply, which should allow arriving at a conclusion as to whether it is to be:
 1. taxed, or
 2. exempt.

It is necessary to examine each of those elements successively, starting by the qualification as a good or service, and then unrolling the criteria in the context of the different types of NFT transactions.

3.2. Are supplies of NFTs transactions in goods or services?

The VAT world is divided in two, on the one hand goods and, on the other hand, services. Everything that is in the scope of that world is either one or the other¹.

¹ For VAT purposes a supply of good designates the transfer of the right to dispose of a tangible property as owner (Article 14 of the VAT Directive) and a supply of services designates any transaction which does not constitute a supply of goods (Article 24 of the VAT Directive).

NFTs are no exception. Therefore it must be determined whether they are goods or services from a VAT standpoint. To do so, one first needs to start by figuring out whether the digital token is the object of the transaction or if the asset is. It is proposed to perform this assessment by comparing NFTs with property titles and vouchers and then, to envisage the possibility of NFTs being composite supplies or, as seems to be the more widespread view, electronic services. Two casus conclude this section.

- **Property titles**

When a person acquires real estate he or she passes an act at the notary and gets a property title which – depending on the rules applicable in the jurisdiction – represents the ownership of the real estate. The object of the transaction is the real estate while the property title is merely a certificate of ownership, a proof of what is acquired, but that it is not what is acquired. That leaves the question whether an NFT could be compared to such a property title.

An NFT being a digital record of provenance, it is a proof of ownership of an asset just like a property title. Therefore, an NFT may be compared to a property title.

The consequence in the case an NFT is considered a mere means, or proof, of the transfer of the owner's right to dispose of the asset, like a notary certificate, would be that the VAT treatment of the transaction be based on the nature of the said asset. That asset could then be either a good or a service. The VAT rules applicable to the transfer of the goods/services in question would then normally apply.

- **Vouchers**

A voucher, in the sense of the VAT Directive², is an instrument that obliges the redeemer to accept it as consideration for the goods or services supplied in return³. A voucher must give details of the goods or services it represents or of the identity of the potential suppliers. There are two types of vouchers, the single-purpose and the multi-purpose vouchers. For both types of vouchers, the aim is that the VAT due is similar to what would have been applied had the goods or services not been supplied through the use of a voucher. The main difference is that in certain circumstances, the timing, meaning the moment of taxation, may differ from that of a sale without the use of a voucher.

Single purpose voucher:

A single-purpose voucher (SPV)⁴ is a material or virtual document that is accepted as consideration or part consideration of a supply of goods or services where the place of supply and the VAT due in respect of these goods or services are known at the time of issue of the voucher, that is before its release for use. From a VAT standpoint, the transfer of an SPV is seen as a supply of the good(s) or of the service(s) to which it relates based on a *fictio iuris* predicated on the status under which the transfer is made⁵. While the transfer of an SPV must be regarded as a supply of the underlying goods or services, the actual handing out of goods or

² Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax (OJ L 347, 11.12.2006).

³ The concept of a voucher is set out in Article 30a(1) of the VAT Directive.

⁴ Definition as it can be found in Article 30a(2) of the VAT Directive.

⁵ Article 30b(1) of the VAT Directive.

services in return of an SPV is not seen as an independent transaction. Where goods or services are handed out by a taxable person other than the issuer of the SPV, that taxable person is however deemed to have supplied those goods or services to the issuer.

Multi-purpose voucher:

A multi-purpose voucher (MPV)⁶, is any instrument meeting the conditions for being a voucher whilst not falling under the notion of an SPV. An MPV entitles its holder to receive goods or services but the goods or services in question or the Member State where they are to be supplied and taxed, cannot be sufficiently identified such that the VAT due can be fixed at the time the voucher is issued. The goods or services supplied in return of an MPV are therefore taxed upon redemption. Upon redemption, VAT is levied in the same manner as that which would have been applied had the goods or services in question not been supplied through the use of a voucher.

Certain NFTs could be seen as vouchers for VAT purposes. This may be the case when upon purchasing an NFT, its holder can redeem it for a specific good or service and upon redemption, the NFT is permanently removed from circulation (this is referred to as “burning” an NFT). In that case, the transfer of the NFT, like a transfer of a voucher if qualified as an SPV, must be regarded as a supply of the related goods or services. In parallel, the actual handing out of the good or supply of the service is deemed a non-supply. On the other hand, in the case when an NFT is enabled to change its metadata based on the choice of its holder (those can be considered to fall into the sub-category of the “dynamic NFTs”), that is for example when upon purchasing the NFT its holder gets the right to choose amongst different goods or services, the NFT could be seen as a voucher but then as an MPV. The goods or services supplied in return of such an NFT would be taxed upon redemption.

The so-called “gift card NFTs” can also be assimilated to vouchers for VAT purposes. Those are NFTs with embedded metadata of monetary value such as a crypto token. It enables the receiver to purchase something with the monetary value from a defined supplier. Depending on the specificities of each card, it may be that the information related to the place of supply and the VAT due in respect of what is acquired is known or not. This specificity determines whether a given gift card NFT can be assimilated to an SPV or to an MPV.

In all the cases where an NFT could be assimilated to a voucher, the VAT treatment should follow that of the voucher so that the VAT due is the same as that which would have been applied had the goods or services not been supplied through the use of an NFT.

- **Composite supplies**

The VAT Directive does not provide a specific indication for the case of composite supplies. Guidance in that respect comes from the Court of Justice of the European Union (CJEU) which indicates that there is a composite supply when a supply consists of multiple elements, which can be either goods, services or both. In principle, each element is subject to VAT on its own merits⁷. However, if one of the elements within the

⁶ Definition to be found in Article 30a(3) of the VAT Directive.

⁷ Article 1(2) of the VAT Directive.

composite supply can be regarded as constituting the principal element, while the rest are only ancillary, a special VAT treatment applies. As per the maxim ‘*accessorium sequitur principale*’, the ancillary supply ought to share the VAT treatment of the principal supply. An element is regarded as ancillary if it does not constitute for the customers an aim in itself but a means of better enjoying the principal element supplied⁸. There is also a composite supply subject to a specific VAT treatment where two or more supplies are so closely linked that they objectively form a single, indivisible economic supply that it would be artificial to split. Then the supply is uniformly taxed on its own merits.

The provision of an NFT could be seen as a composite supply made of a digital token and a related asset with either a principal and an ancillary element or two closely linked elements.

It is probable that the acquisition of the asset is considered the principal element of the composite supply. If so, the VAT treatment of the NFT would follow that of the asset (like in the case of vouchers).

However, it is possible that the principal element is the token. This could be the case if most of the value lies in the uniqueness provided by the NFT medium itself, in the so-called “scarcity”. In that case, the VAT treatment of the NFT supply would follow that of the token. The token being of a digital nature and supplied over the Internet with minimal human intervention, it should qualify as an electronic service from a VAT standpoint⁹.

The third possibility, that of the supply of the NFT and of the asset being considered a single, indivisible economic supply, which it would be artificial to split, is not to be discarded either. This could only be the case where the token and the asset would be closely intertwined which could only happen when the asset would be of a similar nature as the token. In that case, the VAT treatment would be that of an electronic service as envisaged above.

- **Electronic services**

The definition of “electronically supplied services” is given in Article 7(1) of the VAT Implementing Regulation¹⁰: ‘*Electronically supplied services*’ include services which are delivered over the Internet or an electronic network and the nature of which renders their supply essentially automated and involving minimal human intervention, and impossible to ensure in the absence of information technology.’. The supply of images, of text and of information are examples of such supplies.

NFTs are digital ledger-related technology and as such an NFT supply can only be performed over the Internet and requires only minimal human intervention. Moreover, in the case of an NFT’s asset being of a digital nature, its supply provides the recipient with an access to, and a certain right over, that digital asset. This corresponds to the definition of an electronic service.

⁸ CJEU, judgment of 25 February 1999 in case C-349/96, *Card Protection Plan* (EU:C:1999:93).

⁹ See just below.

¹⁰ Council Implementing Regulation (EU) No 282/2011 of 15 March 2011 laying down implementing measures for Directive 2006/112/EC on the common system of value added tax (recast) (OJ L 77, 23.3.2011, p. 1) (hereafter: VAT Implementing Regulation).

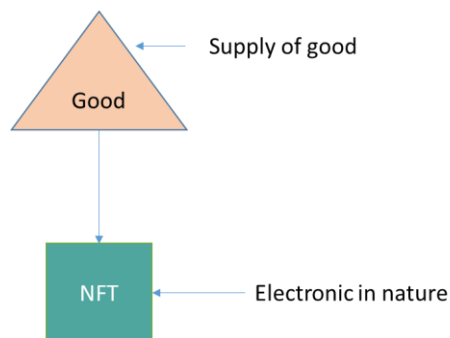
Conclusion: The current majority view considers NFTs to be electronic services. However right this qualification may be for certain NFTs, it cannot be generalised to all. The above real-life comparisons sketch out different possibilities regarding the object of the transaction and it is clear that a case-by-case assessment is needed to determine whether the supply of NFTs is a transaction in goods or services from a VAT standpoint and to ascertain their VAT treatment.

- **Casus**

- **An NFT is used to acquire a tangible good**

In this example, upon purchasing an NFT, its holder gets the possibility to redeem it for a designer pair of socks. Upon redemption, the NFT is burned and its holder receives the socks.

In that case, the NFT is similar to an SPV. Its transfer must be subject to VAT as a supply of a pair of socks. When the actual handing out of the pair of socks happens, this should be deemed a non-supply.



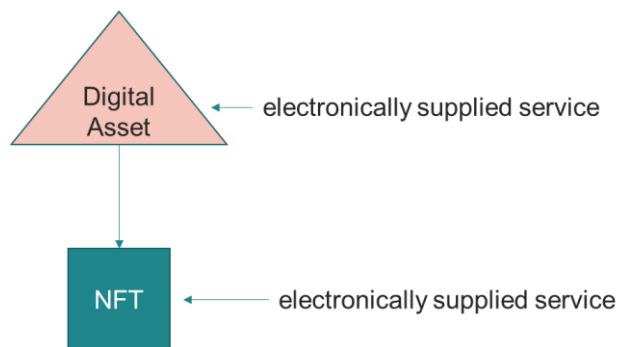
- **An NFT is used to acquire a digital asset**

In that example, upon purchasing an NFT representing a digital piece of artwork, its holder receives the NFT in his or her digital wallet and (as per the contractual terms of the transaction) the right to post the image online.

The supply of the NFT is internet-based. It consists in giving access to digital files over the Internet. The online delivery is the only possible way to supply the NFT and it does not require much human intervention.

The VAT Directive does not provide a general definition of electronically supplied services but only an indicative list of them (Annex II). The VAT Implementing Regulation in its Article 7(1) however indicates that they include services which are delivered over the Internet or an electronic network and the nature of which renders their supply essentially automated and involving minimal human intervention, and in the absence of information technology is impossible to ensure.

Such supply is therefore that of an electronically supplied service.



3.3. NFTs supplies and their VAT implications?

3.3.1. NFT minting

- **Is the supply made for consideration?**

After the creation of the asset, the NFT needs to be minted so that the metadata are recorded and the smart contract(s) implemented. It requires writing the token with its metadata in the digital ledger. Such writing involves the process of validating transactions, generating new blocks, and recording information and requires payment of a “gas fee”.

A gas fee is a digital ledger transaction fee paid at least partly to network validators for their services. The amount of the gas fee is unrelated to the price of the NFT itself, it rather reflects traffic on the network. Depending on the blockchain networks/digital ledger, the gas fee may be different. In the one most commonly used for NFTs, Ethereum, the gas fee is made up by a base fee and a tip. The base fee is burned upon completion of the transaction (i.e. it is destroyed by the protocol which entails that it is not sent to anyone) and the tip is paid to the network validators for their computational work to process transactions¹¹.

Qualification of the transaction

To mint an NFT, one needs to select, name and describe the file in the chosen platform, and to hit the “mint” button. Then the network validator runs a program that validates the transaction and updates the blockchain without any further need of human intervention. Therefore, a minting service does not require much human intervention and is dependent upon information technology for its supply. This would qualify as an electronic service in line with the definition of “electronically supplied services” in Article 7(1) of the VAT Implementing Regulation.

Existence of consideration

To be within the scope of VAT, the VAT Directive requires a transaction to be realised for consideration. The CJEU case-law provides guidance regarding the situations when a transaction can be seen as being made for ‘consideration’. A supply is made for ‘consideration’ if there is a direct link between the goods or services provided and the consideration received¹². Such a direct link exists only if there is a legal relationship

¹¹ <https://ethereum.org/en/developers/docs/gas/> last viewed on 6 February 2023.

¹² See a.o. CJEU, judgments of 5 February 1981 in case C-154/80, *Coöperatieve Aardappelenbewaarplaats* (EU:C:1981:38), paragraph 12, and of 18 January 2017 in case C-37/16, *SAWP* (EU:C:2017:22), paragraph 25.

between the supplier and the purchaser entailing reciprocal performance, the price received by the supplier constituting the value actually given in return for the goods supplied¹³. On a related matter, the CJEU has also held that the consideration is the value actually received rather than a value estimated according to objective criteria and that it had to be capable of being expressed in monetary terms¹⁴.

Our understanding is that minting services are remunerated with gas fees (ref. infra) and not with automatic rewards paid by the digital ledger (which differentiates minting services from those of mining¹⁵). The gas fees are paid in the native currency of the digital ledger¹⁶ on which the NFT is minted but as cryptocurrencies are means of payment¹⁷ and can be converted to EUR, this alone does not prevent the recognition of a consideration (ref. infra “How to determine the taxable basis?”)¹⁸.

However, identifying the existence of a direct link between the gas fee paid and the publication on the digital ledger is not straightforward due to the difficulty in establishing the existence of a legal relationship between the one requesting minting to be done and the network validators involved in the said publication. To confirm that a legal relationship exists, a detailed analysis of the conditions under which those services are provided and are remunerated should be carried out.

In particular, attention should be brought to the part of the gas fee referred to as “base fee” and to the so-called “tip” part of the gas fee.

The base fee part of the gas fee is burned upon completion of the minting service which indicates that it is destroyed rather than paid to the network validators¹⁹. In the *Glawe* case²⁰, the CJEU found that a fee not received by the service supplier is not part of the consideration. Therefore, it could be that this part of the gas fee may not be seen as part of the consideration paid for the work of the network validators. No VAT should therefore apply to the base fee.

The second part of the gas fee, the “tip”, is paid to the network validators for their computational work to process transactions²¹. Despite the name of that fee, it seems that its payment is mandatory. The argument that the direct link is missing as concluded by the CJEU in the *Tolsma* case²² can thus not be applied²³. However, due to the anonymity of the transactions at stake, what remains for now is how to recognise the legal relationship between the parties which is necessary to consider the fee to be within the scope of VAT.

¹³ See CJEU, judgment of 3 March 1994 in case C-16/93, *Tolsma* (EU:C:1994:80), paragraph 14.

¹⁴ See, *Coöperatieve Aardappelenbewaarplaats*, paragraph 13

¹⁵ The VAT implications of mining have been analysed in detail in Working paper No 892.

¹⁶ The native currency is the digital currency inherent to the digital ledger. Every digital ledger has its own native currency that is used to reward miners and validators. For example, the native currency of Ethereum is ether, the native token of Cardano is ada and the native token of Binance Smart Chain is Binance Coin.

¹⁷ See about Bitcoin: CJEU, judgment of 22 October 2015 in case C-264/14, *Hedqvist* (EU:C:2015:718).

¹⁸ See the bitcoin analysis performed by the VAT Committee in Working paper No 892, p. 8. The analysis can be extended to other cryptocurrencies.

¹⁹ <https://ethereum.org/en/developers/docs/gas/> last viewed on 13 February 2023.

²⁰ CJEU, judgment of 5 May 1994 in case C-38/93, *H. J. Glawe Spiel* (EU:C:1994:188).

²¹ <https://ethereum.org/en/developers/docs/gas/> last viewed on 13 February 2023.

²² CJEU, judgment of 3 March 1994 in case C-16/93, *Tolsma*, (EU:C:1994:80).

²³ See Working paper No 892, p. 15.

This characteristic may not last in the long term²⁴ and the legal relationship should not be an obstacle to meet anymore.

- **Is the supply made by a taxable person acting as such?**

Taxable status of the network validators

As to the condition relating to the taxable status of the provider of the minting service, the network validators, it cannot automatically be assumed that they are taxable persons for VAT. This will depend on whether the provider can be seen as independently carrying out an economic activity, whatever the purpose or results of that activity²⁵.

Where the activity of mining has been characterised as an economic activity notably because of the link between the miner's hardware capacity to find solutions to complex calculations and the verification of transactions (i.e. mining)²⁶, the activity of minting only requires the staking of a certain amount of tokens as a collateral. The staking appears at first to be a passive activity deriving a revenue (i.e. the gas fee) that is not much different from the holding of shares to receive dividends. As such a holding activity is not an economic activity for VAT purposes²⁷, it may be that where instead of acquiring shares and deriving dividends, the minter acquires tokens and derives a gas fee, this is not seen as an economic activity from a VAT standpoint either. However, the tokens held are not only owned; they are staked which amounts to being exploited with a view to derive the gas fee in question. Moreover, the minter also runs a programme that validates the transaction which in turn generates the payment of the gas fee. Therefore, the activity of minting seems to differ from that of a pure holding activity and thus could be seen to qualify as economic activity so that minters qualify as taxable persons.

- **Is the supply taxed or exempt?**

Possible exemption

Exemptions should be construed restrictively since they constitute exceptions to the general principle that VAT is levied on all supplies of goods and services for consideration carried out by a taxable person. In the situation here represented, we see no basis for an exemption to apply.

- **Variante**

It is possible to defer the minting of an NFT until it is first sold (this is referred to as “lazy minting”). A lazily minted NFT is not written onto the digital ledger until someone buys it, at which stage it is put on-chain and transferred to the buyer's digital wallet. Lazy minting is used by creators to avoid the prefinancing of the minting costs since in the circumstances of lazy minting, the payment of any gas fee is deferred until the effective minting happens.

²⁴ The OECD published the Crypto-Asset Reporting Framework (CARF) on 10 October 2022, designed to ensure the collection and exchange of information on transactions in crypto-assets including NFTs. The identification of the parties being part of this information. See [Crypto-Asset Reporting Framework and Amendments to the Common Reporting Standard - OECD](#). Last accessed on 16 February 2023.

²⁵ Article 9(1) of the VAT Directive.

²⁶ See Working paper No 892, p. 16.

²⁷ CJEU, judgment of 20 June 1991 in case C-60/90, *Polysar Investments Netherlands* (EU :C :1991 :268).

Lazy minting is not relying on information technology since it does not involve the whole process of uploading the NFT onto the digital ledger. This service merely consists in the granting of an authorisation to mint an NFT at a later time. It is therefore not an electronically supplied service.

There is in most cases no consideration involved in the supply of lazy minting. No gas fee is due for the supply of a lazy minting authorisation and the buyer of an NFT pays a price covering the cost of minting but nothing for the lazy minting as such. Lazy minting therefore does not fall within the scope of VAT.

- **Conclusion**

A significant hurdle appears along the way to consider minting services being within the scope of VAT. This hurdle is caused by the specificity of the market which makes the legal relationship weak if at all existent. As VAT is meant a large based tax, this type of hurdle does not seem in line with the purpose assigned to it. It should therefore be considered to rethink the definition of consideration for VAT purposes in view of the evolution of the business.

3.3.2. NFT trading

NFTs can be bought and sold, at a fixed price or at a virtual auction, via dedicated marketplaces, games or in the real-world. NFTs can be sold for cryptocurrency or fiat but can also be transferred for free. When NFTs are being traded, both the token and its related assets are – depending on the terms of the NFT - being transferred. Last but not least, an NFT can be sold on the primary market by its creator but also on the secondary market amongst traders and collectors, basically until it ceases to exist. The NFT creator typically receives a royalty each time his or her NFT is sold on the secondary market.

When considering an NFT sale, one needs to also consider the related supplies. The “miners” record the transactions and update the digital ledger and the marketplace lists the NFT and facilitates the sale.

- **Are the supplies made for consideration?**

Qualification of the transactions

As envisaged before, NFT sales may qualify either as supplies of goods or of services (see section 3.2).

The supplies from the miners and those from the marketplaces are services.

Existence of considerations

The supply of an NFT triggers related services to be supplied for which flows of payment need to be considered when analysing the existence of a consideration. The analysis starts by the NFT price itself and then carries on to the gas fee and the marketplace fee.

NFT price

When a creator sells his or her NFT and receives a payment from the purchaser, this payment may be regarded as the consideration for the NFT if there is a legal relationship

between the seller and the purchaser. Assuming there is an agreement between the parties and the payment corresponds to the subjective value given by the parties to the NFT, the existence of a consideration should not be questioned²⁸. The condition relating to the existence of a consideration should in principle be fulfilled whether the price is paid with cryptocurrency or with fiat (see infra “How to determine the taxable basis?”). The anonymity may jeopardize the recognition of a legal relationship and should be further analysed²⁹.

In the case of a supply for free, it would in principle be out of scope of VAT³⁰.

An NFT may also be sold in the secondary market (resale). The points surrounding the existence of a consideration are similar to those in the primary market but an additional question arises regarding the method by which to tax (whether a margin scheme may for example apply).

Gas fee

The gas fee is payable against the services rendered by the network validators.

The analysis made in relation to the existence of a consideration for minting services may apply equally to the services remunerated by gas fee in the context of a supply of NFT assuming these services is similar.

Marketplace fee

Marketplaces charge fee for their services. We took note of the transaction fees, also referred to as “account fees”, which make up a percentage of the cost of the NFT and of the “listing fees” which are a charge for the sales listing. These fees can either be charged to the NFT seller or the purchaser, in both cases it should be analysed if there is a legal relationship between the marketplace as provider of the service and the seller or purchaser confirming the existence of a consideration and prompting the inclusion of the services provided by the marketplace within the scope of VAT.

All comprising fee

In a number of cases, the purchaser of an NFT pays a single fee comprising the NFT price, the gas fee and the marketplace fee to the marketplace upon the purchase of the NFT. This might indicate that a composite supply is made by the marketplace. In principle, the VAT treatment applicable to the principal element should dictate the VAT treatment applicable to the said all-comprising fee.

- **Are the supplies made by taxable persons acting as such?**

Taxable status of the NFT sellers

A seller qualifies as a taxable person when he acts independently and his trading aims at obtaining an income.

²⁸ The existence of the direct link is not questioned in the case of a price disconnected from the objective value of the NFT. See in that regard CJEU, judgment of 11 March 2020 in case C-94/19, *San Domenico Vetraria* (EU:C:2020:193), paragraph 29.

²⁹ See footnote 24.

³⁰ Unless Articles 16 or 26 of the VAT Directive apply.

A marketplace or an individual selling multiple NFTs over time would therefore qualify as a VAT taxable person.

On the other hand, the qualification as a taxable person of an individual selling an NFT on an occasional basis is less straightforward. In most cases, such an occasional sale should not trigger the qualification as a VAT taxable person of the seller³¹. However, in the case where the NFT's terms provide that the seller will receive royalties every time the NFT is resold, the seller may qualify for this one initial sale alone, as a taxable person. The situation should be analysed on a case-by-case basis to determine if an economic activity is performed considering notably whether the royalties received correspond to rights of successive use and exploitation (being the consideration for an economic activity and thus subject to VAT) or to resale rights (which are not a consideration for an economic activity and thus are not subject to VAT)³² as this may influence the qualification as a taxable person. As NFTs are unique, one may consider that the rights of use and exploitation attached to them are exhausted when they are first placed on the market, which would then entail that the remuneration gained from the resale is deemed to be a resale right outside the scope of VAT.

Taxable status of the Network validators

Network validators may use either a PoW or a PoS. Their taxable status has in both cases been analysed as constituting economic activities given work undertaken leading to the qualification as taxable persons of the validators³³.

- **Are the supplies taxed or exempt?**

Possible exemption

Exemptions should be construed restrictively since they constitute exceptions to the general principle that VAT is levied on all supplies of goods and services for consideration carried out by a taxable person. In the situation here represented, we see no basis for an exemption to apply.

3.3.3. NFTs earned

NFTs can be purchased or obtained for free (see supplies envisaged under section 3.3.2). They can also be gained through video games using digital ledger technologies to reward gamers (hereafter “earned NFT”). For example, players earn in-game NFT assets (such as an Abyssal Scepter) when they are levelled up in the game.

- **Qualification of the supply**

As envisaged above, an electronically supplied service is a service delivered over the Internet or an electronic network, the nature of which renders its supply essentially automated and involving minimal human intervention, and impossible to perform in the absence of information technology. The receipt of an NFT through participation in an online-game certainly meets the criteria for such transaction to qualify as an electronically supplied service.

³¹ Unless the Member State uses Article 12 of the VAT Directive.

³² CJEU, judgment of 19 December 2018 in case C-51/18, *Commission v Austria* (EU:C:2018:1035).

³³ See for the PoS the analysis supra “NFT minting” and for PoW see Working paper No 892, p. 16.

- **Existence of a consideration**

In a classical sale (see section 3.3.2), the acquirer of an NFT is the customer and he pays to acquire the NFT. Things are different in the case of play-to-earn games. There, the player receives the NFT as a reward for playing the game.

It can be that players pay to participate to the online gaming but it may also be that players do not pay at all and that the online game generates returns from sponsors and advertising. Therefore, in the play-to-earn economy the direct link between the earned NFTs and the amount paid by the players to enter the online game is not automatic and should be researched on a case-by-case basis. Moreover, the possibility of a direct link seems rather remote considering that there is (probably) no relationship between the value of the earned NFT which a player can gain and the amount he or she has to pay to play the game³⁴.

In the case where the earned NFTs do not partake to any taxable transaction (in the absence of any consideration) it would in principle be out of scope of VAT.

- **Place of taxation**

The place of supply of an earned NFT depends on its VAT qualification and on the taxable status of the parties.

We refer to section 3.3.2.

- **Taxable status of the players**

Based on the factual circumstances including the purpose of the player, the gaming activity might qualify as an economic activity remunerated by the earned NFTs. If that were to be the case, the player would be considered a taxable person.

How to determine the taxable basis?

If a seller receives cryptocurrency in exchange for an NFT transaction, the value of the cryptocurrency must be converted to the currency of the Member State where the supply takes place as of the time of the sale³⁵. However, some issues may arise due to the decentralised and global nature of cryptocurrencies which trigger uncertainty around the exchange market and the reference rate to use as references.

To circumvent the issues mentioned above, it could be agreed that the reference rate to be retained for the conversion of the price paid in cryptocurrency into fiat is that of the platform hosting the seller's wallet used for the receipt of the NFT's payment.

3.4. Overview of the VAT treatment of supplies linked to NFTs in the Member States and EEA

Treatment of supplies linked to NFTs per Member State

³⁴ *Tolsma*, see in particular paragraphs 12, 13 and 14.

³⁵ Article 91(2) and Article 230 of the VAT Directive.

Spain

Binding ruling V0482-22, of 10 March 2022, issued by the Spanish General Directorate of Taxes (Dirección General de Tributos)³⁶.

The concerned NFT grants rights of use to the buyer on pictures edited with Photoshop.

The object of the transaction appears to be the digital certificate of authenticity represented by the NFT without physical delivery of the image file or of the digital file associated with it itself. This supply implied the provision of digital art services and, accordingly it being classified as services provided by electronic means and taxed at the general rate of 21%.

Belgium

Answer to a parliamentary question, Belgian Finance Minister, 3 November 2021³⁷.

The Belgian treatment of NFTs has been officialised by the Minister for Finance Vincent Van Peteghem in an answer to a parliamentary question. He indicated that transactions involving NTFs should be subject to VAT at the rate of 21%, when it is deemed to take place in Belgium. He specified that NTFs must not be regarded as a means of payment for the purchaser, but as a digital collection or an object of digital art.

Norway

On 13 December 2022, the Norwegian tax administration released a statement on their website³⁸.

The supply of an NFT is considered a taxable electronically supplied service. The tax administration indicates that a supply of digital art, including in the form of an NFT, cannot benefit from the VAT exemption applicable to tangible art because that exemption only applies to sales transferring a copyright whereas in the case of a supply of an NFT the NFT artist retains the copyright.

The tax administration also indicated in a non-dated release on their website that the minting of an NFT is not subject to VAT³⁹.

3.5. Conclusion

The aim of this Working paper is to address the VAT consequences of NFT related matters in the hope to generate meaningful discussions within the VAT Committee and reach a common position. Although the current majority view considers NFTs to be electronic services, the developments here presented have underlined the complexity of the situation and the necessity to refrain from hasty conclusions.

³⁶ https://petete.tributos.hacienda.gob.es/consultas/?num_consulta=V0486-22 last accessed 6 February 2023.

³⁷ Réponse à la question parlementaire n° 705 de monsieur Emmanuel Burton du 03.11.2021

³⁸ <https://www.dekamer.be/QRVA/pdf/55/55K0073.pdf>

³⁸ <https://www.skatteetaten.no/rettskilder/type/uttalelser/prinsipputtalelser/merverdiavgift--avgiftsbehandling-av-digitale-kunstverk/> last access 10 February 2023.

³⁹ <https://www.skatteetaten.no/en/person/taxes/get-the-taxes-right/shares-and-securities/about-shares-and-securities/digital-currency/nft/> last accessed 10 February 2023.

4. DELEGATIONS' OPINION

The delegations are requested to give their opinion on the issues raised and, in particular on:

- the initial reflections on the VAT treatment of supplies linked to NFTs as set out in the conclusions above and
- the accuracy of the qualification of the treatment they apply to these supplies as set out in the present paper.

*
* *

Non-Fungible Tokens (NFTs) – Snapshot, glossary, sticky issues

Glossary	
Cryptoasset	Generic terminology for a “digital representation of value or rights which may be transferred and stored electronically, using DLT (or similar technology)”. <i>MICA Regulation (due to be adopted)</i>
Distributed Ledger Technology (DLT)	Technology that enables the operation and use of <u>distributed ledgers</u> ; ‘ <u>distributed ledger</u> ’ means an information repository that keeps records of transactions and that is shared across, and synchronised between, a set of <u>DLT network nodes</u> using a <u>consensus mechanism</u> ; ‘ <u>consensus mechanism</u> ’ means the rules and procedures by which an agreement is reached, among DLT network nodes, that a transaction is validated; ‘ <u>DLT network node</u> ’ means a device (= computer) or process that is part of a network and that holds a complete or partial replica of records of all transactions on a distributed ledger. <i>Pilot DLT Regulation (EU) 2022/858</i>
Fractionalised NFTs	Some token offer the possibility of “fractionalising” ownership of the NFT, the F-NFTs, i.e. splitting ownership so that each holder with a percentage of ownership of the original NFT.
Minting	Creation of a NFT as a data file using DLT.
NFT	Unique crypto-asset that represents rights to an underlying asset. Unique means it is not fungible, such as other crypto-assets (e.g. Bitcoin), where each token is interchangeable and indistinguishable.
Non-deletion of NFTs	As (an eternal) part of the DLT (e.g. blockchain) NFTs cannot be edited or deleted.
Proof of work vs. proof of stake	PoW: is a decentralized consensus mechanism that requires (all) network members to expend effort in solving an encrypted hexadecimal number, whereby one member only succeeds in the end (requires a lot of energy)
Storage	<p>NFTs may be hosted on a DLT platform in the form of a link between the NFT and the underlying asset (off-chain NFTs). If the digital asset is stored on a server (“cloud”) there is a risk that the file could be changed or deleted, or server shut down, hacked etc. hence breaking the link between the NFT and the asset. Similarly, what happens if the physical asset is destroyed, stolen, counterfeited etc.</p> <p>NFTs may also be hosted directly on a digital ledger (on-chain NFTs). It means that the token (including amongst other the data, the smart contract, the metadata and the hashtag of the generated NFT) and the asset are written and stored on the digital ledger.</p> <p>As on-chain storage is very expensive, most NFT assets are stored off-chain.</p>

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Single NFT or Numerous NFTs	NFT issuance may consist of a single NFT or may involve several/millions of NFTs. Problem with MICA.
Smart contracts	NFTs incorporate “smart contracts”, which is an agreement written in computer code specifying and automating certain rights and obligations of the buyer and seller (e.g. “royalties” i.e. NFT creator receives a percentage of the transaction proceeds whenever the NFT is sold on). NB such “agreements” may not always qualify as legal contracts.
Token	A digital entry/unit on a DLT register, where a person is recorded as owning a unit or other entitlement.
Underlying asset	May be digital (pics, videos) or physical (paintings other tangible assets). NB depending on the terms of the NFTs, it may be possible to sell a NFT linked to a physical asset to one buyer and sell the physical asset to another. Value of the NFT lies in the uniqueness of the digital copy.
Uniqueness demonstration or verification	Uniqueness and ownership of an NFT are demonstrated and verified using distributed ledger technology (DLT).