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IMPACT OF DIGITAL ECONOMY ON TAXATION AND CHARACTERIZATION OF INCOME

by

ELISE NAJJAR

Under the direction of

Professor DANIEL GUTMANN

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LIST OF ABBREVIATIONS

B2B: Business to business
B2C: Business to consumer
BEPS: Base Erosion and Profit Shifting
CNC: "Conseil National de la Comptabilité" meaning the National Accountancy Council
CNCC: "Conseil National des Commissaires aux Comptes" meaning the National Council of Auditors
CNIL: "Commission Nationale de l'Informatique et des Libertés" meaning the French National Agency regulating Data Protection
CNNum: "Conseil National du Numérique" meaning the French digital national council
EU: European Union
FASB: Financial Accounting Standards Board
FATP: the Forum on Harmful Tax Practices
Fevad: "Fédération Ecommerce et Vente à Distance" literally meaning the Federation of ecommerce and mail-order selling
Iaas: Infrastructure as a service, as part of cloud computing services
IAS: International Accounting Standards
IASB: International Accounting Standards Board
IFRS: International Financial Reporting Standards
IP law: Intellectual Property law
LCEN Act: "Loi pour la Confiance dans l'Economie Numérique" literally meaning the Digital Confidence Economy act
OECD MC: Organisation for Economic Cooperation and Development Model Convention
Paas: Platform as a service
PE: Permanent establishment
Saas: Software as a service (cloud computing)
TAG: Technology Technical Advisory Group (OECD expert group)
UK: United Kingdom
UN: United Nations
US: United States
VAT law: Value Added Tax law

Introduction

Our study theme provided as part of this year's Wintercourse Eucotax Program deals with the impact of digital economy on taxation, focusing thus on the way that enterprises of such area add value and make profits, and in particular on the lack of tax legislation on that matter, despite new value created due to innovative business schemes.

Our study subject directly deals with one of the core problems in such domain since it implies focusing on the characterisation of income within digital area, which is by far one of the most important difficulties of all current legislations, as will be shown later.

Indeed, our first part aims to show that main rules on digital products or rules that could apply to such products are for most, intellectual property rights or VAT tax rules, indirectly enabling us to qualify such products as intangible assets, for which the wide use of the Internet makes it even more difficult to source such products for direct taxation purposes.

More, this applies for digital products that are part of our current legislation but some are not even regulated yet, which is for instance the case of cloud computing transactions, for which only recommendations can be found in order to handle contractually legal lack and uncertainties. This implies that most of the value generated in such outsourcing schemes is not even legally taken into account, showing the French legislator's delay in his adaptation to current digital growth.

Moreover, massive data protection rules are also involved since from the beginning of the Internet growth, French legislation tried to limit the impact of digital technology on personal data, however for tax purposes, there had been no advancement in the characterisation of the added value that may generate data. As a matter of fact, the only progress that can be related on the matter is proposals that have lead to no concrete implementation.
Therefore, all this first part focusing on digital transactions and Internet traffic points out the lack of legislation regulating such products and massive data circulation involved, even though other fields of law are taking into account as previously said those intangible products and value (I).

The second part on tax implications unfortunately confirms our first analysis, and focusing on either internal or conventional tax legislation, the same comment can be made, with regard to the obvious non-adaptation of rules to digital commerce. This explains for most, how digital actors manage to avoid taxation as complete part of their business plan, since products at the base of the value chain are not regulated and current concepts related to the sourcing of these electronic transactions are old and out of date. Besides, they also rely on national disparities within cross-border transactions in the absence of a clear and homogenized qualification of income derived from digital agreements, to avoid taxation if not benefit from double exemptions.

More, the need to adapt legislation complying with the general principle of tax neutrality prevents for now the adoption of any specific rules to digital area, implying at first sight as sole option mere adaptation of current rules in order to ensure minimal tax treatment. Therefore an urgent need for tax evolvement can be noted and in particular within the concepts relative to the sourcing of income derived from digital commerce, referring as a result to the concept of permanent establishment within international context.

In fact, dealing with permanent establishment notion is almost necessary in digital area as such actors which rely on the wide use of intangible assets and on the Internet to convey their products to clients, do not need anymore to be established on our territory to make a major part of their turnover due to such transactions, within our country (II).

As a consequence, and this will be the core issue of our last part (III), global solutions have to be provided to stern the losses of taxation within digital environment. Indeed, only harmonized solutions may enable us to reach our goal, as digital actors for most are multinational firms that could avoid drawbacks of a particular legislation if no overall answers are found.

Finally, adopting unilateral legislation would not be a clever choice since it would not prevent digital actors of finding solutions to circumvent our specific taxation and would above all lead to set our country aside and thus harm our competitiveness, in a context in which digital technology interferes in all fields of our economy.

I. Difficulties encountered through digital growth within the qualification of digital products

Digital growth leads to the change of standard business models as enterprises now rely on new technologies to carry out their activities. These changes are based on using digital means to reduce physical intervention, enabling thus digital enterprises to transfer electronically their products. However, if national systems provide for rules taking into account these new types of transactions, we can see that it could not be done without encountering difficulties for specific products that are not even regulated yet (data, cloud computing).
Therefore, we will use IP rules to show that some products are considered under French and other countries' domestic law, employing moreover VAT law to qualify them, as intangible assets.

This first part concerning digital products' qualification is essential to understand the logical flow of taxation uncertainties developed further, as there are the basis of digital actors' business models, which are relying on the massive use of intangible assets. More, for most of countries these characterizations are necessary to the application of relevant taxation, which explains the need to primarily define such products. With the exception of the US in which contract law (state law) defining such products is not followed by tax law, which is a matter of federal law, such qualification constitutes consequently the first and necessary step of our study, for tax purposes discussed further on.

A. New business models crafted on the wide use of intangible assets

1. Absence of any global qualification of digital products under domestic civil law

a) Current rules' protective object

French legislation provides with specific regulation applying to Internet and more specifically, digital transactions, but these specific rules are only provided with a protective aim, without even getting into the qualification of products involved in such transactions.
This sole legislation aim could however be explained by the massive growth of online consumers and the need to contain risks that derive from electronic development. As a matter of fact, French consumers have spent an average of 57 billion euros in 2014, implying an increase of 11% of online sales for 2014[1]. Besides, 20 000 additional websites were created within the same year, thus an increase of 14% can be noted. Considering the forecast asserting that online sales will excess the 60 billion for 2015, it is worth reminding French legislation applicable on the matter of digital transactions.

French regulation arisen alongside the community harmonization on the matter due to European directives, which are now transposed in our internal legal order.
On May 1997, was first adopted the Directive on consumer protection in the case of distance sales, transposed in France through legal notice of 23 august 2001.
Then, has been taken the Directive of 13 December 1999 on electronic signature, which was soon transposed with the Law of 3 may 2000.
We can also mention the Directive of 24 October 1995, on the protection of individuals with regard to the processing of personal data and the free movement of such data, transposed through French Law of 6 august 2006 and modifying the Law of 6 January 1978 relative to data protection. Moreover, this last

[1] See Fevad (meaning Federation of ecommerce and mail-order selling), Annual report on the electronic commerce in France, 2014. Press release of 27 January 2015, for 2015 estimations.

directive is subject to a reform project currently going on, with regard to personal data protection, since a resolution draft was introduced in 2012[2].
However, we will consider this last directive and its implications later, through the problematic on the place of data[3], which should be balanced with data protection considerations, focusing for now on purely economic aspects of the legislation.

Therefore, in order to regulate online business growth, was adopted the E-Commerce Directive of 8 June 2000, which is transposed in French legal order by the Law of 21 June 2004 (LCEN Act), adopted with the aim of fostering "the confidence in digital economy", through new principles and specific rules. We can also mention the Law of 9 July 2004 on electronic communications, which reinforces consumers' protection and information, the Act of 3 January 2008 promoting competition for the benefit of consumers and the Law on the Modernization of Economy of 4 august 2008.
As a result, these rules combined with other directives and in particular directives above-mentioned, contribute to secure and sustain Internet transactions and as a result contribute to the growth of ecommerce.
However, we have to mention that Community harmonization operated through directives could not resolve all obstacles arising through e-commerce, since each legislator was given total freedom within implementation of provisions. As a result, aiming to limit national disparities in the European union and further encourage the online commerce, a new directive assorted with a principle of total harmonization[4] was adopted the 25 October 2011[5]. This directive is transposed in French legislation by the Consumer Affairs Act of 17 march 2014, providing increased protection to customers, in particular in the context of digital transactions (better information of consumers, extension of the withdrawal period granted for distance contracts, prohibition of options checked by default on companies' websites etc).

A brief overview of all specific rules applicable to digital transactions, deriving from all the directives and transposing acts above-mentioned, shall be mentioned in order to understand their object and aim.
We can note the fact that rules implemented aim in particular, to guarantee to the buyer the communication of exhaustive information, enabling online customers to act with prior and informed consent. Therefore the online offer must conform to several conditions, enforced by the combination of provisions of the Consumer code, the Civil Code and, or, the LCEN Act, considering all steps of the contract's conclusion (offer, acceptance, withdrawal).
First article 19 of the LCEN Act, states that without prejudice of other information obligations provided by applicable law and regulations, any individual carrying out the activity defined under article 14 (definition of e-commerce) will have to provide to the beneficiary of goods and services delivered, information relative to his identity, which access should be made easily, directly and permanently. This obligation of information is also provided at article L.121-18 of the Consumer code, applying to professional sellers.

Moreover, Internet contracts being necessarily concluded at a distance, their dematerialized form implies specific rules. As a consequence, article 1369-4 of the Civil Code (introduced by the LCEN Act), outlines particular information that the commercial offer must provide in order to be valid (for instance, all steps to

[2] Proposal for a regulation of the European parliament and of the council on the protection of individuals with regard to the processing of personal data and on the free movement of such data. COM/2012/011 final.
[3] See below, Part B-1(data).
[4] Article 4 of the Directive provides: Member States shall not maintain or introduce in their national law, provisions diverging from those laid down in this directive, including more or less stringent provisions to ensure a different level of consumer protection, unless otherwise provided for in this Directive.
[5] Directive 2011/83/EU on consumer rights, amending Council Directive 93/13/EEC and directive 1999/44/EC of the European Parliament and of the Council and repealing Council directive 85/577 EEC and directive 97/7/EC of the European Parliament and of the Council.

be followed to the conclusion of the contract, all technical means enabling the customer before the conclusion of the contract, to identify and modify potential errors committed etc).
Besides, article 19 of the LCEN Act requires that the price shall be mentioned in a clear and unambiguous manner, and shall specify whether taxes and cost of delivery are included, this requirement being still applicable even in the absence of a contract offer.

Conversely, the acceptance of the bid could not be valid, if the customer did not have the possibility to verify the detail of his order and its final price, as well as the ability to correct his potential errors, as stated under article 1369-5 of the Civil Code. However article 1369-6 (also introduced by the LCEN Act), provides for exceptions to this last rule, in the case of relations between two professionals, or in the case in which the contract is concluded, not online via the Internet, but through exclusive communications exchanges between contractors. Then, the client after checking his order must confirm it, for the purpose of executing the transaction.
For further information regarding the validity of the contract in its electronic form, provisions are given at article 1369-1 and following of the Civil code.
The client may eventually, under article L.120-20 of the Commercial code[6], withdraw his order in a period of 7 days, without having to give any justification. This delay shall start from the delivery of the goods, or from the acceptance of the offer in case of services, and has been recently extended to 14 days by the Consumer Affairs Act of 17 March 2014.

Finally, cyber-sellers should be attentive to the proper execution of the contract concluded online, considering the fact that they are subject to a strict liability regime. As a matter of fact, article 15 of the LCEN Act provides that any individual or legal person engaged in the e-commerce activity as defined by article 14, is fully liable towards the purchaser, for the correct discharge of obligations deriving from the contract, whether these obligations are to be discharged in person or by other agents providing a service, without prejudice of his right to claim against the said agents.
Therefore, this provision shows that the online seller is the sole contracting party with the purchaser, and the only liable person in case of failure in the performance of the contract[7]. However this article also provides derogations, enabling the supplier of goods and services to ask for all or part of his responsibility to be waived, if the individual or legal entity is able to show proof to the effect that the non-fulfillment or the incorrect execution of the online contract is attributable, either to the purchaser, or to the unpredictable and insurmountable act of a third party not normally involved in the provision of services stipulated in the contract, or to a force majeure event.

This full liability must be distinguished of the derogatory regime of the hosting provider applied in the context of digital commerce to e-commerce platforms[8], under article 6-I-2 of the LCEN law. As a result, "individuals or legal persons, that ensure the storage of signals, written data, images, sounds or messages of any nature, provided by the service addressees" could not be held liable for the activities performed or information stored at the request of the recipient of these services, if they did not have knowledge of the illicit nature of the data or if they withdrew those illegal data, as soon as they were aware of its illicit nature (on the condition that they did not interfere at any point in the commercial process and limited their activity to the function of storage).

[6] Introduced with the order of 23 august 2001, transposing the directive of 20 may 1997 relative to the protection of consumers in respect of distance contracts.
[7] The same strict liability is provided under article L.123-20-3 of the Consumer code, regarding the professional seller obligations towards the consumer in case of distance contracts.
[8] Provided that they limit their activity to those of mere technical brokers, and therefore do not intervene in the process of trading (neither in offers' content, nor in contracts formation, delivery etc).

As a conclusion, all of these rules demonstrate of their safeguard goal, focusing thereby on providing rules ensuring the unique online consumers' protection, without attaching a particular importance on qualifying digital products involved in the process of electronic trade.

b) Mere definition given under French law of digital commerce

Under French legislation, the LCEN Act adopted a broad definition of digital commerce defined as the economic activity by which a person offers or provide remote and electronic delivery of goods and services (article 14). Are also included in the scope of this definition, services providing online information, commercial communications and services providing tools for finding, accessing and recovering data, or for accessing to a communication network or the hosting of information for free or not. Consequently no distinction is made under the LCEN Act, between professionals or lay people, free or paid services, which demonstrates the wide range of areas covered by electronic commerce.

As a result, French legislation despite the absence of definition given to the digital product itself provides for a definition of electronic commerce, which is as a reminder "the commerce through which a trader offers or provides remote and electronic delivery of goods or services as part of an economic activity". We can then deduce from this definition the fact that digital products are those, as part of digital commerce, which are delivered by electronic means.
Being delivered electronically implies another consequence, which is that digital products are necessarily intangible products since they are conveyed online, without any physical means needed. However this qualification is only the result of personal inferences and could not lead to say that digital products are bindingly qualified as intangible assets under legislation stated above.

Fortunately aside these common rules, more specific legislation such as IP and VAT law, focused on electronic products enabling us to assert our assumption.

2. Regulation of digital products under IP law considering their intangible aspect

Searching for a legal definition and regulation of the digital product, meaning any product delivered and used in a digital format, we find the conclusion that IP law also fails to expressly define the digital product itself but however may give specific protection to some forms that it could take.

IP law is particularly important in the digital environment, since it is more and more easy to benefit from protected products through downloads (of music, films, streaming) or use of cloud computing services. This paragraph on IP law is also particularly relevant in the matter of royalties since it will later enable us to identify income generated from protected products as such, thereby distinguishing them from other kinds of revenues that could be involved within digital context.

For illustration purposes, we can refer to the OECD commentaries, which in the matter of software use IP law to show what type of income could characterize royalties' payments. Indeed commentaries on article 12 (royalties' article) of the OECD Model Convention (MC), refer to rights to use the program "in a manner that would, without such license, constitute an infringement of copyright"[9], which shows the use of IP protection in the qualification of income derived from digital transactions.

[9] OECD commentaries, article 12, paragraph 13.1.

The downloaded software, which benefits from legal protection under article L.112-2-13° of the Intellectual property code provides that software, including their preparatory design material, may be considered as intellectual work for copyright purposes. However no more details are given at a European level under the Directive of 14 may 1991 on the legal protection of computer programs.
Besides, tax administration defined the software in 1984[10] as “a set of instructions, programs, processes and rules, together with potential related documentation, relative to the functioning of data processing equipment. The software is then characterized through intangible assets including necessary programs for the information process but also tangible assets used to support intangible assets”. Only this definition appears now to be obsolete considering the current wide use of intangible assets and above all the use of dematerialized means of transmission such as downloading.
We can also infer from this definition expressing the intangible aspect of the software as related to its source code, that the software transferred electronically (meaning without use of tangible assets to support the dematerialized work) within digital transactions, shall be qualified as an intangible product. We can ad that whether in the US or in other EU countries[11], software is regarded as a literary work and consequently protected under copyright, provided that it fulfills the originality requirement.

And still for illustration purposes, another particular product could also be defined under French law, which is the e-book, considered under a law on the unique price of digital books[12]. This law was adopted with the aim of initiating a regulation on the matter, taking into account national historic particularities and European constraints with regard of anti-trust and free market.
Therefore, it is a restrictive definition which is given of the e-book defined as the book ‘marketed under its digital form and published in a printed form or which is through its content and consistency, likely to be printed with the exception of accessory items depending of the digital publishing’.
We can also refer to a the definition provided by French tax administration through a rescript in 2011[13] linking thus this definition with IP law, as it defines the digital book but also the one supplied through physical media, “as having for object the reproduction and the representation of an intellectual work created by one or more authors, composed of graphical elements (texts, illustrations and drawings) published under a title. The digital book only differs from the printed one, by some points necessarily inherent to its format”. Tax administration adds that the e-book “is available through online communication network, in particular via downloading, or online streaming, or removable recording media”.
As an intellectual work, e-books as for software may also benefit from copyright protection when the author demonstrates through his work originality. More, the electronic book is widely regulated in French law through tax purposes (VAT), as the reduced rate of 5,5% applies since the 1st January 2013[14] (reduced rate lately questioned by a Court of justice ruling).

Accordingly even though no general qualification of the digital product as a whole could be found, we can still reach by some inferences to the qualification of digital products as intangibles, such as for the software and the online book examples regulated for both by IP and tax law. And as above-mentioned the last definition of the online book given by tax administration refers to the book as ‘the reproduction or representation of intellectual work’, which shows the primordial place given to intellectual property law in the regulation of digital products and which is the most appropriate considering their dematerialized aspect. Indeed digital products meaning dematerialized products, which can only be delivered

[10] Instruction of the General Directorate of Taxes, 12 October 1984, Official Bulletin 4C-7-84.
[11] For European countries, this results from the transposition of the directive 2009/24/EC.
[12] Law n°2011-590, of 26 may 2011.
[13] Rescript n° 2011/38 of the 29 December 2011; Official Tax Bulletin-TVA-LIQ-30-10-40.
[14] General Tax Code, article 278 bis 6°.

electronically, necessarily imply considering potential intellectual property rights that they may contain, which are omnipresent in digital environment as emphasized by the professor Caroline Le Goffic[15].

For instance she reminds that websites suppose domain names, which are also granted protection under certain conditions through intellectual property law. Moreover, the website manager will probably be the trademark owner under which goods and services are marketed in several countries. The website may also for instance benefit from a general protection through copyright or from punctual protection regulating the various elements constituting the website (such as digital medias, databases, software etc.) and which are all granted protection under IP law[16].
All these digital items can therefore benefit from a protection under either literary and artistic property, or industrial property, provided that they fulfill some legal requirements. Yet, there are for most protected under copyright law since it is indifferent to any physical support[17] and grants protection to any intellectual work on the condition that the intangible product fulfills the requirement of originality.

Indeed and more broadly, IP law grants exclusive rights to protect intellectual creation, which can obviously not be materialized[18]. As a result, the use of intellectual property law when convenient[19] thus points out the needs of a specific regulation for the protection of immaterial value, such as for digital products.
As a matter of fact, intellectual property law distinguishes intangible creation from the various forms through which it can be represented either intangible or tangible. Article L.111-3 of the intellectual property code provides that « intangible property as defined at article L.111-1 (cf. note 18) is independent of the physical material property ». Therefore, intellectual property law distinguishes intangible property from the tangible property of the physical object, which is only the manifestation of the author's intellectual creation.
As a consequence, digital products as seen before are protected through intellectual property enabling owners to protect intangible products resulting of intellectual creation and which are not represented through a material form (software, databases, multimedia creations etc.). This enables us to indirectly assert the intangible aspect of digital products under our domestic legislation.

Finally, we have to say that the development of digital environment makes it really difficult to identify all protected intangible products and to regulate the spread of such products in order to protect these creations from counterfeiting, pointing out the primary need for intellectual property law to adapt to digital growth.

3. Confirmation of their intangible nature through qualification of services under VAT law

We can reach the same previous conclusion using that time VAT law, as the digital product meaning the product delivered and used in a digital format is considered as an immaterial service through

[15] Caroline Le Goffic, University Lecturer in private law and co-director of the master 2 specialised in law of digital activities, at the University of Paris-Descartes.
Lamy Journal on the subject of Droit de l'immatériel 2014, Digital activities and intellectual property.
[16] Granted copyright protection since they may constitute intellectual work, see for example article L.112-3 of the IP code for databases protection.
[17] Article L.112-1 Intellectual Property Code: « the provisions of this code protect author rights on all intellectual work, whatever the type, or the form of expression, and regardless of its merit and purpose ».
[18] Article L.111-1 Intellectual Property Code : « the author of an intellectual work enjoys on his work, because of the only fact of its creation, of an exclusive intangible property right which is enforceable against all ».
[19] Has to match specific requirements to be granted protection through copyright law and it is also the case for economic work granted protection through industrial property law (specific conditions which fulfilment is proven through registration).

tax law. A service being necessarily dematerialized as opposed to goods, which are delivered through material means, such qualification confirms thereby the digital products' intangible nature.

This distinction towards digital products and its tangible or intangible aspect is not new in the domain of French taxation as it was issued in the 1980's concerning the VAT tax regime which should be applied to the operations of software supply. At that time, a distinction was then made between standard software and specific ones[20], the first being produced depending on their market outlook whereas specific ones are only provided on special order. However, this distinction is of little interest in our case, since as soon as the software is downloaded via the provider's website, the transaction is analysed regardless to the software nature (standard or specific) as provision of services[21]. This solution prevails for all downloaded contents either data, music, texts etc. Any download of any kind implies then the characterisation of the digital product furnished that way as a provision of service due to operations' immateriality.

Conversely the supply of good implies the effective delivery of tangible products, which could not be done through downloading. All the interest of such distinction, justified by the materiality of the product necessarily delivered through physical support or the intangibility of products downloaded and which remain imperceptible, will trigger specific tax consequences and in particular for VAT purposes[22]. For a quick illustration, we can refer for instance to the downloaded product qualified as a provision of service and in which taxable events arise when the service is provided, whereas services are chargeable only on receipt of the payment. This qualification is thus profitable as it enables the provider to avoid to advance the VAT, which is only due at the receipt of payment whereas it is less favourable to customers whom cannot deduct it until the payment arises, and not at the time of the debt book-entry.

More on the intangible aspect of such products, the Council of State in its report on the "Internet and digital networks"[23] associates online delivery of digital products to intangible services provisions, since they constitute dematerialized goods supplied electronically. This points out considering the delivery of dematerialized goods, the delicate issue of the legal qualification of goods and services that are not only ordered online but also downloaded online, without physical transit or provision off-line. This is especially the case for software and music or film recordings.
The report thus mentions that unlike the United States, for whom a digital product remains a virtual good, which delivery can never receive the qualification of service, the French Tax legislation department and the European Commission on the contrary consider that "software and other dematerialized products are qualified as services as soon as there is no physical delivery of the good"[24].

Besides, the provision of dematerialized goods via online downloading is asserted in France as an immaterial service provision under VAT law according to article 259 B of the general tax code. Indeed, this article refers to services as those provided on the Internet or any electronic network and which nature implies automated operations with minimal human intervention and impossible to ensure in the absence of information technologies[25].

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[20] Ministerial reply Authié, Senate Official review of 11 October 1984, p.1638. Details on distinguishing criterions brought under the tax instruction of 16 February 1996, Official Tax Bulletin (BOI) 3 A-1-96 n°2.
[21] Instruction of 8 September 2003, Official Tax Bulletin (BOI) 3 A-3-03, n° 26 to 28.
[22] For more details on the matter, see for instance under the direction of Judith Rochfeld "Les nouveaux défis du commerce électronique", Editions LGDJ Lextenso 2010, p.175 and following.
[23] Study adopted by the Council of State general assembly on 2 July 1998.
[24] (COM) 1998, 374 final.
[25] For more details, see also article 98 C of the Annex III of the general tax code (list of electronical services provided) and the Official Tax Bulletin, BOI-TVA-CHAMP-20-50-50, n°340.

UK legislation also leads to the characterization of digital products as intangibles due to their immaterial properties, revealed through VAT law qualifying them as services with regard to their dematerialized aspect. At least, all European countries agree on classifying digital products as services as opposed to goods with regard to their intangible features.
Most of countries (except the US) arrive to this conclusion due to the VAT directive basis. For other European member states, the same conclusion will be reached through their civil law governing commercial contracts as for the US. Indeed, US law as for other EU countries (such as Sweden and Switzerland) will refer to the subject matter of the contract, which will determine the applicable commercial law to such contract. For other contracts non-governed by commercial law in the US (other contracts than sales of goods), common law will then apply. Being specified that this distinction between tangible and intangible products is less interesting within the US, considering the fact that taxation does not rely on the way assets and transactions are characterized under the applicable commercial law[26].

As a conclusion, the digital product with regard to our domestic law and other countries' national systems have finally to be considered as an intangible product, and moreover regarded as a service (except for the US in which there are qualified of virtual goods), despite the various mechanisms through which countries reach that same result.

4. Subsidiary confirmation of intangible properties through direct taxation issues

On a subsidiary basis, we can reason that time from a direct taxation point of view, referring to confirm our previous observation about the dematerialized aspect of digital products, to the ministerial reply brought to Mr de Chazeaux[27]. Indeed, this reply indirectly confirms the previous qualification made of digital products as intangibles since the concept of permanent establishment is revealed as not adapted to e-commerce, since it enables undertakings to fully carry out their business in other countries without any physical presence, due to the use of the Internet with all harmful tax consequences that it implies. It concludes with the fact that current discussions are going on, from the OECD and French point of view on the ability of characterizing permanent establishment without any physical presence, and thus adapting taxation rules to the new context set out by the Internet. Therefore, reference to the non-adaptation of our current rules facing new business models which are totally dematerialized, confirms the intangible aspect of this new form of trading and its potential detrimental tax consequences (cf. part II).

After trying to define and qualify digital products under our national systems, implying to refer only to products that are recognized and thus known by our countries, we also have to focus on all other products, which despite their certain value for interested actors are still being left behind by countries' regulations.

[26] Contract law is a matter of State law whereas taxation is entirely governed by federal law, having its own rules for determining the character of assets, and thus not deferring to state law.
[27] Ministerial Reply to Mr de Chazeaux, of 26 October 1998 (not listed in the Official Bulletin of Public Finances, BOFIP).

B. The use of digital products not governed by law

1. Place of data: non-characterization as intangible asset

a) Data value in new multi-sided markets

As seen before, business changes implied by the development of the Internet have been in some cases, taken into account through specific rules regulating online transactions (IP law and VAT law, cf part I-A). More, this issue involves data protection rules, since the digital traffic concerns a huge amount of data, collected and used on the Internet.
Indeed, data constitutes one of the core intangible values on which digital actors relied to build their growth. This subpart focuses then on the way that data is used through new business schemes to leverage profits from online free services supplied by such actors.

As far as data value and in particular raw data value is concerned, no measures or current legislation lead to consider the existence of a potential data value, as distinct from the processes of collecting and using that data. Even these latter processes are not given yet any value, since only a renowned French study on the matter: the report Collin and Colin[28] highlighted for tax purposes potential value issued from data collection and processing.
This report, which will be discussed further on, qualifies such data of "free work" from users of such applications[29]. It implies though to focus on the means of collecting and processing such data, since even if no rules exist on the matter as in the case of raw data itself, the use of such data should be taxed considering that it become common procedure in new business models, to collect users' personal data in exchange of granting the access to a free service.

It also recognizes the controversy opinion of authorities on the matter and the lack of measures regulating such value, limiting consequently the Internet to a mere media or distribution channel[30]. However it does not occult the true value that such data generates in business schemes, for example with regard to third parties, who pay for a license for their use. These transactions must of course be held with respect of the consent limitations given by users, but the Report above all focuses on the concrete value of data in business environment, which made the success of major actors basing their functioning on its use (Google, Amazon, Facebook, Apple etc).

The report also emphasizes the regular and systematic monitoring of personal data issued by digitals multinationals on one side of the market, and which are then sold (itself or after processing) on another side of the market, in order to leverage no-cost services ensured towards users of applications within the first market and whom data are used. Indeed free service is supplied, provided that users give personal information in order to create their account, which correspond to the moment through which data is collected.
Collin and Colin consider that the user in that scheme contributes to the production of value to other users' attention located on the other side of the digital actors' business model. They talk in that aim of "free work" provided by users of such applications, which escape to French taxation power and which would otherwise justify in the context of tax treaties, taxation of the income generated by the source State.

[28] Report Collin and Colin, published on the 18 January 2013, available on the website of the Ministry of Economy, entitled « Mission d'expertise sur la fiscalité de l'économie numérique » meaning expert mission on digital taxation.
[29] Report Collin and Colin, section 2.2. « Les données valorisées dans l'économie sont majoritairement issues du travail gratuit de la multitude des utilisateurs d'application », p.52.
[30] See Report Collin and Colin, p.55.

However this study shows in the absence of taxation of data itself, that raw data does not have any value yet under French taxation and more broadly under French legislation, which limits its temper towards merchandising of data, to their mere protection during their collection and processing[31]. The only progress that can be noted is the reflection in taxation domain of these methods of collecting and processing French data, and in particular proposals of taxing the collection of data derived from the regular and systematic monitoring of French users' online activities.

b) Absence of data value and ownership through data protection law

i. <u>The sole protective aim of legislation applying to data</u>

Internet traffic implies massive data circulation, as it will also be dealt with through further paragraphs of our study (cloud computing, cf part I-B-2). Thus specific regulation has been set out in order to contain this phenomenon through various rules that all have the same objective, which is to protect personal information and privacy on the Internet. Going through all of these rules will also enable us to confirm conversely that no value is attached yet to data.

French law since 1978 adopted specific rules regulating the Internet traffic under the law entitled the Data Protection Act of 6 January 1978. Then, the Directive of 24 October 1995, on the protection of individuals with regard to the processing of personal data and on the free movement of such data, significantly renewed the rules applicable since then. This directive was transposed in French law by the law of 6 august 2004, on the protection of individuals with regard to the processing of personal data and modifying the Data Protection Act of 1978. This law was assorted with a decree of 20 October 2005, amended the 25 march 2007.
This directive transposed in European countries enabled the EU to create a uniform system of protection, which secured international exchanges. Though, applying different levels of protection would disrupt cross-border exchanges implying data circulation (as through cloud computing), since individuals may be unwilling to transfer personal data abroad in case of lower protection or no protection at all compared to their own country's legislation. However, the US point of view has to be put aside through our developments since it does not grant significant protection toward personal data while only regulating for the most, data derived from children users[32].

As a result, we notice that the common point between all of previously mentioned rules is the need to conciliate data merchandising essential to current competitive business models, while showing respect for persons involved, which implies to combine the principles on protection of personal data and free circulation of such data. In order to illustrate the fact that data is only regulated under a protective aim, we will briefly lay down core principles enforced towards data collection and processing.
First the principle provided under article 6 of the Data Protection Act is that personal data shall be collected in a licit and loyal way and for specified purposes, when explicit and legitimate (principle of fair data collection).
Some data however, may not be collected or processed, without the express consent of the individual concerned by these data. Such data are qualified of sensitive data and concern racial origins, political opinions, philosophical and religious beliefs, trade-union membership and data concerning the health and sex life (article 8-I of the Data Protection Act). Still on sensitive data, we can mention a particular one, with

[31] Reference to the Directive on the protection of personal data, n°95/46/CE, transposed in French legislation by the Law of 6 August 2004, n°2004-801 on the protection of individuals with regard to the processing of their personal data, and modifying the Data Protection Act of 6 January 1978.
[32] For instance requiring parental consent prior to any collection, use and/or disclosure of personal information from children.

regard to its signaling power of individual identity, which is the number of inscription through the national directory of individuals' identification. This particularly sensitive data cannot be collected without the CNIL's authorization (article 25, I 6°).

Concerning now data processing, the process shall have a specified purpose and be carried out by a specific person, to whom individuals can refer in case of need (article 19 and 20 of the Data Protection Act). The processing founding act shall determine people who will have access to these information and individuals authorized to ask for the communication of such information. More, information shall only be stored for a limited period of time also determined in the processing founding act, which suggests the right to oblivion.
Furthermore, the processing manager shall take all necessary measures to ensure the security (article 34) and the confidentiality of such data, in particular in the case of potential subcontracting relationships (article 16). The data controller will thus have to implement appropriate technical and organizational measures to protect personal data against accidental loss, unlawful destruction or unauthorized disclosure, alteration and access or all other unlawful forms of processing (article 34).
But above all, article 7 provides that data processing could not be carried out without the prior consent of the person concerned (except for cases where the same article has determined otherwise).
Then, in order to ensure an informed consent, the data controller has an obligation of information with regard to the person whose details will be processed. This obligation is provided at article 32-I of the Data Protection Act, implying a series of information and amongst others: information relative to the data manager's identity, information on the purpose of the processing, information about the rights of the concerned party such as the right to access his data, to make corrections, to delete it or opt out entirely etc[33].

Finally and as far as the data processing is concerned, persons whose data are processed will benefit from several rights granted under the Data Protection Act, as mentioned earlier through the data processing controllers' duties.
First, any individual will have access to data concerning him (article 39-I-5°).
Article 40 also provides a right to challenge and make corrections to data concerning him. The right of rectification enables the concerned person to require the data update and even its deletion. This instantly refers to the "right of oblivion" which is in practice hardly effective. Indeed, most of data on the Internet are characterized by long lifetime, while there are rare opportunities given to the user to remove his traces when unsubscribing from a service.
Besides, legitimate information published about an individual are not withdrawn when a favorable ruling is issued from courts or when charges are dismissed. Therefore national measures are brought in order to struggle this problem, as when two senators have submitted a law proposal to help better "guarantee the right to privacy in today's digital word"[34], which should among other things, enable the user to benefit from a free right of removal relative to data concerning him. Yet, this law proposal adopted by the Senate, still have to be voted at the National Assembly before being enforced. Moreover, a charter on the right to oblivion was adopted[35]on French Government's initiative, by several digital actors such as Bing, Windows Instant messenger though neither Facebook, Google or Yahoo! are signers. However, this at least enabled concerned persons to manage through online tools data dissemination.
Last but not least, the interested person is also granted a right of opposition to the processing of personal data in application of article 38 of the Data Protection Act, provided that there is a legitimate motive. However, article 38 adds that the individual can freely object to the use of his personal data, in particular for marketing purposes, by the current data processing manager or in the case of later processing.

[33] The decree of 25 March 2007 under article 14 provides modalities for giving prior information.
[34] Law proposal from Yves Détraigne, Anne-Marie Escoffier, submitted to the Senate for a first lecture, the 6 November 2009.
[35] Adopted the 13 October 2010.

As a result, the only limitation that could be found to the protective goal of current data legislation is that data protection must however be conciliated with other purposes and mainly the freedom of expression, specifically in the field of journalism and literary and artistic work (article 67 of the Data Protection Act).

ii. The spatial scope of data legislation with regard to cross-border exchanges

French legislation makes no distinction between rules applying to data or more specifically to personal data, the only data benefitting from protection being the one defined as the one enabling identification of a physical person, directly or indirectly (personal data definition, as provided under the Data Protection Act at article 2). Furthermore, the Collin and Colin report emphasizes the fact that it is difficult to make a distinction between personal data and other data, considering the fact that it has become simpler with the use of adequate processing to identify persons from what appears to be anonymous data[36].

However, it is relevant to refer to the territorial scope of the Data Protection Act, since it is the base frame of French data protection legislation and could have parallel consequences with regard to the application of French tax law. Indeed, it enables us to check rulings previously mentioned, from an effective and practical point of view in the context of trade internationalization and the generalized use of informatics tools.
This geographic limitation is issued by the LCEN Act modifying the Data Protection Act and inserting thereby a territorial scope as provided in the relevant directive[37], in the absence of any geographic indications given in the original text. It provides that rules apply to any personal data processing, which manager is established within French territory (article 5 of the Data Protection Act), considering that is established in France any person pursuing an activity through an installation and independently of its legal form (subsidiary, branch etc.). French law thus converge towards European directive and case law interpretation, for which establishment suppose "true and effective exercise of an activity, by means of a stable activity"[38].

More, Article 29 of the Working Party considered in its opinion on research engines[39], that it was sufficient in particular for an establishment, "to be responsible of relations with users of the search engine, in a specific jurisdiction or that the processing controller had an office in a Member State, which plays a lead in the sales of advertisements focusing on inhabitants of that State", for European and national rules relative to data protection to apply.
Consequently, many firms to avoid application of such protective legislation are thus tempted by the layout of their processing structures within third countries. Though, legislation to fight this potential risk provides with a criteria of means through the directive, meaning that rules also apply to any processing manager, "whom without being established within the French territory or in another Member State territory of the European Community, recourse to processing methods located in this same territory". However no further precisions are given, in view of defining those processing methods. The Senate's interpretation only indicates the fact that they include material and human means[40].

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[36] Report Collin and Colin, issued from the expert group on digital taxation, of January 2013 (available on the website of the ministry for economy), p.59.
[37] Directive n°95/46/CE.
[38] CJCE, 25 July 1991, Factortame II, case C-221/89.
[39] Opinion 1/2008 of 4 April 2008 on aspects of the data protection related to research engines.
[40] Senate, Report n°218, 19 March 2003.

As a result, this legislation truly applies to Internet actors as it covers any body even located out of the European Union as soon as they carry out data processing in France, with the exception related to the means "used for the only purposes of transit"[41].

These details regarding the determination of French law spatial application are relevant with regard in particular, to the second part of our study focusing on tax implications and thus, the potential application of French tax law to such operations. Indeed, tax power is only founded according to French legislation when based on an effective presence within French territory. And if the application of French data protection law is so dreaded, it is because of its high level of protection, as well as French tax law, which could act as a deterrent considering its high rates' reputation. Though, its application is still limited even in the context of digital international exchanges to the location of a permanent establishment, while digital actors act mainly through dematerialized means, coming in particular from servers located outside of the taxing power's authority.
Applying thus tax law as explained for data protection law would lead to effective taxation of digital actors, which even if settled outside French territory, still rely on data processing to levy online free services used by French consumers. Even if this potential solution could appear as simplistic considering States sovereignties involved in such transactions (organized through tax treaties), it is not useless to remind that harmonized solutions could be applicable as in other fields of law, to prevent digital actors from avoiding French taxation.

iii. <u>Absence of any data value consideration</u>

Finally, and above all, the Collin and Colin report provides that users' "free work" previously described in new business models is not valued by tax law, since data itself are not considered as intangible assets from an accounting point of view, which feeds back the same inconvenient in tax law (as tax is entirely dependent of accountancy under French system).

This assertion is explained by the report, which reminds that an asset according to accounting rules is an identifiable element of the enterprise patrimony, which has a positive economic value for the entity, meaning an element generating means that the entity can control due to past events and from which future economic benefits are expected. More, the cost and the value of the asset must also be evaluated with sufficient reliability in order to be registered.
Considering particularly the intangible asset now, it is defined as a non-monetary asset without any physical substance. But it is hard to consider, according to the Report that data could meet this definition of intangible asset for digital enterprises or at least could be accounted that way.
Indeed, the definition given under accountancy rules emphasizes the control needed on the element in order to be qualified as an asset, however control over data cannot be ascertained since the ownership of data is excluded as explained under the following part. As a matter of fact, the rights of access, rectification and deletion granted to users on their data prevent us from considering that the entity, notwithstanding the absence of data ownership, could exercise any control on such data[42].

Therefore, in the absence of any tax rules imposing raw data itself and considering the current difficulties to consider raw data as an asset of the enterprise under French and other countries' regulation,

[41] Exception recognized in the case Bénédict S. vs. Google Inc., ruling ot the Paris Tribunal de Grande Instance, of the 14 April 2008.
[42] See Report Collin and Colin, p.84. « Section 3.2: Les données et le travail gratuit des utilisateurs d'application ne sont pas appréhendés par le droit fiscal ».

we can conclude that despite its quantifiable value for digital actors (for instance for advertising purposes) data is not given any objective value from our countries' point of view.

iv. Absence of data ownership

Some advocates data ownership such as the Professor Pierre Catala, who analyzed prerogatives granted to individuals, implemented under the Data Protection Act (rights to access, amend, delete data) as "prerogatives deriving from their real right"[43]. According to him, these prerogatives "embody implicitly the belonging of nominative data to the person concerned" concluding thereby the existence of a right on "personalized information".

Other actors are also advocating this idea of personalized information appropriation, such as Arnaud Belleil[44]. Politics even presented a "Declaration of fundamental numeric rights" stating that "any individual is the owner of numeric information concerning him, with respect of the rights and freedoms of others. The use of these information is defined by the concerned individual"[45]. This analysis of ownership of personal information seduces by the exclusive control that it implies for individuals and the efficiency to which it could lead, as in other fields of rights such as in the matter of right to one's image etc.

However, despite this last point of view, rights on data are rather characterized as personal rights that benefit to individuals with regard to his data circulating on the Internet, as part of their personality rights. This right is thus attached to his right of privacy, which has constitutional value in French legislation (article 2 of Declaration of Human Rights)[46] and in most European countries.

It is referred to as a fundamental freedom in Europe[47], thus it was showed that the Data Protection Act do not accredit the data ownership thesis[48]. The same observation whereby rights conferred to individuals on their data are not proprietary rights but personal rights can also be made under the directive on the protection of personal data of 1995. Indeed on the contrary of databases, which are protected by intellectual rights[49], settled to protect investments that represent the collection and the processing of such information, the appropriation of data itself can not be recognized, since it would lead to get out from the scope of French and European legislation, breaking the balance between data protection and freedom of circulation of such data.

Moreover, the best manifestation of the personalist concept applicable to data protection is the rule of prior consent of individuals with regard to the collection and processing of their data. This consent is made possible because of the data processing manager's obligations, notably of information towards online users[50]. Other various rights are also granted to individuals on their data under the Data Protection Act, showing of this aim to attach a personal character to such rights.

Finally, the Report Collin and Colin also considered this question and reminds that countries of Latin Law (such as France, Germany etc) have a personalist conception of data centered on the individual, subject of

[43] Pierre Catala « Ébauche d'une théorie juridique de l'information », Dalloz 1984, chronic p.97, n°27.
[44] « La régulation des données personnelles », Légicom 2009/1, n°42, p. 143 and following. See also « Le marché des données personnelles : protection de la vie privée à l'âge d'Internet », Dunod, 2001.
[45] Press conference given by Hervé Morin at the 'Fondation pour l'innovation politique' meaning the Foundation for political innovation, on 23 June 2009, article 4 entitled « propriété numérique ».
[46] Constitutional Council, decision n° 99-416, 23 July 1999.
[47] Interpretation of article 8 of the European Convention on Human Rights and in the European Union through interpretation of articles 7 and 8 of the Chart on fundamental rights for respect of privacy and for protection of personal data.
[48] Y. Poullet, « Le fondement du droit à la protection des données nominatives : propriétés ou libertés ? », Nouvelles technologies et propriété, Editions Thémis/Litec diffusion, 1991, pp. 175 and following.
[49] Directive n° 96/9/CE of 11 March 1996 and Law of 1st July 1998.
[50] Article 32-I, of the Data Protection Act of 6 January 1978.

the data[51]. Following this conception, the subject and his data could not be dissociated, individuals preserving through inalienable way extensive rights on data concerning them.
As compared by the study to copyright, which benefits from a protection since the work is the expression of the author's personality, data law consider data as inseparable from persons from which there are derived. It adds that the personalist conception of data protection law is yet not hostile to data commercial exploitation, which it only aims to regulate by laying out some safety principles (individuals' prior consent to the collection of their data, collection for specified and explicit purposes, the right to access and rectify those data etc.).

We can rebound on this problematic of data through cloud computing transactions, as users under such contracts will enjoy software or other infrastructures, which are mutualized by the provider to all his customers and thus implying the transfer of their data. For example, the software used will not be owned by the customer obliging him to trust the provider even though he is not always aware of the server's location and of the degree of protection applied, according to the country in which it will be located.

2. Cloud computing

a) Cloud computing transactions: Iaas, Saas, Paas

i. Definition and typology of cloud computing services

Another core value of digital business may be found through cloud computing transactions, though we cannot relate yet any regulation on the matter. Our country does not provide for specific rules dealing with cloud computing but this do not prevent initiatives from being undertaken, from political[52] or independent administrative authorities, in order to find solutions relative to the execution of these specific contracts.
The cloud computing refers to all new forms of hosting platforms for data and applications offered by services' suppliers through an information system[53]. More and as defined by the European Commission, the cloud computing is everything that includes storage, processing and use of data contained in a remote computer and which access is provided using the Internet[54].

The Cnil[55] also considers it as a developed manner of outsourcing, whereby the client or the user are offered an online service, which administration and operational management are performed by a subcontractor. The cloud is also characterized by the billing on demand, the near-immediate availability of resources and the fact that in most cases customers ignore the data location.
The Cnil after defining this emerging phenomenon also provides with recommendations in order to determine specific rules, which should be followed by cloud computing providers and users.
Therefore we could consider in the absence of specific law regulating cloud computing, that our country still provides through an independent administrative authority, specific rules that should be followed in order to handle contractually, legal uncertainties that could arise through the use of the cloud.

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[51] Report Collin and Colin, p.58 and following, « Section 2.2.2 : Le droit fondamental à la protection des données personnelles est un premier tempérament à leur prédation par les entreprises».
[52] For an example, see the Proposal for a regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data. COM 2012/011 final.
[53] Lamy Droit du Numérique 2014, Chapter 6 Cloud computing contracts.
[54] Opinion of the European Economic and Social Committee on the « Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on 'Unleashing the potential of Cloud Computing in Europe' », COM (2012) 529 Final, of 27 september 2012 (2013/C 76/11).
[55] « Commisssion nationale de l'informatique et des libertés » meaning the National Commission on Informatics and Freedom, which is an independent administrative authority.

As a matter of fact, the client can in the light of his own needs, have access to various cloud services more or less complete. Specialized providers in the area offer a broad typology of cloud services that may however be structured around three areas.
First, is used the software as a service (SaaS, formerly known as ASP, meaning application service provider), which constitutes an online software offer (and by far the most popular cloud computing offer). Then, the platform as a service (PaaS) on which, the firm offers online applications. And finally, infrastructure as a service (Iaas), which offers online infrastructures, making available the virtual computers resources of calculation or storage (servers, processors, network etc.).

These distinct formulas benefit to both parties, since the user will not have to invest in software or applications while just paying the right cost considering his own use of the service. On the other side, the provider will gain from the infrastructures' mutualization, as used by his clients and enabling him to offer competitive costs.
Yet there is still a common point between all these services, which is the outsourcing of such services offered and the remote hosting of all or part of clients' data.
Accordingly and considering these common points, it is then possible to focus on specific rules (Cnil's recommendations) established through standard clauses that should be applicable to all offers, in order to prevent or regulate risks in the absence of specific legislation on the matter.

ii. Contract uncertainties handled through Cnil recommendations

Cloud computing, in its structure, leads to legal uncertainties considering application of contract law to these specific contracts and with regard to new issues that may emerge from such contracts. As a result, thoughts were given on standard contracts, which could handle several issues raised by the cloud and especially the issue regarding protection of users' data.

With that object, a whole set of recommendations is provided by the Cnil on a French level[56], but we also have to mention the fact that recommendations on a European level are also aiming to govern such contracts[57], with the purpose of handling legal lack through a contractual basis. Indeed, cloud users and services' providers are going to govern their relations with the conclusion of an agreement, thus these recommendations provide with standard clauses aiming to protect various interests involved.

Considering now what type of transactions are dealt with, through cloud computing is difficult, as there are many and various and will all depend on contractual obligations expressed in the contract itself. Though we can still attempt to legally qualify them.
First sales contract have to be excluded, since no transfer of ownership (tangible or intangible) is implied in such transactions. The rental agreement could also be considered, since the provider is in most cases going to offer to the user, application resources with a private data storage space. Yet, this qualification would be simplistic regarding in particular all additional services also supplied.
Consequently, characterizing cloud transactions as business contracts or service leasing contracts would be more appropriate. As a matter of fact, the use of applications and storage spaces in return of the payment of fees are almost always assorted with other services such as, counsel, maintenance or backup services etc. Therefore, the Cnil through its recommendations refers to such transactions as for contracts of provisions

[56] CNIL, recommendations for enterprises that consider subscribing to services of cloud computing, 25 June 2012, Group art.29, Opinion n°5/2012 on cloud computing, adopted the 1st July 2012.
[57] Opinion of the European Economic and Social Committee on the « Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on 'Unleashing the potential of Cloud Computing in Europe' », COM (2012) 529 Final of 27 September 2012, (2013/C 76/11).

of services. Qualifying such contracts will enable us further on to apply relevant taxation to income derived from cloud transactions, excluding qualification of capital gains (as the sales contract is excluded) and focusing on business income or royalties, according to what is provided through each contract.

We are finally going to explicit briefly what core rules to be followed are provided by those recommendations and are trying to protect all interests involved, in particular security of data transferred in such transactions.
Indeed, The Cnil in the framework of its recommendations raises the main issue relative to cloud transactions, which is the protection of personal data. In this way, the Cnil reminds that its indicative recommendations are based on an initial risk analysis, which is the user's responsibility and is also based on providers' commitment to transparency, which shall be formalized within the contract.

Cloud computing contracts will have consequences, the most important one being the transfer of data on a computerized data collection system, which management is not in the hands of the user anymore and could as a consequence be more readily intercepted by others. As a result, this data collection system has to conform with applicable French legislation on the processing of personal data as mentioned above, in particular with the law on the protection of individuals with regard to the processing of personal data, modifying the Law relating to Data, Files and Freedom[58], and transposing European directive on the matter[59]. The Cnil therefore recommends to the user to ensure contractually that providers have an obligation to respect law relative to the processing of personal data, and in particular, the law of 6 august 2004, added to his confidentiality obligation.
Besides, aside from his general obligation of counsel, information and warning, the cloud provider shall also respect specific obligations with regard to particular characteristics of cloud services. In view of the remaining issue of personal data protection, the cloud provider must then inform customers about all storage locations and all processing activities on personal data included in the service provided, which allow customers to ensure in particular, that countries in which data are stored have a protection level equivalent to the one ensured by European law[60].

As far as the provider's responsibility is concerned, French law transposing the directive above-mentioned considers the third-party provider (hosting provider) as a data subcontractor, acting on the instructions of a data processing manager who is the client himself. The provider will thus be invested of an ordinary liability with regard to civil law, implying an obligation of means as to the service's availability, and an obligation of result regarding the hosted data recovery. In this last case, only the "force majeur" could enable him to be exempted of his responsibility, still it is possible for the provider to manage contractually his liability through limitative clauses.

Finally, standard contracts also imply to consider intellectual property rights, in particular in Saas transactions, since the cloud provider if he is not the author (of the software used as a service), must have signed an upstream contract with this last one, which grants him a license in order to render the software available to his own customers. This shows that initial transactions are needed too, before any cloud computing offer could be made.
So the upstream contract must foresee the ability for the provider to use, to exploit and distribute the software. The provider must thus make sure that he has the right to offer computer applications to his

[58] Act n°2004-801 of 6 August 2004 relative to the protection of individuals with regard to the processing of personal data, and modifying the law of 6 January 1978 relative to data, files and freedom.
[59] Directive 95/46/CE of the European Parliament and of the Council, of 24 October 1995, relative to the protection of individuals with regard to the processing of personal data and on the free movement of such data.
[60] See also Commission decision of 5 February 2010 on standard contractual clauses for the transfer of personal data to processors established in third countries under directive 95/46/EC of the European Parliament and of the Council.

clients, avoiding any civil or criminal liability with regard to software potential counterfeit, which also demonstrates IP remaining issue through the use of digital products.
After explaining the cloud computing challenge in the absence of current rules taking into account this new phenomenon, we can still find accounting legislation potentially applicable to such contracts through application of the treatment provided for bundled contracts.

b) Cloud computing accounting treatment as bundled contracts

The bundled transaction, implying the sales of a product but also including services' provision within a same transaction, are often encountered within agreements implying digital products. For a quick example related to the cloud, it is not rare within Saas transactions that the software's use sold also includes for the customer, necessary maintenance services. Though income generated by such contracts are not explicitly treated under French rules neither for individuals nor consolidated accounts. However we can still find answers for consolidated accounts under IFRS[61] principles and for individuals under questions asked directly to the French CNCC[62].

i. <u>IFRS principles applying to French listed companies with consolidated accounts</u>

We will directly refer to IFRS principles since they are more precise considering consolidated accounts than French rules, as the CNCC[63] provides in the absence of domestic rules, that with respect of the principle of "substance over form", products and services derived from the bundled contract shall be accounted considering their respective fair value.

Then for a second step, the overall contract value has to be divided depending on those respective fair values. According to the CNCC, these fair values are determined considering all available elements and notably rates fixed when bundled contracts are subject to separate price offers, which is the case when the customer can buy separately from the product, services for instance for those related to maintenance.

However and with the aim of determining more precisely the treatment of a bundled transaction, which is common in the context of electronic commerce and in particular through cloud transactions, sub-issues of law may be considered which have already been resolved under French provisions[64], towards enterprises that apply IFRS accounting principles. We have to remind that European Union imposes the mandatory compliance with IFRS rules to all listed companies within consolidated accounts. Notwithstanding its specific and limited scope, IFRS principles are the most detailed rules that could be found for the treatment of bundled transactions and we will then begin by explaining the analysis grid provided, before dealing with other accountancy rules applicable to other individuals and consolidated accounts under French rules.

For instance, the first question to consider in the case of bundled transactions under IFRS rules is about the identification of separable transactions, which shall then be distinctly accounted. The issue is to determine whether identifying factors shall be the same independently of the contract's nature. The answer brought to this question is that these criterions are distinct considering the nature of the contract, and thus primarily determining the contract's reference standard is necessary.

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[61] Acronym for International Financial Reporting Standards, provided by the IASB (International Accounting Standards Board) regulator.
[62] CNCC is the acronym for "Conseil National des Commissaires aux Comptes" meaning the National Council of Auditors.
[63] See CNCC Bulletin, n°131 of September 2003.
[64] The Mémento IFRS 2015: Subsection II. Bundled transactions, A. General principles for income accounting, Editions Francis Lefebvre.

Indeed, if the contract falls within the scope of IAS 18 (providing for sale of goods, provision of services, the use by others of entity assets yielding interest, royalties and dividends[65]), which is the type of contract involved in digital transactions, are thus applied to such transactions separating factors set out by the norm reference applicable. There are for instance distinct from those set out for contracts falling within the scope of IAS 11, which applies to building contracts (defined « as a contract specifically negotiated for the construction of an asset or the combination of assets, that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use »[66]). It is thereby primarily essential to determine the nature of the contract to refer to the proper norm reference, in order to apply adequate separating factors for the needs of accountancy.

Therefore IAS 18 provides that in certain circumstances, it is necessary to apply rules on revenue recognition to each separately identifiable component of a single transaction, in order to reflect the substance of the transaction[67]. This latter rule does not provide for strict criterions, but rather general principles illustrated by examples, to determine whether bundled transactions must be accounted taking into account each separable component.
It provides for example, that when the selling price of a product includes an identifiable amount for subsequent servicing, that amount is deferred and recognized as revenue over the period during which the service is performed. Conversely, the recognition criteria is applied to two or more transactions together when they are linked in such a way that the commercial effect cannot be understood without reference to a series of transactions as a whole. It provides the following example: an entity may sell goods and at the same time enter into a separate agreement to repurchase the goods at a later date thus negating the substantive effect of the transaction. In such case, the two transactions are dealt with together. Before pursuing, we have to notice the fact that the same transaction may include elements falling within the scope of IAS 18 while others may be covered through IAS 11, as for instance in the case of a construction contract including services' provision, which are not directly linked to assets' construction.

Now, if the nature of the contract falls this time under IAS 11, it provides that in certain circumstances, it is necessary to apply standards to separately identifiable components of a single contract or to a group of contracts together, in order to reflect the substance of a contract or group of contracts[68]. It therefore provides this time precise criterions of separation relative to components, taking into account procedures regarding the conduct of the negotiation. IAS 11.8 thus states that when a contract covers a number of assets, the construction of each asset shall be treated as a separate construction contract in three cases. First, when separate proposals have been submitted for each asset. Second, each asset has been subject to negotiation and the contractor and customer have been able to accept or reject that part of the contract relating to each asset. Finally is included the case in which the costs and revenues of each asset can be identified.

On the contrary and as already laid out above, IAS 18 does not provide for precise criterions but general principles for the recognition of revenue and the case in which each gain must be linked to several components constituting a bundled transaction. IAS 18 is particularly interesting in the case of digital transactions as they focus on the type of contracts implying transfer of materials'use, assorted with provisions of services.

[65] IAS. 18.1
[66] IAS 11.3
[67] IAS 18.13
[68] IAS 11.7

A question occurred in the IAS 18 area, asking if those rules concretely enable to determine if the contract includes several transactions or if it is a sales contract with an obligation. The answer given[69] is that general principles are not always sufficient, thus it will be necessary to carefully analyze distinct elements, which could potentially be included in the current contract.
To illustrate this, are given examples relative to a sales contract with services provision including assistance and maintenance, or a sales contract with a warranty on a longer period than the manufacturer warranty. These contracts could lead to a distinct recognition of its various elements, as soon as their value can be determined, and that they could be acquired by third parties or sold separately by the supplier.
However in the case in which, value of complementary services are not significant comparing to the contract as a whole, it would be possible to not recognize those elements separately.
Conversely, in the case of sales of goods with a manufacturer warranty, this legal warranty which can not be dissociated from the purchase price, considering the fact that the customer could not acquire this same warranty from an outside party other than the seller, this operation should be analyzed as a sales contract with an obligation and not a contract including two distinct transactions.

Finally, some practical cases could lead to more difficulties within identification of distinct transactions or distinct elements in a single transaction. For example, in the case of the sales of a hardware with an assistance and maintenance contract for a certain period (one year), the hardware material and the contract of assistance and maintenance are distinct since the vendor could sell the material independently of the maintenance contract and the buyer could buy this service from any other supplier. And this consideration should be independent from the fact that the hardware price in the sales contract is distinguished from the price of complementary services' provision. Gains therefore received, as part of the maintenance contract, should be recorded as prepaid income.

However and as a conclusion, these rules should no more apply from the 1st of January 2017, because from this date, IFRS 2015 replaces IAS 11 (building contracts) and IAS 18 (revenue of common activities) accounting standards. It provides that its new requirements are effective for new fiscal years beginning on or after January 1st 2017, subject to European authorities approval.
These new rules are set up with the aim of convergence of accounting standards, which could finally lead to the effective comparability of undertakings' results, due to harmonized accounting standards.

Indeed the IASB[70] and FASB[71] published on the 28th of may 2014, a common norm which deals with the recognition of revenue from contracts with customers and providing the ability of an anticipate application. Within the framework of these new decisions regulating all transactions contracted between the enterprises and its clients (with the exception of insurance contracts, rental contracts and purely financial transactions), rules relative to income have changed and therefore the way of accounting for gain and losses shall be far better adapted to information needs of investors, in particular in term of information comparability.

As a result, a single analysis grid will be implemented including 5 steps that are related below.
First, arises the identification of the contract or contracts that could form a single transaction.
Second, are identified obligations arising under the current contract: there are performance obligations made by the supplier to transfer goods provided in the contract to the client, or to execute services also negotiated under the same contract. Nevertheless, most problems occur in this particular type of contracts including several performance obligations, as we have to consider whether they could constitute distinct

[69] The Mémento IFRS 2015, Subsection II Bundled transaction, point 25352.
[70] International Accounting Standards Board.
[71] Financial Accounting Standards Board.

goods and services for clients, which could independently lead to economic advantages, or by using other resources already available to them.
After determining the several promises contained in the contract, will then be considered to what extent these promises could be separated from one another. This constitutes a primordial step since this period determines if the revenue recognition will need to be ventilated between several components, which could be recorded through different accounting years.
Third, is determined the price of the whole transaction.
Then, the following step will be to reallocate the fixed purchase price to various obligations identified through step 2, the disaggregation being based on the value (observed or estimated) of each component as if it was sold independently. The whole price of the transaction could be lower than the sum of all components' individual purchase prices, thus the global discount will be ventilated proportionately between all components except when the undertaking can show that this discount is the result of a particular component.
Finally for the 5th and last step, intervenes the recognition of each income within the period in which the promise was satisfied (delivery of the purchased good or performance of the services). In the case of a continuing obligation, an objective method must be set out by the undertaking, in order to evaluate the progress in the service execution, and therefore the amount that should be recorded each year until the service's complete execution.

Without forgetting the limited scope of IFRS principles only compulsory to listed companies with consolidated accounts, we will now consider other rules that should apply in all other scenarios.

ii. National accounting principles applying for all other cases: provisions given through questions asked to the CNCC

The CNCC[72] reminds that bundled transactions include all at once sales of goods and performance of services over a period of time and that it applies for instance to software sales assorted with maintenance services for products sold.
Thus recognition of income from bundled contracts must be done in accordance with disaggregation of the price of products and price of services performed, as provided under the concerned contract. The CNCC therefore distinguishes two situations, either the one in which enterprises identify within the contract the price relative to the product sold and the price of the service provided simultaneously, or the situation in which the overall price is not divided within the contract, according to its different benefits.

In the first case in which distinction is made, there are no difficulties and thus the CNCC provides that recognition of income shall be done according to the disaggregation undertaken in the contract, depending on the price fixed for the product itself and the one fixed for assorted services.
However, in the case in which a service is insured on several accounting periods (as for maintenance services), while the price of the concerned service is received at once by the enterprise, this last income shall be however spread over the several periods for accounting purposes. Therefore, part of the income corresponding to services still to be performed on subsequent periods must be accounted in the class of "income collected in advance". It adds that taxation regime applies in the same manner to such cases.

However in the second assumption where no distinction is made within the contract to ventilate the overall price according to several benefits included under a same price, the overall income is fully accounted when the product is sold, and no differed income has to be recognized. Though, as a counterpart of the

[72] See CNCC Bulletin, n°131 of September 2003, EC-2003-21, p.407 and following.

recognition at ounce of the whole income derived from the contract, a provision for services to be rendered shall be accounted. From a fiscal point of view, this provision may be deducted within the limit of products already recognized.

Intermediate Conclusion

What can be primarily observed is that no current regulation settles a clear qualification of the digital product as a whole, even though inferences were made to reach the result of characterizing some products as intangibles.

As above demonstrated, some products, which are the basis of digital actors' growth are not even taken into account from an economic point of view in our legislation, while the only advances noted focus on privacy protection towards digital uncontrolled spread.

At best, rules are laid down with regard to data protection and recommendations set out to handle contractually legal uncertainties raised by the new cloud challenge, though both are either practically non-effective or non-binding to subcontractors.

All these highlighted issues are making very difficult recognition and qualification of digital value, implying considering the fact that characterization of a product is the first step under French legislation to account and thus tax a product, huge taxation losses that will be developed as of now.

II. Qualification issues reflected on domestic and international tax law

The legal qualification of digital products and transactions as dealt with through previous part, affect the way they are taxed since tax consequences will apply on payments considering the way they have been defined. More, previous characterization will also affect the State of taxation, since depending on qualification adopted towards involved transactions, different States could be legitimate to tax income derived from such transactions. For illustration purposes, if revenues are characterised as royalties, this could give rise to application of a withholding tax (unlike provisions given by the OECD Tax MC), whereas qualification of business income will only enable the State of residence of the concerned provider to levy taxation on profits issued, unless a permanent establishment can be characterized in another State, justifying taxation from this latter country.

Those issues shown through this last example not only involve domestic law but mostly international legislations, considering the difficulty of qualifying income under different national systems but also allocating such income to one country or another. Indeed, digital transactions involve cross-border relationships as they erase countries' borders, considering the fact that digital actors rely on intangible assets needing no more physical presence to carry out a business within a country, since their products are transferred electronically.

A. Tax treatment of basic digital products under national systems

French law tax system (either corporate tax and personal income tax) provides for a characterisation of basic digital products, such as software, websites and domain names, combining rules, case law and statement of practices determining tax treatment of such products. Considering the absence to provide for any tax treatment for other digital goods, it is thus relevant to provide for an exhaustive presentation of what tax logic is applied to standard products.

Considering either the supplier's point of view or the user's position, accounting rules are also to be taken into account in determining the taxable result and must be explained simultaneously to tax rules, since taxation under French law is based on accountancy. Indeed, enterprises shall respect definitions provided under the French general accounting plan under the condition that there are not conflicting with rules applicable to the tax base[73].

1. Software

a) Rules regarding the recording of expenses relative to software

With regard to software expenditure, are distinguished several situations that shall be treated separately:

- The case in which software are created by the undertaking itself.
- The case in which, software are acquired by the enterprise considering besides that transcription and transposition operations regarding these software are treated by the judge, independently of their distinct nature as acquisitions too, for tax purposes.
- Operations improving existing software, which are either recognized as expenses or fixed assets, in accordance with legal rules enforced.
- Finally software licensing royalties paid by undertakings, which constitute deductible operating charges.

[73] Article 38 quater, Annex III of the Tax General Code.

We will first start by reminding the definition given for the software by tax authority[74]. The software is considered as " a set of instructions, programmes, procedures and rules as well as the potential relevant documentation, relative to the functioning of the information processing equipment. A software is characterized by intangible elements including necessary programmes for the processing of information, and tangible elements serving as a support to those intangible elements". As already stated while searching for a qualification of the digital product, this definition shows out of date rules enforced in the absence of any adaptation to digital growth, since the software is still defined as necessarily conveyed through material means.

i. Expenses relative to the creation of software: taxation of article 236–I

This article is of a general application concerning software expenses, as it applies to both enterprises subject to personal income tax (in the category of industrial and commercial profits, non-commercial profits or agricultural profits) and enterprises subject to corporate income tax.

Article 236-I of the Tax General Code relative in its first part to expenses for the creation of software, treats such expenses in the same way that applied for scientific and technical research expenses.
Undertakings as defined before (either subject to personal tax or corporate tax) will therefore benefit in the case of software from an option, which enables them either to deduct immediately all conception expenditure from earnings in the year in which they are incurred or to capitalize this same expenditure.
From an accounting point of view, this option granted to the enterprise does not exist, since expenses shall imperatively be recognised as operating costs, or if certain conditions are fulfilled, be subject to immobilisation. Though, we must note that the immobilisation from an accounting perspective, does not however determine their tax treatment. In this aim, we can briefly explicit accounting rules before dealing with their tax treatment, which rules are particularly interesting in the conception period.

- *Accounting treatment*

Opinion of the French national accountancy council (CNC) of 29 April 1987 relative to the accounting treatment of software, provides that the general process of software creation is divided into eight steps grouped into three main stages: the conceptual stage, the production stage and the user delivery and follow-up stage. This classification of the software creation was also taken over by tax authority, in its documentation relative to conditions applicable to the research tax credit in the conception of software area[75].

Until the production process begins, this process being defined by the CNC through two cumulative conditions[76], expenditure are thus recognized as expenses.
However when the production process starts, the software shall then be entered by the enterprise on the assets' side of the balance sheet but in the class of "capital work in progress", until its achievement. This accounting treatment is identical for internal use software, or software for commercial use but treated by the undertaking as means of exploitation[77]. Yet, software intended for sale constitutes expenditure that must be included in the inventory, at the end of the financial year.

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[74] Tax Instruction of the Tax Directorate, 12 October 1984, Official Bulletin of the Directorate General of Taxes 4 C-7-84.
[75] Administrative document, 4-A-4112, n°28 and Instruction, 4-A-1-2000, n°34.
[76] The project has genuine chances of succeeding and the undertaking must have concretely indicated its intention to produce the concerned software (memorandums, reviews) and to use it on a long-term basis to cover its own needs or those of its customers.
[77] French National Accountancy Council (CNC) in its opinion of 29 April 1987 regarding the accounting treatment of software, distinguishes the software for commercial use (those intended for sales, rentals or marketing in other forms) and the software for internal use (all software not covered by the definition the commercial software).

More, until the software's achievement, it could not be subject to amortisation, but the CNC enables undertakings to register the reduction of the asset value resulting from causes whose effects are not irreversible, through depreciation provisions.
Last, when the software is achieved it must be amortised under an amortization schedule, based on its estimated useful life. Its depreciation period is determined depending of the date on which it will cease to answer the undertaking customers' needs (for software commercial use) or its own needs (for software internal use).

- *Tax treatment*

We will now consider how tax law treats functioning expenditure carried out in the framework of software's conception according to their previous accounting (conception operations as defined by the CNC and as taken over by tax authority).
Moreover a tax instruction[78] defines software's conception expenditure as those, which enable to define and describe functional specifications of the future software and those, which ensure programming work and prior monitoring tests, either for the manufacturing or trading of the software.
As previously mentioned, article 236-I focuses on the creation of software by undertakings and provides an option to such enterprises, which can either decide to capitalize its conception expenditure or deduct those expenses from their income of the year, or from the financial period from which the expenditure is contracted.

In principle, the option exercised by the enterprise is subordinated to the concerning accounting entry, however the rigidity of the link established between the method of recognition and the tax treatment applicable to expenditure conception, has been substantially minimized by a tax instruction[79].
Indeed, if according to accounting rules, expenditure was formerly capitalized (as for internal use software), the enterprise can still opt for immediate tax deduction but will first have to record an amortization expense on the software full value, as soon as the financial period in which expenditure was immobilised is closed. Secondly, the undertaking will have to register in the class of special depreciation allowances, the difference between this value and the amount of the accounting amortization expense.

This choice of the undertaking between capitalizing its expenses and its immediate deduction must be done for each software and constitute a management decision, enforceable against the undertaking.
But limits to the attenuation of the link between accounting and tax treatment is showed if this time on an accounting level, expenditure relative to software conception had the character of expenses such as software intended for sale, since the same tax treatment must be followed implying that tax capitalization of such expenditure cannot be made[80] (this would for instance be the case for specific software).
If the undertaking opted for immediate tax deduction, conception costs could not be taken into account on a fiscal level, in the evaluation of inventories costs[81]. Thus the undertaking, which chose to deduct conception expenditure recorded as asset of the balance sheet, shall withdraw for the determination of the taxable income, the proportional depreciation relative to expenses included in the accounting value of inventories.

[78] Tax instruction of 12 October 1984, Official Bulletin of the Directorate General of Taxes, 4 C-7-84.
[79] Tax Instruction of 1999, Official Bulletin of the Directorate General of Taxes, 4 E-2-99.
[80] Tax Instruction 9-3-1999, 4 E-2-99, n° 7 à 9; Tax Instruction 30-12-2005, 4 A-13-05, n°21.
[81] Article 236-I of the Tax General Code.

Concerning capitalized conception expenses, they are depreciated according to a linear amortized plan and in a maximum period of five years, or for particular items on a longer period, which could not exceed the assets estimated useful life[82].

Previous explanations are given only with concern of standalone software as opposed to software, which are inseparable of materials on which they can be used. In this last case, expenditure shall necessarily be registered as tangible fixed asset of the undertaking, though on a fiscal level, the company could still choose to deduct all conception expenses from the taxable result, according to article 236-I.
The tax deduction will thus be made by the establishment through additional special depreciation allowances (as in the case of autonomous software), which is only possible when the software cost price can be distinguished from the material's own cost, from which the software cannot be separated.

ii. Expenses relative to the acquisition of software

- *Accounting treatment*

According to the CNC, when the software is acquired with the aim of being used in a sustainable way to the business activity, then it must be accounted for as intangible asset[83]. Though, this position of the CNC, is exclusively limited to autonomous software as opposed to those which cannot be separated from the material on which there are used.

Considering now the other type of software, meaning inseparable software, there must be accounted as tangible assets and are depreciated at the same rate than the material to which they belong[84].

The acquisition cost, which is going to be subject of immobilization, is constituted adding the agreed price, as well as incidental expenses, meaning all expenses directly attributable to the acquisition and thus, all charges incurred in setting up software or allowing it to work. This acquisition cost must then be recognized as an intangible asset and should be allocated according to its actual useful life, over an amortization schedule.

- *Tax treatment*

Autonomous software acquired with the purpose of serving sustainably the business activity constitute intangible assets, which could be subject to straight-line depreciation, which rate is determined according to its probable period of use[85].
This amortization plan must be established according to the date on which, taking into account the foreseeable evolution of concepts and techniques, the program will cease to fulfil the enterprise's needs or those of its customers[86]. Moreover, considering the fact that computer programs start depreciating from the date of their acquisition, the first depreciation annuity may be calculated from that date even if the software is put into service subsequently[87].

[82] Administrative doctrine, 4 C-2111, n°40; Instruction 30-12-2005, 4 A-13-05.
[83] CNC Opinion of 29 April 1987.
[84] However, when the useful life of such software is lower than the material from which it is physically inseparable, than software can be accounted as components of the equipment and depreciated according to their own useful life.
[85] Instruction of 9 March 1999, 4 E-2-99, n°12.
[86] Council of State, 22 February 1984, n°39535. Council of State, 6 December 1985, n°53001.
[87] Council of State, 6 December 1985, n°53001.

Moreover, exceptional amortization may be made according to article 236-II providing for the cases of software acquisitions. Meaning that enterprises could exercise an accelerated depreciation over a period of twelve months for the full cost of the software acquired. Not counting the fact that in case of simultaneous acquisition of computer equipment and software, only the software could benefit from this depreciation.
However, in the case of software of low-value, meaning that expenses for the acquisition of such software do not exceed the cost of 500 euros, these costs may be directly expensed.

iii. Expenses relative to transposition operations

The transposition operation consists in transcribing existing programs in order to make it compatible with the computer equipment, which could not be used through such equipment otherwise.
The Council of State in its ruling of 6 December 1985 provides that costs relative to the transposition of computer programs, for use on several financial periods, have as counterpart the acquisition of an intangible asset and thus could not constitute deductible charges[88].
Therefore transposition costs shall follow the same regime than costs relative to the software acquisition, with an option between depreciation under conditions of ordinary law (straight-line amortization) or an exceptional depreciation (accelerated) under article 236-II of the Tax General Code.

iv. Expenses relative to software improvement

Such expenses can only be deducted from the undertaking taxable result provided that improvement costs incurred, resulted in a decrease of net assets as mentioned under article 38, 2 of the Tax General Code.

Case law on the matter enable us to determine cases in which maintenance or improvement costs may constitute deductible charges. It is thus the case when expenditure will not have any other aim than keeping assets in state of use and functioning, until the term of their normal period of use[89]. Whereas, are excluded from deductible charges, costs leading to the increase of fixed assets' value (for example costs relative to the improvement of the software's performance), or which can result in extending in a significant way its probable period of use.
These expenses may thus be capitalized implying necessary examination on a case-by-case basis, in order to determine whether such costs should be deducted from the taxable result or immobilized as fixed assets of the enterprise.

This analysis and classification based on costs' effects enables the enterprise to determine all at once the accounting and tax treatment.

v. Expenses relative to software licensing royalties

License implies that the user is given precarious and temporary right of use on the concerned software. Remuneration of such right is usually done under the form of periodical royalties.

From an accounting point of view licensing royalties constitute for enterprises operating costs. In terms of taxation royalties also constitute expenses that can be deducted from the taxable result, as soon as conditions provided under article 39 of the Tax General Code are fulfilled.

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[88] Ruling n°53001.
[89] Council of State, 26 June 1992, n°78850: Council of State, 30 March 1994, n°114589.

Royalties shall then occur in the direct interest of the business activity or be attributable to the normal management of the enterprise. There must also correspond to an effective charge and be supported by documents in proof. More, there must reveal a decrease of the enterprise net assets and obviously be included in expenses of the financial period to which there are related.

An interesting ruling on the matter of intangible rights' concession and in particular relative to exclusive licenses of trademarks enables to determine in which circumstances, these royalties could constitute fixed assets[90]. Thus shall only be capitalized rights constituting for the enterprise a sustainable source of profits, which are also characterised by their long-term viability and which ownership may be transferred.
However, regarding the transposition of such case law in the case of software exclusive licenses, even if they could constitute a regular source of profits and are characterised by their long-term viability due to their exclusive character, is difficult since the ownership transfer condition seems rarely fulfilled. As a matter of fact, the transferability of rights conceded is almost always excluded in such contracts. Therefore, circumstances in which software royalties could constitute fixed assets, only seem reachable in exceptional cases[91].

After seeing French taxation rules applying to expenses relative to software as part of digital products, we can briefly explicit research tax credits which can be granted in the case of software and which thus may reduce the taxable result.

vi. Software expenses and research tax credits

- ***Research tax credit***

First, we can mention the research tax credit, for which tax administration specifically considered in which cases expenses relating to the creation of software, could constitute research operations according to the research tax credit rules.
The research tax credit may only benefit to enterprises subject to an actual taxation regime under industrial and commercial profits (personal income tax) or corporate tax.
The Finance Act for 2008[92] modified and improved the research tax credit as codified under article 244 quarter B of the general tax code. Therefore since 2008, new taxation rules on the matter provide a tax credit rate of 30 % for the portion of research expenses, lower than or equal to the amount of 100 millions euros, and 5% for the portion of research expenses in excess of 100 millions euros. More this rate is increased to 50% and 40% for respectively the first and the second year following the end of a five-year consecutive period, during which the enterprises did not benefit from its research tax credit.

The creation of software may constitute a research operation according to the general tax code provisions applicable to the research tax credit[93]. However, following abuses in the area of tax returns for the purposes of research tax credit, tax authority provided under an instruction[94], conditions under which software conception could constitute research operations and above all, in which cases it could not be granted.
The instruction provides that constitute for instance a research operation, the organization of a software workshop, which purpose is to find out software rapid development tools. This work will thereby need

[90] Council of State, 21 August 1996, "SIFE" n°154488.
[91] As noted according to Alain Bensoussan, in his book entitled "Informatique, Télécoms, Internet"; Editions Francis Lefebvre 2008.
[92] Law n°2008-1822, of 24 December 2007.
[93] For further development on research operations, see article 49 septies F of the annex III, on the basis of article 244 quater B of the general tax code.
[94] Instruction of 22 April 1991, Official Tax Bulletin n°86, and for further examples see Council of State ruling of 16 February 1996, n°154.185 ; 154.187 ; 160.124.

preliminary studies for the creation of computer applications and the production of tools prototypes. Conversely shall not constitute for instance research operations eligible to tax credit, the design or adjustment of software packages or software conceived for the specific needs of customers, or those conceived for a particular category of users. Nor could constitute research operations for a last example, the enhancement of current software through the production of additional interfaces to standard devices, printers, display and terminals etc.

More recently court decisions enable us to understand what is asked from software designers, whom are seeking for the granting of the research tax credit. For example, administrative court[95] provided that expenses for the conception of software in order to benefit from the research tax credit must constitute genuine research and developing operations, which object is to result in technical improvements regarding the product or process. On the contrary these operations could not constitute research ones according if there are based on the software mere commercial novelty or on the development of transactional modules. Moreover, has also been considered[96] that research tax credit could not be granted in circumstances in which, the alleged novelty brought by the conception of the software was not justified by any details on the results of the research, nor on the novelty of solutions developed, while no specific material was used and considering the fact that employees were not either scientists or engineers.

- *Tax credit on new technologies*

Last, we will briefly consider another existing taxation regime, which provides rules that could apply more broadly to all digital products, since are concerned intangible fixed assets.
Indeed, the Finance Law for 2005[97] initiated a tax credit benefiting to small and medium-sized enterprises, carrying out expenses on equipment for new technologies and which is codified under article 244 quater K of the Tax General Code.
Targeted companies are those employing less than 250 workers, achieving a turnover below 50 millions euros and having a balance sheet total of not more than 43 millions euros. The capital of the company must be detained for a minimum of 75%, by individuals or legal persons fulfilling identical conditions.

Expenditures thus eligible to the tax credit are listed under the article 244 quater K and concern notably, acquisition costs relative to tangible or intangible capital assets, which are carried out with the purposes of establishing Intranet or extranet networks, or high–speed Internet access and networks protection. As mentioned under the article, costs relative to the acquisition of computers are excluded from this provision, excepted in the case in which they are exclusively used as servers.
The tax credit applying is equal to 20% of the expenditure incurred in such context and is set off against corporate and personal income tax owed for the year. In the case of tax integration regime, the parent company of the group may charge subsidiaries' tax credits on corporate tax for which they are accountable[98].

After seeing the accounting and tax treatment of expenses incurred for software which, depending on their characterisation as deductible charges or fixed assets will influence the taxable result of the enterprise, without considering tax credit to which enterprises could eventually be eligible, we will now conversely consider treatment of software's products under French law.

[95] Administrative Court of Besançon, 9 May 1996, Juris-Data n°042476.
[96] According to the Administrative Court of Chalons en Champagne, 1st chamber, n°92-693.
[97] Law n°2004-1485, of 30 December 2004, articles 46-I and 46-II.
[98] Tax Instruction of 1st March 2006, Official Tax bulletin 4-A-8-06.

b) Rules regarding the recording of revenues relative to software

With regard to software products this time, we can distinguish several tax regimes involved in case of transfer or concession, under French tax law.

i. Business income regime applying to enterprises in case of transfer and concession of software

For enterprises subject to corporate income tax, products derived from the concession of software are taxed at the standard rate of corporation tax, which is of 33, 1/3% under French law[99]. However a reduced rate of 15% is applicable to small and medium-sized enterprises.

Now for enterprises subject to personal income tax (either in the category of industrial and commercial profits[100], non-commercial profits[101] or agricultural profits[102]), products derived from the software concession are included in the taxable result, thus taxed at the progressive income tax rate[103].

However, concerning the products obtained from the transfer of software, they are subject to general tax rules applying to business capital gains[104], provided that the transfer concerns fixed assets. Conversely and as seen before, if the software is not intended for a sustainable use within the undertaking, they could not constitute intangible fixed assets and products derived from software transfer will thus be included in operating profits of the financial year.

ii. Registration fees relating to the software transfer

In the case in which this time the undertaking acquires the software, this acquisition may be subject to registration fees if the transfer is made simultaneously to the transfer of other elements of the business.
The software transfer will thus lead to proportional registration duties under article 719 of the general tax code, provided that it arises at the same time than the business or customers' transfer.

iii. Business income regime applying to independent creators in case of transfer and concession of software

Since the Finance Act for 1990, the transfer of software or of their right of use by individuals, are subject to long-term capital gains tax regime.
Independent software creators are subject to personal income tax, under the category of non-commercial profits and benefit for products derived from transfers and concessions of original software, of the reduced taxation of business long-term capital gains[105].

This preferential treatment, only benefits to individuals whom rights are protected under copyright law, thus the software which rights are transferred shall then be original, software originality being recognized

[99] Article 219 of the Tax General Code.
[100] Provided under article 34 of the Tax General Code.
[101] Provided under article 92 of the General Tax Code.
[102] Article 63 of the General Tax Code.
[103] Article 197 of the General Tax Code.
[104] Tax regime of business capital gains and losses, under article 39 duodecies of the General Tax Code.
[105] Article 93, quater 1 of the General Tax Code.

by tax authorities in several cases[106]. The software must result from an intellectual and personal work, going beyond the mere implementation of an automatic and constraining logic.
Originality is also characterised when in their conception and expression, software constitute an original work and when they are not inspired of any other existing software, in particular through translation under another language or through the adaptation of existing software to other materials or to specific uses. Though, its esthetical or utilitarian character, its interest or use, or technical nature (application and operating software) will have no incidence on the characterisation of software's originality.

Products arising in above circumstances will therefore be subject to a reduced rate of 16%[107], to which are added social security taxes (of 10%).

iv. Case of the employed designer

In the case of employed creators and unless otherwise stipulated, the software created by one or several employees in performance of their duties belong to their employer, who detains copyrights on the work done by his employees.
Indeed, economic rights on software and its documentation, created by one or more employees in performance of their duties or following the instructions given by their employer, are exclusively devoted to the employer, unless otherwise stipulated as provided under article L.113-9 of the Intellectual property code.

Moreover, we can take advantage of this reference to employees to remind another French tax rule applicable to digital products and in particular to software. Indeed, the Finance Act for 2008 in its article 31 provided an exemption of taxation normally applying under personal income tax to benefits in kind, granted to employees and resulting from the free disposal of computer equipment and software.
As a result, this advantage is codified through article 81 of the General Tax code[108]and benefits from an exemption on taxation for employees, provided that the cost of such equipment and software received in the year, do not exceed the amount of 2000 euros.

2. Website

The other standard product regulated by French regulation is the website, implying consequently to take advantage of this study to provide for its tax treatment, since regulation on digital products are rare.

a) Creation of a website

An instruction of 9 May 2003[109], enabled tax authority to precise the tax treatment relative to expenses of creation and acquisition of websites.
It notes that the website refers both to Internet sites (which are available to all persons having access to the web global network) or intranet sites (only available to employees of a company, connected to its internal network) and extranet sites (which are intranet sites made available either by the Internet to identified users or through another intranet site).

This instruction also defines the website as a complex creation characterised by its multimedia aspect, since

[106] Administrative doctrine, Official Tax Bulletin 5-G-432, n°3.
[107] Article 39 quindecies.
[108] See article 81, point 31° bis.
[109] Instruction of 9 May 2003, Official Tax Bulletin 4 C-4-03.

it associates heterogeneous elements such as texts, sounds, images and software, held under interactive mode.
The website is under this definition characterised through intangible elements, corresponding to instructions or programs necessary to the process of the information (images, sounds, texts) and tangible elements, constituted by computers or servers used as physical support to the website.
Going back to expenses in websites area, three stages can be distinguished.

- *The preliminary research phase*

Expenditure in that context includes those incurred by the enterprise, with regard of determining objectives and functionalities of the future website. But also those relative to the identification of appropriated material, the process of preliminary legal aspects and identification of internal means for the website creation.
All of these expenses as provided by the instruction, shall be subject to immediate deduction from the taxable result of the enterprise, within the financial period in which expenditure incurred.

- *The website development and production launch*

Expenses included at this stage are in particular, those engaged for obtaining and registering the domain name, but also those relative to the acquisition and development of materials and operating software and which relate to the website functionality etc.

Under the above-mentioned instruction, expenses are considered that time as those incurred in the creation of internal use software, referring consequently to the option previously explained under article 236-I of the General Tax code between immediate tax deduction and capitalization.
This fiscal option is autonomous of the accounting of such expenses[110], thus their prior accounting capitalization will not prevent the undertaking from their immediate tax deduction. As for software, the enterprise will then first have to recognize a depreciation charge for the full value of the website, and second register the difference between this value and the amount of the accounting depreciation, under the class of exceptional depreciation.
And as for software, this choice constitutes a management decision, which is enforceable against the enterprise and which has to be done for each website.

- *Operational phase*

Expenses targeted in that final stage are those engaged by the enterprise within training of employees involved in the website's maintenance, those relative to graphic updates, to royalties paid for the use of domain names etc.
Expenses incurred at that level are assimilated under the instruction to maintenance or upgraded costs, which shall then be deducted from the taxable result of the enterprise.

[110] See instruction of 30 December 2005, Official Tax Bulletin, 4 A-13-05.

b) Acquisition of a website

According to the instruction, when the website is this time acquired and not created by the undertaking, with the aim of serving in a sustainable way the business' activity, the website as for software constitutes an intangible fixed asset of the enterprise.
And as for software under article 236-II above-mentioned, amortization can be either straight-line (the applying tax rate being calculated depending on its probable period of use) or accelerated on a period of twelve months (tax rate then being calculated prorata temporis).

3. Domain name

As part of the website, the creation, acquisition and registering expenses relative to domain names are also provided for, under our tax legislation.

The domain name is the term employed to designate the website address and which enables its identification on the network. Its registration and reservation is necessary to enable users to access the site.
Costs relative to the domain name acquisition are intangible elements, which could not be depreciated according to the same instruction in the case of websites, except in the case in which the domain name's use is time-limited and when it is predictable that its beneficial effects on the business activity will end at a fixed date. This could for instance be the case for domain names used for the acquisition of a website intended to promote entertainments or films, which could conversely be depreciated on their probable period of use.

Therefore, in the case of website acquisitions, the overall cost must be disaggregated in order to distinguish expenses relative to the acquisition of the website, which could lead to capitalization and accelerated depreciation as for software, and on the other part expenses relative to domain names, which could also be capitalized but which cannot in principle be depreciated (as provided under instruction of the 9 May 2003).

Concerning finally expenses relative to the creation and registration of domain names, costs relative to the acquisition and registration of the domain name follow the same tax regime than those incurred for the creation of a website, granting then an option between immobilization or immediate tax deduction as for software under article 236-I.

Our previous explanation aims to show complete tax treatment provided for basic digital goods, since software, website or domain names are standard products developed from some time ago. Yet, tax regulation did not adapt to digital fast increase and completely ignores new values used by digital actors.

B. Issue raised by the absence of any accountancy and tax regulation for other digital products (either through national or international law)

We have to note under this part the absence of any accounting and tax treatment applying to all other digital products unlike exhaustive rules that have been explained, for software, websites and domain names.
As a matter of fact, despite all researches carried out on the matter, no regulation is provided for other products of the digital environment. Besides no general regulation with regard to the digital product as a whole could even be reported (cf part I).

This shows that current rules are out of date, since they are limited to basic digital products and did not evolve with the fast growth characterizing digital environment.

Therefore and as showed through our first part (and as it will also be developed further on), core values funding digital actors growth are not taken into account under our domestic law, neither under other countries' tax systems, which allow digital actors to continue of benefitting of national wealth creation without contributing to taxation that should normally apply. These essential products are for most data and cloud computing services, constituting the basis of digital actors' economy and which as noted previously are not even taken into account as potential value creators.

More, digital actors additionally to the use of unregulated products will also benefit from non-taxed operations since their intangible products are conveyed online, avoiding thus taxation of such transactions in the lack of clear and homogeneous legislation on the matter and through use of optimized schemes to maximize tax avoidance.

C. Particular issues within taxation caused by digital actors business models

1. Digital actors based on optimized international schemes

As explained through the Collin and Colin report[111], multinationals in digital sector benefit from an initial optimizing environment, specifically built up to ensure such undertakings, of the lowest taxation.

This optimization as mentioned through the report is based on several principles, such as the requalification of particular activities within the value chain, in order to make sure of the absence of any permanent establishment, preventing thereby as will be explained below, taxation considering current tax rules. For an example, the report mentions the transformation of a distribution subsidiary into a mere commissionaire, which will prevent Member States of characterizing a permanent establishment triggering taxation.

The second mean of optimization used by global digital actors is the strategic localization within particular States, from which tax advantages can be used through law or tax treaties. For instance, some States literally called in French language (Tunnel States) do not apply any withholding tax to benefits transferred to tax heavens.

In the same way, digital actors whom have been previously mentioned as based on the wide use of intangibles will then also make sure to centralize such assets in countries in which taxation is the most advantageous.

Finally, we will refer to transfer pricing exercised within groups, and which consist for enterprises of a same group to under evaluate or over charge transactions arising between them, in order to transfer benefits, ultimately leading to reduce their overall tax rate.

This enriching report shows that even if such tax means are not proper to sole digital actors, they are though emphasized through such actors' financial strategies and business models' specificities.

[111] Report Collin and Colin, p.18 and following, part 1.2 "Des conditions initiales favorables permettent aux grandes entreprises américaines du numérique de payer peu d'impôts sur les societies".

a) Enterprises optimized from the start

Digital enterprises take into account and base their implementation considering each country's tax rules, thus localizing new group entities in specific countries as to take advantage from beneficial clauses issued from various tax conventions.

They will also base with considerable care the location of their intangible assets since they are the entity's main source of benefits. Initial efforts will enable start-ups to gain from taxation arbitrations and especially when the young enterprise will have reached its global scale.
Therefore this type of undertakings, which are also known for being funded through venture capital, will then make sure that their organization includes the initial goal of reducing effective tax rate in case of international development.
The report also reminds that optimizing schemes have been and are still used by all American digital enterprises, known under the GAFA appellation (Google, Apple, Facebook, Amazon). As part of their organization, the report raises the use by these actors of what is called within French language "le double irlandais" and "le sandwich néerlandais", which could be literally translated into the "Irish Double" and the "Dutch sandwich".

We will briefly explicit this tax optimization strategy, which leads to consider three distinct countries: Irish, Netherlands and a tax heaven (such as Bermuda, Cayman Islands etc.).
Those schemes being mainly used by American global actors, an example involving Google is given under the report and thus shows how American taxation is avoided. The US applies a consolidated global profits' system with a "check the box" measure, allowing enterprises to check the box for subsidiaries which profits will not be taxed under American regulation (in practice it enables to not register some of their entities established abroad). Then, the right to use intangible assets will be sold or licensed by the US parent company to the Irish subsidiary, which entrepreneurial functions are exercised by a permanent establishment located in a tax heaven. All benefits attached to such intangibles will accordingly be accounted and registered by the Irish subsidiary (under the "check the box system") and thus non-taxed by the US administration. Indeed, another Irish subsidiary will be created (the "Irish double") and which qualification plays on divergences between US and Irish taxation. It leads to the situation in which the Google Irish subsidiary is considered as an Irish firm from the US point of view (non taxed) and from the Irish one, it will be considered as a firm located in the tax heaven country, since its effective management center is located there (non taxed either under Irish law).

First, royalties will be paid by the first Irish subsidiary to the US mother company, royalties which amount will be as low as possible in order to reduce the tax burden in the US. The other Irish subsidiary will be the main actor as it issues most of the European group's turnover, and will also be licensed enabling to erase most of its profits by the payments of royalties to the permanent establishment of its mother company located in the tax heaven. Payments for this use will constitute royalties (as it will be seen later), which amount will that time be fixed at its highest since this payment will enable to shift profits to the company located in the tax heaven.

More, this optimization scheme can be emphasized by the use of the "Dutch sandwich" since a Dutch company will be intruded, considering the Irish rule under which royalties linked to intellectual property rights are totally exempted of taxation if transferred within the EU. Indeed, royalties' transit through a Dutch company will enable the payer to benefit from the favorable Irish-Dutch tax treaty, including the absence of any withholding tax applied by the Netherlands, even in the case of transfer of such royalties to

the permanent establishment which effective managing center is located in a tax heaven (meaning that very low or even no taxation will ultimately apply to concerned profits).
Non-taxed benefits will as a result be hoarded in tax heavens and may be used for external investments since they could not be returned to the US without leading to taxation from this latter (with the exception of "tax holiday" periods in which profits made worldwide could be returned to the US under favorable conditions).

Fortunately these optimization schemes seem to mean to an end with Irish announcement of the "Double Irish" suppression under EU and OCDE's pressure[112]. Michael Noonan, minister of finance, released such news while presenting to the Parliament the budget for 2015, stating that he will abolish the "Double Irish" by amending tax residency rules. From now on, undertakings registered in Ireland shall also be qualified as Irish residents with regard to the tax residency regulation. This new rule is enforced from the 1st of January for all companies establishing in the country from this date, though a transitory regime is enforced against companies already located in the country and applies until the end of 2020. From this date, all firms located in Ireland will also be considered as Irish residents preventing "Double Irish" schemes. Even though Ireland takes the risk of seeing most of multinationals leaving its territory, its attractiveness is not to be showed, considering its lowest corporate taxation rate (of 12,5%) in the EU zone and with regard to thoughts given of a more favorable taxation regime applying to licenses and patents.

b) Enterprises which environment favors multi-sided business models

The report previously referred to also defines the multi-sided market (already explained through data creation of value), which is organized around an undertaking, playing the role of an intermediary between different types of customers and users. Then, value is created by interactions between customers and users on different sides of the market.
It also reminds that such schemes as previous optimization measures are not specific to digital actors, though novelty lies in the possibility for these actors to locate different sides of the same model in different countries. For illustration purposes, an interesting example is also given through this report, which refers to Google research engine and its users, whom can be located either in France, or in other countries. However, contracts with advertisers are located on another side of the business model and are usually signed by a firm established in Ireland, which will register profits generated and declare income to Irish administration. Then this multi-sided system enables them to leverage profits from free services offered on one side of the market, using data collected to be sold on the other market's side to advertisers.

Digital actors, due to their already mentioned specificities, can as a result rely on the wide use of intangibles and do not need thereby any physical presence on the territory to carry out their business, digital products being transferred electronically. This explains the fact that some unequal constraints still apply to other actors, preventing them from totally optimizing their multi-sided model, due in particular to their physical restraints.
Though, without discussing more deeply the subject, this leverage being already described under our data part, we will now focus on the particularity on which rely digital actors, their free services.

[112] See JolPress online review, "Suppression du double Irlandais, l'Irlande court-elle à sa perte?" written by Sybille de Laroque and published on October 17, 2014.
http://www.jolpress.com/economie-suppression-double-irlandais-irlande-google-apple-828436.html

c) Tax issues favored by digital actors' free services

Unpaid services are the basis of digital growth since free services give confidence to online users, whom could not expect that the counterpart is the massive collection of their personal or behavioral data, sold on another part of the business model.
Gratuity is justified by the need of acquiring new users, constituting thereby a determining factor to the attractiveness of the concerned service. In most cases, digital actors relying on free services only achieve profits in a later period, as for example Facebook, which only accelerated its sales of advertisement spaces since its stock exchange listing (after attracting more than one billion users).
Another way of generating profits may be the coexistence of a free application version and a paid version of the same application, which will be used by most active users.

In all cases, the free service will be funded by another side of the business model, due to positive externalities generated by data sold on this other side. Data enables advertising targeting and are as a consequence valuable to advertisers, it also enables the feed of enterprises' information systems achieving thus productivity gains. Data could also be made available to application developers through a platform (such as Facebook and its application platform) or more merely, be rented or sold to third parties.
More, some actors do not achieve any court-term profits while not searching for the application evolvement towards a paid version, since the goal of their strategy is the enterprise buyout for a price, which is high enough to recover at least investments made.

Collin and Colin refers to the controversy of the free service environment and its merchandising aspect, the user is confident and do not foresee the value that he generates and which is used by the services' provider as a counterpart of the unpaid service. As a result, free services induce the user in a spontaneous behavior, which is the most profit making for the other side of the business model.

However, we can immediately notice difficulties generated on a tax level, since value created is not even taken into account yet under tax legislation, and the use of free services only makes it more and more difficult to source income, generated on a different side of the business model and to attach such profits to a taxpayer liable to French taxation. However, Collin and Colin provide that the fact that the service is free should not mislead tax authorities, since it is not justified for digital actors making available free services, to exclusively register positive externalities in foreign entities' accounts, without generating any tax revenue to our country. This enabled us to show issues arising from the gratuity factor which even if being enjoyable for French users, worth at least French tax administration losses.

2. Massive development of cross-border transactions without any physical presence in the state of income

Digital actors as already said rely on the wide use of intangible assets, implying that they can carry out a business without even being located physically within the consumer's country. Indeed, digital actors have thus specialized as seen in the previous part, in organizing their activity within countries in which they choose to allow characterization of an establishment triggering taxation (excluding thereby countries with high tax rate). After explaining previous optimization schemes, it is relevant to now consider how digital actors manage to avoid taxation due to their ability to trade without any fixed establishment, which will emphasize the issue arisen under digital economy about allocation of income.

Yet before reaching that point, we have to mention the fact that despite greater opportunities from which digital actors benefit as previously developed (specific business schemes, intangibles and thus no physical presence needed to trade), countries have decided to not treat them differently from others, in application of the tax neutrality principle.

a) Issue relative to the non adaptation of current existing rules within application of the tax neutrality principle

General rules relative to international transactions that will be explained further on and which are digital actors' motto, permitted by their specific products and naturally deriving from taxation optimization schemes, circumvent current existing rules on allocation of income and which are as a result, revealed as inadequate to this new environment.

Indeed in French tax law, no distinction can be found between rules dealing with e-commerce and other forms of arrangements carrying on the same business. All texts consulted[113] on the subject remind that no specific tax rules have been set up in the e-commerce area, and all reports on the subject notably those of the OECD, merely explore issues arisen by this new phenomenon and investigate on new solutions without further enforcement.
Besides it can also be read, that tax rules (settled for traditional trading) are fully applicable to individuals or enterprises carrying on their business through the Internet. We can refer to a ministerial reply to Mr de Chazeaux[114], in which the French position is explained (by the French Minister for Economy) considering potential specific treatment of e-commerce, which is excluded from a national point of view, aiming to avoid any discrimination towards businesses carried through the Internet by applying common tax rules.

The ministerial reply begins by reminding that France agrees with the framework conditions that have been settled by the OECD at the Ottawa Ministerial conference of 7, 8, and 9 October 1998. Accordingly, France totally agrees with the fact that tax authorities must ensure that e-commerce benefits from a favourable environment to its growth, notwithstanding the fact that the rise of new information and communication technologies shall not limit States in their ability of raising taxes and of financing public expenditure as approved by citizens. The reply adds that France is actively participating to thoughts on the matter, either as part of the OECD or at a communitarian level, considering that French taxation rules should apply to e-commerce in the same way as for other economic activities.
Therefore, it rejects the idea of creating new and specific taxation applicable to e-commerce environment, but considers that shall be ensured the full application to this matter of existing tax rules on the basis of universal standards such as fairness, efficiency and neutrality. More, this full application of our tax legislation to e-commerce still according to the reply, should be ensured as quickly as possible, preventing current situations of non-taxation for certain transactions to continue and cause competition distortions.

We can conclude from this ministerial reply, occurred in the context of OECD negotiations and in particular with regard to the U.S. Secretary of Commerce position (asking at the time for an extension of the moratorium on Internet taxation and the non-taxation of cyberspace) and considering above all the lack of specific treatment towards electronic products in our legislation since then, that the neutrality of tax treatment still prevails in our country.

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[113] See for instance, Editions Francis Lefebvre Mémento Fiscal, Impôt sur les sociétés (2013/2014), Mémento Fiscal Groupe de sociétés (2013/2014), Les Nouvelles fiscales n°843 01/03/2001, Bulletin comptable et financier des entreprises 7-8/02, Lamy Droit des affaires n°33, 12/2008.

[114] Ministerial reply to Mr de Chazeaux, question n°35468, Official Journal of National Assembly (JOAN) 29 January 2001, see also the previous ministerial reply with the same position towards application of tax common rules to digital economy, question n°1506, (JOAN) 26 July 1997.

Still and for the sake of accuracy, a previous distinction could have been reported between the VAT rate applicable to online books and the one applicable to printed books, but since the Finance Act for 2011, the same reduced rate also applies to e-books from the 1st January 2012. Therefore no discrimination could be found, even under indirect taxation legislation, however this last debate may be reopened after the recent ruling of the European Court of Justice, condemning France on the 5 March 2015[115], for extending the above-mentioned reduced rate to e-books.
As a matter of fact, application of the reduced rate to e-books was decided as going against European law by the Court of Justice, which considers that it should only benefit to books supplied through physical mediums. Then the Court provides that the electronic book could not be considered as such, even if it requires to be read on a physical medium (such as computers) not delivered with the content itself. The Court also asserts the fact that e-books constitute electronic provisions of services, for which the VAT Directive prohibits any application of a reduced rate to such services. Our country has naturally taken into account this ruling in a press release[116], notwithstanding the fact that France urges the European Commission of making proposals within the strategy of the digital market, to introduce in European legislation the tax neutrality principle, enabling the application of the same reduced rate to either electronic or printed books, therefore regardless of their medium. This press release confirms France still prevailing position on the application of the tax neutrality principle and confirming the absence of specific tax rules solely applying to business for the reason that they are carried on through the Internet. Though, an upcoming difference will therefore be noticed in the future against digital actors in the e-book domain as they will be applied the normal rate of 20%, which is not under our country control as explained, our country being obliged to restore this rate or penalty may ensue.

After demonstrating this core principal founding identical tax treatment towards digital undertakings, we can now enter into the treatment in question by emphasizing thereby taxation resulting issues.

b) National rules' failure to adapt in the absence of tax treaties

i. French principle of corporation tax territoriality

First, we have to consider that under French legislation is enforced the system of territoriality of corporation tax, which therefore applies to all enterprises exercising within international context. This principle not only applies towards corporate tax but also to industrial and commercial profits under income tax. Indeed, article 209-I of the General Tax Code provides that shall only be subject to corporate tax, profits made through business carried on in France, implying conversely that profits issued from business carried on abroad may not be subject to French taxation[117]. This territoriality system sets us aside comparing to other developed countries, which take into account all profits of a same undertaking, regardless of the place in which business is carried on.

However the term "of business carried on" in France was not explained under domestic law, therefore case law and then tax authorities provided that this concept implies the regular exercise of a business activity in France, either through an autonomous establishment or in the absence of such establishment, through representatives without independent professional status or through operations constituting a full business

[115] Court of Justice of the European Union, decision of 5 March 2015, case n°479/13.
[116] Interministerial press release, n°221-446, of 5 March 2015.
[117] This system is symmetrically applied towards losses, meaning that if profits are not taxable, losses would not be deductible. For more on this symmetrical system, reference is made to a decision of the Council of State, of 12 June 2013 Sté BNP Paribas.

cycle[118].

ii. Types of businesses carried on within French territory

We will now explicit these business forms in order to better understand in which cases, in the absence of tax conventions, foreign enterprises are subject to French taxation still with regard of the adaptability of such factors to digital transactions.

First and as mentioned before an establishment on French territory is needed, meaning a physical installation with some permanency and which has its own autonomy. This autonomy necessarily implies the existence of distinct staff, commercial, financial or technical services and accountancy distinct from its head office. Sales conducted by such establishment located on French territory will therefore enable taxation by our country. This concept is similar to the concept of permanent establishment under tax conventions, which also justifies taxation by the country in which such entities are located.

Now, in the absence of such establishment, regular exercise of an activity on our territory is characterised when carried out through dependent and autonomous representatives, whom are not granted with an independent status from the undertaking using their services[119]. Meaning that the representative triggering French taxation is characterised each time that he can be considered as an employee of the enterprise and when it can be assumed that it is the undertaking that carries on the business directly and personally. Conversely, foreign undertakings carrying on their activities through independent agents acting in France shall not be subject to French taxation.

Last, we will refer to a particular concept under French tax law, which is not shared by other developed countries nor under tax conventions, but which will be much more explained through our last part, since it could constitute an alternative for digital taxation purposes. Indeed, can characterise regular exercise of a business activity, in the absence of any establishment or representative on French territory, operations constituting a full business cycle. This concept covers a series of commercial, industrial or handcraft activities, directed towards specific purpose and which package constitutes a cohesive whole[120]. The classical example that can be given to illustrate this concept are operations of purchase of goods and their resale, both operated on French territory, yet case law and tax administration exclude from this concept participants to brief fairs and expositions in France, such as the Paris Fair[121]. For an example, when a foreign undertaking resells in France goods directly purchased in our country, then profits issued from these operations will be subject to French taxation even without any establishment on our territory[122].

iii. Difficulty of taxing digital actors under the sales' criterion

Naturally these rules only apply in the absence of tax treaties, article 209-I also considering that French taxation is eligible to profits when provided so under tax conventions.
Focusing now on foreign business with application of our particular tax system, will then be liable to French taxation foreign undertakings, which run an establishment in France or without any establishment, which either use dependent representatives to conduct sales, or even carry out operations constituting a full

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[118] Official tax bulletin (BOI), BOI-IS-CHAMP-60-10-10 n°60.
[119] BOI-IS-CHAMP-60-10-10, n°120.
[120] BOI-IS-CHAMP-60-10-10, n°210.
[121] BOI-IS-CHAMP-60-10-10, n°350.
[122] Council of State, 22 May 1963, n°46870, for a more recent decision on the matter in the case of dietetic products purchase/resale on French territory, see decision of the Paris Administrative Court of appeal, of 2 October 2013, n°12PA01844.

business cycle in our country. Then, only sales made through this type of businesses and accounted by them will justify French taxation, characterising thus an activity carried out within our territory.

As a result, we can deduce from these developments that the factor sales is the main criterion for attributing profits under our country's legislation (except for the full business cycle which as will be seen later will enable to reverse current logic into a destination-based approach), since these sales will be accounted by the enterprise conducting them and therefore will only be taxed under French law if the business is carried on within our country, through forms above-mentioned.
Though and as could be easily understood from our previous explanations of what could constitute a business conducted in our country, requirements needed imply physical presence (either through fixed establishment or dependant representatives) to trigger taxation. This material presence that is not needed at all for digital actors since their products are immaterial and as a result can be conveyed online to their customers, enables them to enforce their tax optimization strategies explained before, making it very difficult to apply taxation regulation to such actors.

Besides, this physical criterion for taxation purposes is even more needed under our law than through conventional taxation since our country expressly defined its position on the matter, which is even stricter than the OECD's approach as shown below.

c) A renewed issue within the OECD Model Convention

In order to make our analysis complete, we obviously have to deal with the situation in which tax conventions are that time provided (most common case), excluding thereby application of domestic law regulating cross-border issues. We will lay down general rules used to allocate income within international context and issues raised in the context of digital transactions, before pointing out the difficulty already raised above with regard to the sales' criterion for attribution of profits, since concepts used are for most similar.

i. The general concept of permanent establishment

As a reminder, article 209-I of the General Tax Code attributes power of taxation to France when profits are issued from business carried on in our territory (as developed above) and in case of profits for which tax conventions relative to double taxation, attribute such power to our country.

French tax treaties generally follow the OECD Model Tax Convention, which provides regarding business profits of an enterprise, that they shall exclusively be taxed in the State of residence of the undertaking, unless the company carries out its activity in the other contracting State through permanent establishment[123]. Thus the permanent establishment constitutes within international tax law, territorial profits' connecting criterion, for countries in which the permanent establishment is located. This concept as said above is similar to the one applicable within French law, in the absence of tax treaties, referring to the autonomous establishment with the purpose of demonstrating business activity carried out in France (under article 209-I of the General Tax Code). The permanent establishment is defined under the OECD MC, as a "fixed place of business through which the business of the taxpayer is wholly or partly carried on"[124]. Therefore and as seen for establishments in the absence of tax conventions, an installation is needed, which must be fixed and implies thus a certain degree of permanency[125]. Naturally this fixed installation only

[123] Article 7.1 of the OECD Model Tax Convention.
[124] Article 5 of the OECD Model Tax Convention.
[125] OECD Commentaries, C(5) n°6.

characterizes permanent establishment when the enterprise carries out its business wholly or partly through this facility.

An alternative criterion may also be used in the absence of such establishment and in presence of a dependent representative of the enterprise, empowered to routinely represent the company and conclude contracts in its name.
However operations constituting full business cycle are no more valid criteria for attributing profits under French conventional law, as it is a specificity of our country, only enforced in the absence of tax treaties, since other countries do not recognize this concept.

To conclude on that part before demonstrating a French stricter point of view than the OECD, we have to say that non-application of the full business cycle is unfortunate considering the impact that it could have on allocation of income, preventing thus circumvention by digital actors of French revenues' characterisation and conversely enabling taxation by our country.

ii. French stricter interpretation of the permanent establishment within digital environment: the physical presence needed

In order to show to what extent French adopted opinion is stricter than the OECD approach, we will refer to the work of the OECD Committee on Fiscal affairs, on the concept of permanent establishment in the context of electronic commerce.

As a result, it considered that a website could not constitute itself a permanent establishment since it is only a combination of software and digital data deprived of any material consistency.
However, it was decided that a server could characterise the permanent establishment as soon as it constitutes equipment, which is physically located. Though, it was also indicated that the business carried on through this equipment must not constitute preparatory and auxiliary activities, since these latter could not characterise the permanent establishment even while exercised through a fixed place of business.
Spain have even a more flexible approach, considering that an online store may qualify an online permanent establishment, even though in this case the server was not located in the country and no activity was performed through human means or physical presence located in Spain. Therefore, enterprises carrying on business through a website could be treated as having a permanent establishment[126]. Though, this could not yet constitute a position representative of Spanish opinion on the matter, since this case law is not binding, the decision not being taken by a Supreme Court.

Now going back to our country position, the general exemption regarding preparatory and auxiliary activities (towards qualification of a PE) is applied in our country as for the OECD commentaries, also focusing on digital commerce while appreciating existence or not of the permanent establishment[127]. Before moving to the French point of view, we will briefly explicit the OECD opinion of such activities in order to understand what could fall under this general exemption.
As a matter of fact for the OECD are considered under this category, all activities that contribute to the business productivity but from too far to consider that any profit could be allocated to the business from such activities[128]. It would be the case for instance for all fixed installations used for advertisement, the supply of information, scientific researches or ensuring implementation of contracts relative to patents or

[126] ES: TEAC, 15 Mar. 2012, 00/2107/2007, *Dell Products*, Tax Treaty Case Law IBFD.
[127] See OECD Commentaries, C(5) n°23 and following.
[128] See OECD Commentaries, C(5) n°23.

know-how, provided that they keep their preparatory and auxiliary character. Appreciating this aspect is thus not easy and according to the OECD commentaries, the decisive criterion consist in searching whether these activities constitute essential and significant part of those carried out through the fixed place of business[129].

As previously shown, the OECD Committee on Fiscal Affaires dealt with digital economy issues in the appreciation of preparatory and auxiliary activities, referring for instance to servers, which could constitute permanent establishment since there are physically located. Though French tax administration do not share the same point of view, requiring in addition physical presence, which implies the fact that our country recognizes otherwise application of preparatory and auxiliary activities' exemption with regard to digital economy.
To assert this opinion, we can still refer to ministerial replies given to Mr de Chazeaux in which the criterion of physical presence is required for servers, preventing excepted in exceptional circumstances, qualification of the server as a permanent establishment[130]. In the last reply referred to in the footnotes (130) from 2001, the minister for the Economy reminds the Committee on Fiscal Affairs' opinion regarding the server, which can only constitute permanent establishment, under the condition that the server's activities are not preparatory or auxiliary. However, he adds that this general principle provided by the OECD Committee must be completed from a national point of view, in order to avoid any ambiguities related to the term of preparatory and auxiliary activities with regard to the server. Indeed the OECD admitted that Members States could refer to a clear and general principle in order to avoid a case-by-case approach, which is the case for France according to this reply given by the minister. He considers as a result, that our country continues to presume in the lack of physical presence of operating staff on the server's site, that this server shall only characterize preparatory and auxiliary activities and therefore may not constitute a permanent establishment. More, it was provided that this criteria of physical presence on the server's site, could only be set aside by tax administration in exceptional circumstances in which it is possible to show that sales' typical functions (such as conclusion of contracts with customers, payment processing and online supply of services) are carried out in a total automatic way by the computer equipment.

Therefore France assumes that the server in the absence of any physical presence can only play a preparatory and auxiliary role in the business functioning, excluding thereby qualification of permanent establishment, excepted when the presumption is overturned and when it is shown that the whole business activity is made through the server. Otherwise servers, which are necessary computer equipment in the digital economy shall not constitute permanent establishment from a French point of view, considering its preparatory and auxiliary character. We can then conclude according to our readings[131] that France establishes a stricter legal framework than the one provided from the OECD, since it requires an additional criteria for servers (physical presence) to the characterisation of permanent establishments.

However can also be assumed taking into account technological advances, that servers will become more and more autonomous and independent, leading to the obsolescence of the physical presence criteria, since sales may be managed in a fully automatic way through servers, aligning as a matter of fact the French position to the one adopted by the OECD.

[129] See OECD Commentaries, C(5) n°24.
[130] Ministerial reply to Mr de Chazeaux, question n°59961 (JOAN) of 30 July 2001, on the same matter see also question n° 15728, (JOAN) of 26 October 1998.
[131] See for instance Les Nouvelles fiscales 2001: "La territorialité de l'impôt sur les sociétés: Précisions sur la notion d'établissement stable dans le cadre du commerce électronique".

iii. A legal approach of the representative's French interpretation with regard to its distinction with the commissionaire

French rules exist regarding remote contracts through permanent establishment, and distinguish in this view the dependent agent from the commissionaire, mainly through administrative doctrine and case law on the matter. Before further considerations on that point we have to remind that as mentioned by the OECD, this criterion enables in the absence of a fixed place of business, characterization of a permanent establishment through an agent representing the enterprise and contracting on its behalf, constituting then an alternative criterion[132]. This opinion is also shared by French jurisdictions, which reminds that conventional provisions relative to the dependent agent are independent from those, which concern the fixed place of business[133], meaning that the reference to the dependent agent is only needed in the case in which no fixed place of business[134] could be found.

Considering now rules applying to the representative and enabling him of constituting the permanent establishment, two cumulative conditions emerge from case law and converge towards the definition given under the OECD MC, as part of article 5 paragraph 6: a dependent status and the power of contracting in the name of the enterprise within activities generating profits.

The agent to constitute a permanent establishment must thus be dependent from the represented enterprise, the dependence being either legal or economic[135]. It is provided that even if the agent is legally independent, but devotes almost all of his activities to the benefit of a single company, then depending on the circumstances, he could be considered as a dependent agent because of the absence of economic independence (indeed all revenues in this case are earned from the same source). The same conclusion can be made in the case in which the agent do not bear any costs relative to his activities or does not bear any economic risk. Besides, an independent agent may also constitute a permanent establishment whether he does not act in his ordinary course of business, provided that he fulfils conditions needed for the agent to constitute this establishment.
Then, notwithstanding economic dependence, the principle for the representative with the hope of characterising a permanent establishment is that he can not be doted of a professional independent status such as commissioners, brokers, and in general all intermediaries benefitting from such. They must conversely be doted of a dependent status, meaning that they must be considered and act as employees. Therefore, it is only when a representative act in the name of the entity they are working for and on its behalf that the firm may be considered as having direct and personal activity in the country in which the agent is located for tax purposes.

The second criterion also analysed while appreciating if the agent in question could constitute a permanent establishment, is his ability of acting habitually on the behalf of the enterprise and thus, the power of contracting in the name of the company.
From this perspective, the Council of State considered that could not constitute a permanent establishment the dependant agent whom, empowered to enter into an agreement on the behalf of the company, do not use his powers or only in an occasional manner[136]. Indeed, conditions required imply both dependent status and contracting habitually on the behalf of the company, within activities generating profits. Moreover the Council of State considers that the concept of dependent agent empowered to conclude contracts on the

[132] See on that point, the OECD Commentaries, C(5) n°35.
[133] Council of State, 31 July 2009, n°297933, min c/ Sté Swiss International Air Lines AG.
[134] Council of State, 6 October 2010, n°307680, Iota.
[135] See Mémentos Editions Francis Lefebvre, Impôt sur les sociétés 2013-2014, n° 3215 and following.
[136] Council of State, 1 June 2005, n°259617, case Nouvelle Calédonie c/ Société Allianz-Vie ; 1 June 2005, n°259618, case Nouvelle Calédonie c/ SA Eagle Star Vie.

company's behalf, must not only be interpreted with respect to formal aspects of contractual relationships whereas considering the reality of relationships between representative and represented[137]. Finally, this criterion must also be analysed considering the field in which his power is granted since it must apply to activities in which the ordering entity is specialised[138].
OECD commentaries also show the primordial attention given to facts in such situations over the legal form that can take the contract, which will not however be the final French approach. The representative could not be considered as an independent agent even if it was contractually provided that way (independent legal status), if while exercising his commercial activities, he receives precise instructions for instance or is submitted to general monitoring from the undertaking employing him. However, this pragmatic view adopted by the OECD is not the last prevailing one in France even if it also considers facts in its analysis.

Indeed qualification as provided contractually still prevails when an agent notwithstanding the fact that he is economically dependent, is doted of legal autonomous status and do not legally engage the principal against third-parties as in the case of the general commissioner. This position is ensured through French case law with the well-known case entitled Zimmer[139]. Is reminded through this case law that even if the commissioner contracts on the behalf of the principal, the liability of this latter, can not legally be engaged for the commissioner's acts. The decision adds that the commissioner cannot in a general way constitute a permanent establishment considering the only fact that he sells while signing contracts in his own name, the principal's goods and services. Indeed, if the contract itself or any other elements of the instruction, shows notwithstanding the contract qualification of commission that the principal is personally liable for contracts concluded with third parties by his commissioner, this latter will though be qualified of dependent agent, characterizing then permanent establishment in the country of the principal. This shows that the agent's power of engagement of the principal toward third parties could only be appreciated on a legal basis (contract itself) from a French point of view, excluding conversely an appreciation essentially based on facts unlike the OECD.

For last this French notion of dependent and independent agent also implies to refer to the case of subsidiaries and to appreciate if they can be considered as permanent establishments too, since it implies to show that there are not acting as independent agents. Almost all French tax treaties reiterates article 5 paragraph 7 of the OECD MC, considering therefore that the only fact that a firm is resident of one of the contracting states and which control or is controlled by another firm resident of the other contracting state, shall not of itself constitute either company a permanent establishment of the other. However, the Council of State[140] admitted that a subsidiary could constitute the permanent establishment of the parent company provided that it could not be considered as an independent agent of the mother company, by usually exercising in France, in law and in fact, powers enabling him to engage the other company in a commercial relationship in view of operations constituting the own activities of the mother company.

Linking these general rules to digital commerce, we can conclude that all these principles considering the dependant agent could also be readily avoided by digital actors. Indeed and this will be even easier with regard to France's interpretation, digital actors if needed can as a result use commissioners (event though they could be dependent in facts) since France recognizes this criterion with regard of its legal status, making sure that the contract clearly shows his independency.
More, within the OECD interpretation that time, digital enterprises will then have to make sure that the

[137] Council of State, 20 June 2003, case Interhome AG.
[138] Administrative Court of Appeal of Bordeaux, 5 February 2004, n°00BX00833, Société Something Special.
[139] Council of State, 31 March 2010, case n°304715 and 308525.
[140] Council of State, 20 June 2003, n°224407, case Société Interhome AG; Administrative Court of Appeal, 2 February 2007, n°05PA2361, case Zimmer Ltd.

representative is in fact (no prevailing legal qualification), fulfilling conditions introduced below.
All of this shows that it is quite easy for digital actors, to avoid the characterisation of what could trigger taxation under conventional rules, which is normal considering that such rules have adopted quite same concepts than domestic ones, leading to reiteration of issues raised above (remaining sales' criterion).

iv. Difficulty of the sales' factor: criticized consequences on allocation of income

We can conclude from this second development that French conventional taxation, generally complying with the OECD Model Tax Convention shows, considering the similarity with our attributive criterions of profits, that sales are also the factor used either in pure internal or conventional context to empower French authorities to tax profits made within our territory.

However this criterion found for attributing profits through sales made by businesses carried on in France or in conventional context by permanent establishments as mentioned before, does not seem to be adapted to digital growth and to the immaterial business presence of actors in such sector.

As a matter of fact and as also seen before through ministerial reply, in the context of general conditions set out at the OECD Ottawa conference, France confirmed that no specific taxation would be enforced towards such actors and that existing tax rules are implemented regardless of the specific nature of digital commerce[141]. Considering now whether this factor of sales should still be used as main criterion to attribute profits to foreign businesses with regard to digital economy, we can refer to French studies on the matter to explicit our country's point of view, which clearly criticises the non-adaptability of current rules.

Indeed, the report Collin and Colin reminds[142] as showed before through our analysis of legal provisions, that from an internal perspective, the criteria of tangible presence on French territory is inadequate and shows that territorial rules are unsatisfactory with regard to the digital economy context. More, it also details that international tax law (on the OECD MC basis) attributes taxation power on profits, to the State in which the company has its registered office rather than the one in which business is carried on. Though, exception is made to this principle in the case in which permanent establishment is located on a territory other than the State in which the firm has its registered office. Digital actors in the framework of their strategy will however make sure that no permanent establishment could be characterised in the country in which value is created, in order to ensure that profits will be registered by the company, located in the lowest taxation country. Avoidance of a permanent establishment is easily achieved by digital actors, due to their strengths previously demonstrated (wide use of intangibles, no physical presence needed) and which, overtake current profits' attribution criteria.

Indeed, the report provides that "the definition of permanent establishment, which implies presence of facilities and staff, is marked with post-war economic concepts and is inadequate to digital economy". It therefore advises to reform our tax system in order for corporate tax to take into account profits issued from digital economy, since corporate tax is the most "adapted tool to consider taxation according to the creation of value located in our territory". This report being pragmatic reminds that it would not be possible to reach this result in isolation, thus it is necessary to trigger negotiations at a European and OECD level, with the purpose of reconsidering a definition of permanent establishment in the context of digital economy.

[141] As a reminder, please refer to Ministerial reply to Mr de Chazeaux, (JOAN) of 29 January 2001.
[142] See Report, part 3.1.1.2, p.67 and following.

We can on this matter refer to the situation of other countries involved in our study and conclude that for most as for France, physical nexus is needed to the purpose of taxing profits issued from the carrying out of a business. For instance, other EU countries also consider that a website could not characterise a permanent establishment in the absence of any physical tool, the same requirement also prevents the licensing of software of constituting a permanent establishment. However and as discussed above[143], the server could benefit from a more flexible interpretation in accordance with OECD commentaries within other countries, since France requires physical presence whereas other countries consider that when a company uses its own server in order to distribute its products, then the server may characterise a permanent establishment (however the sole use of storage capacity does not enable to reach this conclusion, requiring thereby use of the server in the exploitation of business such as for instance as means of distribution).

More on the non-adaptability of the factor sales, we can still refer to the French report emphasizing the unsatisfactory quantification of digital economy with regard to taxation. Indeed, it clarifies digital actors' business models based on multi-sided markets, showing that the factor sales is not adapted, since electronic services are provided for free in France while operated from foreign countries, and the added value created on the other side of the business model (due to the value of data collected in France), is registered on foreign business accounts, avoiding thus national accountancy.
The report therefore provides that "it is counter-intuitive that digital actors serve freely users on the French market and then price positive externalities issued from French users exclusively in the accounts of foreign companies, without generating any tax revenues for French country". With more details, it explains the counterpart of free services provided in France which is funded by users' activity creating positive externalities (through data collected), since there are used on the other side of the business model, which then enables for instance advertising targeting of being sold as services to advertisers.

Though the main point is that such sales occur within the side of their business model, which is purposefully located within a country chosen for its low tax rate or its non-taxation.
As a reminder free of charge services are part of digital actors industrial and financial strategies as explained by the report, and generates value which is not accounted nor taxed in our country while using French data[144]. Then sales not arising on our side of the market show that this criterion does not enable us to tax such business schemes on which digital actors are based.

As a conclusion on this matter, we can say that current rules mainly based on the sales' factor with regard to corporate tax are obviously not adapted to digital economy and shall not anymore constitute the main criterion to attribute profits to foreign businesses. Alternatives will be proposed under our last part to this issue, but for now, we have to focus on the last point on which digital actors rely: the absence of homogenized qualification of income between countries within cross-border transactions, with all its consequences on taxation (double exemption or double taxation).

D. Across-border taxation uncertainties caused by the absence of a digital products' uniform qualification

Digital actors in addition of all advantages from which they benefit and on which they rely to avoid taxation as explicated through precedents subparts, are also going to take advantage of the absence of uniform qualification with regard of income generated by digital products.

[143] Please refer to part II.C.2.c).ii.
[144] For more details see the Report, part 1.2.3, p.25 and following.

As a matter of fact, they count on national tax systems disparities with regard of revenues' characterisation, since digital products are for most not regulated yet, which could lead to the application of distinct tax rules according to different State qualifications, implying ultimately double taxation and more likely double tax avoidance.
However, the matter principally involves the distinction between income constituting royalties or business profits (services) within digital context, excluding any ambiguity concerning characterisation of capital gains for reasons that will be explained below for each type of revenue. This primary characterisation is primordial since it will determine within international transactions, what country is entitled to tax such revenues.

1. Royalties

a) Concept of royalties in the absence of tax treaties

In the absence of tax treaties, domestic law applies and it is necessary to understand what is encompassed by this concept of royalties under our legislation, to consider potential differences with other countries' definitions and with the one provided by the OECD MC, while focusing on tax treaties in our second part.
As Bruno Gouthière says, no definition is given of the concept of royalties under French law, which is only referred to as subject to a withholding tax (article 182 B of the general tax code) when carried out to the benefit of non-residents[145], without any further qualification. This issue can also be found with other countries involved in our study, in which the definition given of royalty is mostly an indirect one. Three approaches have been distinguished, the first one only covering revenues deriving of specific assets designated by law (Spain), the second covering only payments made for intangible assets (Hungary, Sweden etc.) and for last our approach, which is dealt with through next paragraph. We have to mention the fact that some countries do not provide for any definition at all, such as Netherlands and Poland.

Going back to our internal rules and in particular article182 B, which applies amongst others to royalties in the absence of tax treaties, it provides for a withholding tax to payments made by a debtor exercising his activity in France for the benefit of individuals or undertakings subject to income or corporate tax and which do not have a fixed establishment in French territory.
It includes for the definition of royalty at its point b), revenues from non-commercial products as provided under article 92 of the General Tax Code[146], those obtained by inventors or under copyright law, those received by breeders of new varieties of plants[147], and all products obtained under industrial or commercial property law and similar rights.
However, article 182 B also submits to a withholding tax amounts paid as remunerations of overall benefits supplied or used in France, and also amounts including wages corresponding to artistic or sportive performances supplied or used in France. Thus, B. Gouthière provides that as we can notice, the list of products under the scope of article 182 B is larger than the concept of "royalties" in its usual meaning. He thus specifies, that it covers not only products issued from the sale or the right to use patents, trademarks, processes or manufacturing techniques (which correspond to royalties) but also all supplies of services, materially provided or effectively used on French territory. He therefore points out the wider application of article 182 B, which is not specific to royalties.

[145] See Bruno Gouthière, « Les impôts dans les affaires internationales », Editions Francis Lefebvre (10th publishing/2014), p. 338 and following.
[146] Non-commercial products are defined under article 92 as all benefits received under liberal professions, charges and offices, whom holders do not have the trader status, and all profitable occupations, exploitations, and all sources of profits, which could not be related to another category of benefits or income. The definition of those products comprises therefore copyright products, or products benefitting to inventors for the use or the right to use patents, or from the transfer or right to use trademarks, process or formulas.
[147] See articles L.623-1 to L.623-35 of the Intellectual Property Code.

Payments characterizing royalties (as provided under the sole point b) of article 182 B above-enumerated) will thereby in the absence of tax treaties be subject to a withholding tax fixed at article 182 B to 33,1/3 %. However we can mention the existence of an exemption in the framework of the European Union, since it also provides for a definition of what is encompassed by the concept of royalty, even if it applies in this particular exemption context.

This exemption was introduced through the Amending Finance Act for 2003 transposing the directive of the 3rd June 2003 relative to the common tax regime of interest and royalty payments, between European associated companies. This exemption is codified for royalties at article 182 B bis applicable since the 1st January 2004 and exempt from a withholding tax, payments of royalties benefitting to a European company associated to the payer in the same conditions than those provided for interests under article 119 quarter of the General Tax Code.
As a result, associated companies are characterized when the first company has a direct minimum holding of 25% in the capital of the second company, or when a third company has a direct minimum holding of 25% in the capital of each of the two companies. More, the direct holding in the capital of the other company must be detained without interruption for a minimum period of two years.
When these two conditions are fulfilled, then payments constituting royalties between European associated companies are exempted of any withholding tax, which should normally apply under article 182 B in the absence of tax conventions.
Exempted royalties are thus defined at article 182 B bis of the General Tax Code, enabling us to consider what could constitute a royalty. There are defined in the same way than the directive transposed, which itself referred exactly to the definition given under the tax treaty model of the OECD. As a result, there are "payments of all nature remunerating the use or the right to use of copyright of literary, artistic or scientific work, including cinematograph films and computer software (this last reference of computer software is not however contained in the OECD MC), patents, trademarks, designs, models, plans, secret formulas or processes, and information relative to experience acquired in industrial, commercial or scientific domain".

Then, excepted for these payments made between associated companies within the European context, royalties are liable to application of a withholding tax. We saw that French royalties as defined at point b) of article 182 B of the General Tax Code are liable to application of a withholding tax and some other countries also apply a withholding tax with stricter or broader definitions of royalties. For instance Poland adapts to each country's legislation as it provides that a withholding tax applies to all payments, which are treated as royalties in other countries, demonstrating thereby the wide domain of the potential withholding Poland tax. As a result, royalties above those normally covered such as payments for copyright or other industrial property revenue, will also take into account income generated for the use of an industrial device, know-how and data processing services[148] in this country. Conversely, other countries do not levy any withholding tax on these payments such as for Switzerland, Netherlands and Hungary. Last, for the US royalties are subject to a withholding tax provided that income is of US source and that it is effectively connected to US trade or business.

After searching for an indirect limitation of the concept of royalty under domestic legislations, applying in the absence of tax treaties, we now have to consider the most common case in which, cross-border relationships susceptible to lead to definitions' distortions, are regulated by tax conventions.

[148] Article 21 of the Poland CIT Act.

b) Royalties' concept within tax conventions

i. Scope of royalties

Another definition of royalties can also be mentioned, as it is the one applying that time in a French conventional context since article 182 B only applies in the absence of French tax treaties. This definition also has to be mentioned since the concept of royalties is mostly encountered in the framework of cross-border relationships considering the context of our study focusing on digital actors.
The term of royalties as used in Article 12 of the OECD MC is defined as "payments of any kind received as a consideration for the use of, or the right to use, any copyright of literary, artistic or scientific work including cinematograph films, any patent, trade mark, design or model, plan, secret formula or process, or for information concerning industrial, commercial or scientific experience".

Besides we can also refer to the French tax instruction published on 12 September 2012[149], which specifies its indicative character and the fact that it shall be completed by an examination of conventional provisions, as contained in French relevant tax treaties. The tax instruction then provides that "in a general way, the term of "royalties" as used in French tax treaties refers to payments of any kind, paid for the use or the right to use of copyright of literary, artistic or scientific work, including cinematograph films, or of patents, trademarks, designs or models, plans, secret formulas or processes, and information concerning industrial, commercial or scientific experience". It then adds that the "definition of royalties could also include in certain tax treaties, products derived from disposals of goods or rights". In this case, the "tax treatment of gains from disposals included in the definition is determined while applying conventional provisions, proper to royalties".

All the challenge showed through following points of the tax instruction is then to determine which payments provided under article 182 B (applying a withholding tax in the absence of tax treaties) are not in the scope of the concept of royalty as defined in French conventional law.
It thus provides that "some income targeted under article 182 B are not always covered through French conventional definition of royalties. For instance, it is the case for remunerations of artistic and sportive performances" which could not be treated as royalties.
Conversely, some income could be included in the scope of the royalties' conventional definition, while not provided under article 182 B of the General Tax Code. Accordingly, conventions may confer sometimes the nature of royalty to products from the location of tangible personal property (for example, industrial, commercial or scientific equipment)".
This last example is interesting for our study since it shows a more flexible approach through the framework of tax conventions, as digital actors massively use intangible products as seen in the first part of our study but also informatics equipment such as servers which could not constitute under our legislation a permanent establishment in the absence of physical presence[150]. As also seen before, no physical presence being needed by such actors, it is hard to qualify a permanent establishment triggering taxation by our country. Then, the royalties' concept enlarged under some conventions to income derived from the rental of industrial, commercial or scientific equipment, would enable to pass over the characterization of servers as preparatory and auxiliary activities, thus preventing taxation (since activities could only, in the exceptional case in which all the activity is automatically handled by the server, constitute a permanent establishment and considering that additionally within French country, physical presence is needed[151]). Indeed most of countries unlike what is provided under the OECD Model Convention, apply to royalties' payments a withholding tax limiting as a matter of fact tax administration's losses.

[149] Official Tax Bulletin, BOI-INT-DG-20-20-30-20120912, point 50 to 70.
[150] For more, please refer to the relevant part under II. C. 2. c) ii.
[151] Refer to II. C. 2. c) ii.

We can also add to this last conventional approach the opinion of B. Gouthière on the matter, whom also referred to the concept of royalty in the context of French tax treaties[152]. He specifies that for the sake of defining royalties, modern tax treaties often go back to the OECD MC and in particular to its article 12, which refers to payments constituting royalties as those quoted above. More, he notes that the OECD definition of royalties is more or less reproduced in tax treaties signed by our country.

After defining the concept of royalty through either, domestic and conventional law, it is relevant to consider what rules are applied towards such type of revenues.

ii. Tax rules applying to royalties

As seen through the application of article 182 B in the absence of tax treaties, France apply a withholding tax to royalties when payments are made by a debtor exercising his activities in France and provided that the beneficiary is subject to corporate or income tax and do not dispose in France of any permanent facility.
However tax regulation applying that time in the framework of tax treaties will naturally differ from these last rules and will also depend of contracting parties and the terms of the concerned convention.

In a general way the OECD MC provides that royalties from a contracting State and for which the beneficial owner is a resident of another contracting State, will only be taxed in this latter (State of residence of the beneficial owner)[153]. The term of beneficial owner has to be explained considering that is also used in other articles of the OECD MC relative to dividends and interests[154] and which aims to prevent treaty shopping of enterprises only based in a contracting state to benefit from advantages of one convention.
Then application of the tax convention is subject to the condition that the receiver of such payments is the beneficial owner excluding thereby any intermediary between the creditor and debtor such as agents or representatives. More, some States consider that the beneficial owner is not characterized when an enterprise is only formed for the purpose of benefiting of the tax treaty. For an example, the Franco-British convention provides that royalties' advantages shall not be granted if "the main objective or one of the main objectives of the person concerned with the constitution or affectation of the right or products generating royalties is to take advantage of this constitution or affectation"[155]. Without more discussing this issue of treaty shopping fought amongst others by the beneficial owner clauses inserted within articles relative to dividends, interests and royalties, we will focus on tax conventions providing for a withholding tax and those conversely providing for a source exemption.
But before that, we have to add that article 12 of the OECD MC specifies that if the beneficial owner carries out an activity in the state from which royalties is sourced through a permanent establishment and if the right or the good generating the royalties is effectively connected to such establishment, then royalties rules are not applicable but rather those relative to business profits (as explained through our next part). The effective connection of royalties to the PE are characterized when for instance, intellectual property rights are capitalized in the business assets or when the PE has participated to expenses in a essential way etc[156].

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[152] B. Gouthière « Les impôts dans les affaires internationales », Editions Francis Lefebvre, p. 339 and following.
[153] Article 12. 1 of the OECD MC.
[154] Respectively article 10 and 11.
[155] Article 13, 5 of the Franco-British convention of the 19 June 2008.
[156] France through caselaw was satisfied for the characterization of the effective connection, of the accounting of intellectual rights, yet the OECD through its 2010 revision considered conversely that this criterion is not enough. In fact is required more than mere accountancy, economic

First, tax conventions allowing to levy a withholding tax are often those in which, the flow of royalties is imbalanced between the source state and the residence state. Meaning that the source state will lose more income (withholding tax revenues) that he will win from taxation of his own residents. This unbalance is characterized within relationships occurring between developed and developing countries, which explains according to Gouthière that such countries are not ready to give up on their withholding tax.
Such conventions providing for the application of a withholding tax and which could finally lead to tax digital revenues mostly covered by royalties and considering the difficulty of applying taxation to their receivers (as seen above), we could think that such conventions may be at our advantage. However these conventions provide in general specific exemptions towards copyright, not applying thereby any withholding tax even if it is provided for other royalties' revenues, in order to promote cultural relationships between countries. For illustration purposes, we can refer to the Franco-Italian tax treaty, which provides for royalties the application of a withholding tax of a maximum rate of 5%. Though it excludes from a withholding tax royalties coming from one state and paid to the resident of the other contracting state, for the use of or the right to use copyright on literary, artistic or scientific work which are only taxed by the state of residency of the beneficial owner of such income. However this exclusion does not concern royalties relative to software benefitting from copyright, which are consequently applied the withholding tax. As a result it constitutes an advantage within the framework of digital environment, characterized by massive use of software (especially through cloud computing services; Saas transactions being the most developed cloud computing contracts).

Now we will deal with tax conventions providing for a source exemption, meaning that they follow OCDE recommendations and are in general those concluded between developed countries. France for a long time considered that it would apply a withholding tax to royalties generated in the framework of unbalanced relationships, but this provision have been deleted through the revision of September 1995, meaning that our country is always favorable to royalties' source exoneration even in the case of relations detrimental to our country.

As a result, this emphasizes the difficulty raised in digital context since our country, which is not eligible to apply taxation considering current rules, will not either in the context of royalties (since digital products are for most providing intellectual rights) be able to apply a withholding tax in order to attenuate taxation losses within digital domain. Moreover, even if a withholding tax is provided in some tax conventions, it will be assorted with an exemption towards copyright and even if the copyrighted software may be excluded from this exemption, software only constitute one part of digital products and services as a whole.

2. Business Profits

Business profits have also to be defined, as they constitute types of revenues with which the distinction with royalties may be difficult under certain circumstances, considering in particular that some services are potentially qualified as such (royalties) by some countries while they should normally constitute business revenues. This other qualification will naturally impact the way they are taxed, since rules applying to royalties and business income are different complying with the OECD MC.

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ownership has to be attributed to the PE. Meaning that is has to match the property definition given under income taxation regulation, for taxation of revenues of a distinct entity, with corresponding costs and returns (commentaries C(12) 21.1).

a) Business profits' concept

i. Scope of business profits

Business income are not defined by the OECD MC, though is only indicated the fact that if business income include some revenues dealt with separately in specific articles of the MC, then these latter are the only ones applicable to such revenues (subsidiarity of the business profits' concept)[157].

In the absence of any definition, we will again refer to the interpretation given by B. Gouthière on the matter and as a result he adopts in the silence of the convention a wide definition, considering that business profits cover in general all business revenues. Then he provides that a contracting State could not for instance, apply his internal definition if it includes restrictions not provided by the convention itself.
However some French tax treaties refer sometimes to industrial and commercial profits rather than business profits, in this case it is appropriate to interpret this concept considering domestic law[158]. Therefore in French law, industrial and commercial profits covers amongst others profits derived from commercial, industrial or craft enterprises[159].

More B.Gouthière mentions the case in which French tax treaties include a definition of business profits unlike the OECD MC, such as for the Franco-American convention, which details activities covered by the definition of industrial and commercial profits. However, this situation is exceptional considering that most tax conventions comply with the OECD MC providing thus no definition of business profits. More in the absence of positive definition, article 7.4 of the OECD MC by excluding business revenues' treatment to income given a particular treatment through other articles, excludes thereby passive income from its scope (dividends, interests and royalties[160]).

After demonstrating what could constitute business profits within the OECD MC, we will then think of particular cases in which doubts are raised considering some revenues, since it may be difficult to determine their nature as either business profits or royalties. But before that, we have to explain taxation rules applying to such profits.

ii. Tax rules applying to business profits

When business profits are characterized in conditions explained above, article 7 of the OECD MC provides that the undertaking's business profits shall only be taxable in the State in which the enterprise has its registered office. However, if these profits are attributable to a permanent establishment located in the other contracting state, then this latter will be eligible to levy taxation.

All the difficulty expressed by this straightforward principle will be to determine when these profits could be considered as attached to a permanent establishment located within the other country. Thus, article 7.2 also provides how to appreciate the connection of such profits to a PE, providing that these profits are those which the entity is expected to make, including those derived from transactions with other parts of the enterprise, while considering the entity as an independent enterprise from the one registered in the first contracting state (in the framework of our example). Then it has to be appreciated as if it were "a separate and independent enterprise engaged in the same or similar activities under the same or similar conditions,

[157] Article 7. 4 of the OECD MC.
[158] This situation enables to refer to domestic law, since terms non-defined by the convention are considered with regard of the country's legislation in application of caselaw: Council of State, 28 June 2002, n°232276, Ass minister c/ Schneider Electric.
[159] For more, please refer to articles 34 and 35 of the General Tax code.
[160] Respectively article 10, 11 and 12 of the OECD MC.

taking into account the functions performed, assets used and risks assumed by the enterprise through the permanent establishment and through the other parts of the enterprise"[161]. As a result, when profits are attributable to such entity, meaning that they are directly issued from the activity carried out through this permanent establishment located in the other county, then this latter state will be able to tax income generated from this exploitation.
For more details on the characterization of this permanent establishment especially in the context of digital economy, we send you back to the part relative to issues highlighted within characterization of a permanent establishment[162].

As a result, this shows that digital actors rely on these rules to avoid our heavy taxation by purposefully locating their registered offices in low taxation countries, since they are able to avoid characterization of a permanent establishment within territories in which they carry out their activities (intangibles transferred electronically, no physical presence needed), especially considering the non-adaptation of current existing rules to digital growth (as shown before through all our second part). We can add on this matter that not only our country has a strict interpretation of the permanent establishment, since other countries also require intensive economic connection or physical location at the disposal of the enterprise to characterize a permanent establishment in the meaning of the OECD Tax Model Convention. In fact, a virtual office could not lead to characterizing this permanent establishment, limited for instance to communication or contact point functions (please refer to the auxiliary and preparatory exemption on the matter[163]).

Besides digital actors not only rely on tax rules relative to business profits in order to avoid application of taxation, they above all count on tax systems' disparities and qualification difficulties to make it more difficult for countries to apply taxation, since some particular services could either constitute business profits or royalties considering inclusion or not of explicit provisions within tax conventions, regulating inter-State relations.

b) Blurred distinction between income naturally constituting services but qualified as royalties for the purpose of applying a withholding tax

This distinction between income from services and royalties is fundamental in the assessment of digital products' impact on taxation, since considering their immaterialized aspect, it is more and more difficult to characterize whether payments arisen from digital products should constitute royalties and therefore be subject to a withholding tax[164], or services implying that only the State of habitual residence of the services' supplier will be competent to tax income derived from these services[165]. Taxation as usual will thus depend on the qualification of income, this is why we need to consider in which cases, notwithstanding the fact that income is issued from the provision of services, it might however be considered as royalties and therefore be subject to relevant taxation.

Moreover, this distinction is primordial, according to the doctorate in law Frédéric Huet[166], who denounces in the absence of a clear directive on the qualification of operations arisen in digital commerce, the risk of double taxation if States do not agree on the qualification to conduct for each transaction. Therefore, it is the role of the OECD and States from a national point of view, to bring further qualifications on the

[161] Article 7.2 OECD MC.
[162] Refer to II. C. 2. c) i. and ii.
[163] Part II.C.2.c).ii.
[164] When the OECD model is not followed (provides the taxation power to the State of residence), which is often the case.
[165] Also implying exoneration in the State where the service is provided, unless it is provided through a permanent establishment in this same State.
[166] Frédéric Huet, "La fiscalité du commerce électronique", Editions Litec 2000, p.199.

subject.

In order to consider in which cases, income from services could constitute royalties, we will first have to differentiate royalties from services, this distinction being especially difficult according to B. Gouthière in the matter of technical services and studies of all kinds.
Indeed, he mentions that some States and in particular developing countries, are used to assimilate the supply on their territory of "intellectual work" and technical services to information acquired in the industrial, commercial, or scientific domain, thus treating corresponding remunerations as royalties in order to apply a withholding tax. In fact and as seen through previous paragraphs, the OECD MC and its article 12 paragraph 2 include in the scope of royalties, information in relation to experience acquired in the industrial, commercial or scientific domain. We must thus distinguish either when the reference to such information (in relation to experience in specific domains) is explicit in French tax conventions or conversely when tax treaties are silent on the matter.

i. Supply of explicit provisions within the tax treaty

The first case implying that the tax treaty contains explicit provision on the matter covers several assumptions.

First, when French bilateral tax treaty do not include in its definition of royalty, the supply of information relative to experience acquired in areas above-mentioned unlike the OECD model, then supply of technical services should not be assimilated to royalties. Therefore, in such circumstances royalties could only be characterised when the operation implies the transfer of know-how, by one of the methods provided in the tax treaty itself (patent, process, plan, designs and models etc), meaning conversely that it could not characterize mere provision of services.

We can also meet another scenario in which tax treaties include that time in the definition of royalties information relative to experience acquired in industrial, commercial or scientific domain, but which expressly excludes from this same definition technical services (within protocols annexed to tax treaties). It is notably the case in French modern tax treaties, for instance in the Franco-Turkish convention[167], which provides that "remunerations paid for technical services, including analysis or studies of a scientific, geological or technical nature, or for engineering work including relevant plans, or for consulting or monitoring services, are not considered as remunerations relative to experience acquired within industrial, commercial or scientific domain". It is also the case amongst others treaties, of the Franco-Jordanian[168], Franco-Bulgarian[169] and Franco-Slovenian[170] tax conventions. Therefore in these cases, technical services being expressly excluded from the royalty definition, they are subject to general provisions on business income.

ii. Absence of any explicit provisions

B.Gouthière also distinguishes the case in which tax treaties on the other side do not contain any explicit provision.

[167] Protocol of the French-Turkish Tax treaty of 18 February 1987.
[168] Franco-Jordanian tax treaty of 28 May 1984.
[169] Franco-Bulgarian tax treaty of 14 March 1987.
[170] Franco-Slovenian tax treaty of 7 April 2004.

When the tax convention reproduces the tax model of the OECD, it then automatically includes in the royalty definition[171] the supply of information related to experience acquired in commercial, industrial and scientific area, without excluding explicitly technical services from the scope of royalties. However, in such situations, we cannot conclude that technical services must always be treated as including supply of information in relation to an experience acquired. Indeed the decisive criterion, which is hard to appreciate in practice, will be to determine precisely whether there is or not effective provision of information and communication of experience acquired, through relevant transactions (on a case-by-case analysis).

iii. Illustration through the distinction between know-how and service provision contracts

The cited author to illustrate this criterion of information relative to experience acquired in above-mentioned domains, refers to the commentaries of the OECD Committee on Fiscal Affairs, which were gradually detailed through revisions occurred on January 2003 and July 2008 and which provide for the following distinctions.

Are first mentioned know-how contracts, which are contracts where one of the contractors oblige himself to communicate his particular experience and knowledge, non-revealed to the public, to the other party who can use it for his own behalf. The licensor in such contracts, do not intervene in the application of formulas conceded and do not guarantee any result. Thus in this case, the communication of information shall effectively be considered as being remunerated by royalties, in line with the tax convention. However, this treatment could only apply to the communication of information, provided that they are related to an experience acquired. It will not be the case conversely, when remuneration is due to new information obtained after the supply of services provided at the request of the person who paid the remuneration to the company.

Since the revision of those commentaries arisen in July 2008, it is stated that the expression of "information related to an experience acquired in commercial, industrial or scientific domain" could only be used in the context of transfer of information that have not been subject to patents, and that are not subject in a more general way to other categories of intellectual property rights. Thus, commentaries refer to information non-revealed to the public, of an industrial, commercial or scientific nature, relative to an experience acquired, which find concrete application in the business exploitation and which disclosure could generate an economic advantage.

Explaining the know-how contract is essential in order to understand and oppose it to the service provision contract in which one party obliges itself using this time common knowledge of his profession, to perform a work to the benefit of the other party. Are thus included in this category all contracts of pure technical assistance such as consultations given by engineers, lawyers, or even remunerations obtained for after-sale services.

The interesting part is to determine how these contracts could be distinguished of know-how contracts and all the difference lies as mentioned above, in the nature of information furnished or used. Indeed if information are secret, then they would be transfer of know-how whereas if the business merely relies on the use of experience and common knowledge of his profession, then the operation shall be qualified of service provision and thereby be subject to business income tax treatment. Then we can note that conversely the service's nature is indifferent to the qualification of relevant tax treatment, which will depend on the nature of information conveyed while performing such services, enabling or not

[171] As provided under article 12 paragraph 2 of the OECD Model Tax convention.

characterisation of royalties. As soon as the information used and related to an experience acquired in commercial, industrial or scientific domain are confidential meaning non-revealed to the public, then the contract which would be normally qualified of service provision, will then constitute transfer of know-how, implying treating remunerations of such information as royalties. Yet, if the service implies the mere use of common knowledge of the profession in the accomplishment of the service, the contract remains as all other services treated under business income.

Besides OECD commentaries also dealt with this primordial distinction[172], considering its taxation consequences and thus provided that know-how contracts are those which imply transfer of information arising from existing experience and not information which is created through the provision of a requested service. Thereby service contracts are those, which will require special knowledge, expertise and skill without know-how transfer, since the provider will merely use these attributes. Conversely supply of know-how deals with more than the supply of existing information.

OECD Commentaries also specifically provide for know-how in the context of computer programming which is particularly interesting for our study, considering that there is supply of know-how when there is transfer of "information constituting ideas and principles underlying the program, such as logic, algorithms or programming languages or techniques, where this information is provided under the condition that the customer does not disclose it without authorization and where it is subject to any available trade secret protection"[173].

Therefore, these developments clarify the distinction between know-how contracts and service contracts which is particularly relevant in our study, considering the fact that digital growth is making more and more easy cross-border transfer of know-how and services, which need to be distinguished in the purpose of applying relevant taxation. Not only know-how and services which distinction is difficult are growing exponentially within digital context but also data transfer especially in the context of B2B[174] relationships (as a reminder refer to data value explained within digital actors business schemes[175]). For instance when a company pays another company (within the same economic area) to furnish a confidential list of subscribers (database), these payments constitute royalties, since know-how will be transferred provided that data include the prior commercial or industrial experience of the delivering company. Conversely, if the company supplying data prepared a list to answer the other company's requirement, by extracting names of subscribers from various databases in order to compile the list, then payments characterize in application of commentaries, provision of services subject to business income's article[176].

Now asserting what was said before and cases in which income from services could constitute royalties depending on the nature of the information conveyed, we can thus illustrate this distinction made through administrative doctrine in the framework of the French-Swiss tax convention, confirming that the distinction is only relevant in a conventional context for reasons previously explicated.

French tax administrative doctrine, through ministerial reply[177], provides that shall be considered as royalty by the terms of the present convention, "all remunerations paid for the access to knowledge or particular experiences non-revealed to the public, without the licensor's intervention in their application or any performance guaranteed". However will not constitute royalties, "all amounts paid in the context of a service contract in which one party carries out for the other a work with his profession common knowledge". Though based on that reply, is inferred that payments remunerating services in which the

[172] See OECD Commentaries, article 12, paragraph 11.3.
[173] OECD Commentaries, article 12, paragraph 11.5.
[174] Business to business relationships.
[175] Please refer to part I.B.1.a).
[176] OECD Commentaries, article 12, paragraph 11.4.
[177] Ministerial reply to Bockel, Official Journal of the National Assembly (JOAN) of 4 June 1984.

work is performed due to knowledge on particular experiences not revealed to the public therefore characterise royalties.

As a conclusion on this tough distinction relying on concrete appreciation of each case circumstances it is necessary to summarize what have been said on the technical services' issue regarding the characterization of income, either as business income or royalties.
Then technical services will only constitute business income when the tax convention either makes no reference to information relative to an experience acquired in the commercial, industrial or scientific domain within the definition of royalty or when this reference is made, but technical services are expressly excluded from the royalty's definition (within a protocol usually).
However, when this last reference to information relative to an experience acquired are included, applying thus the OECD MC definition of royalty, without any specific exclusion of technical services, then income remunerating such services will constitute royalties in the only case in which they imply the communication of confidential information, assimilated to a know-how transfer unlike the mere application of the profession common uses leading on the contrary, to business income's qualification.

Last, with regard to other than technical services performed for example in industrial and commercial activities, the same distinction must be made considering indication by the tax convention of information relative to experience acquired in industrial, commercial and scientific domain within the royalty definition, and same tax consequences must be drawn of such indication. As a result, the commercial provision of services could only lead to income characterized as royalties when it implies the transfer of know-how as provided for technical services, yet it is exceptional in practice according to B. Gouthière[178]. For illustration purposes, he gives examples of commercial services which remuneration could not be characterized as royalties. This will be the case for example for services supplied to customers or services performed in the framework of the guarantee ensured to customers[179], or in the case of supply of business information (provided naturally that they do not imply transfer of particular knowledge or confidential information).

After determining this capital and difficult distinction between royalties and services (business income), we have to mention the case of revenues characterized as capital gains, which will be much more quicker considering the absence of any ambiguity on the matter.

3. Capital gains

Capital gains are provided under article 13 of the OECD Model Convention, constituting income deriving from the alienation of immovable or movable property and any other property not mentioned in the article itself.

Considering the digital context of our study, movable property and also any other property are concerned and in this case, OECD first provides that alienation of movable property forming part of the business property of a permanent establishment including gain deriving from alienation of the permanent establishment itself, entitles the contracting state in which it is located to apply taxation[180]. For other types of property, OECD article provides that gains from the alienation of any property not mentioned in

[178] B. Gouthière, "Les impôts dans les affaires internationales", Editions Francis Lefebvre, p.375 and following.
[179] OCDE commentaries, C (12), n°11.4.
[180] Article 13, 2 of the OECD Model Convention.

previous paragraphs of the article "shall only be taxable in the contracting state of which the alienator is a resident"[181].

Focusing on digital environment, we will not develop further explanations on capital gains considering the fact that it may only apply in case of alienation of intellectual rights' ownership. As a result, since these payments will not be made for the use or the right to use intellectual property rights, article 12 providing for royalties' tax treatment is conversely not applicable. The transfer of full ownership does not lead to any specific difficulty within characterization of income in a international context (unlike payments giving raise to the qualification either of business income or royalties), which justifies to focus now on concrete application of general rules previously explained in the context of digital products.

4. Practical application of previous general tax principles to digital products

a) The software example

In order to understand how general principles explained above are likely to apply to digital products, we can refer to the particular case of software which treatment could be extended to all digital products.
It shows notably that the treatment of income will depend on the nature of rights acquired by the transferee as provided by the commentaries of the OECD Committee on fiscal affairs. These general and exhaustive principles developed through commentaries can be used as a matrix for all other digital products in the absence of any specific details regarding these products within tax conventions.

Indeed only few of them explicitly refer to the software, such as the Franco-American[182], Franco-Italian[183] and Franco-Russian[184] tax conventions in which article 12 specifically refers to software, though all other French tax treaties are silent on the subject. We will thus refer for all other cases to the treatment as provided through commentaries of the OECD Committee on Fiscal Affairs[185] since they are usually followed by French tax conventions.

First, we will mention the case in which the transaction implies partial transfer of intellectual property rights. If the beneficiary acquires only part of rights provided under copyright to their author for instance, meaning if the payment remunerates the right to use the program in such way that it would be qualified in the absence of license of infringement against copyright law, then the payment is treated as royalties under article 12 of the OECD Tax Model.
Now, if the beneficiary only acquires the right to use the software for his own use as an end-user, the remuneration will not be qualified of royalty but of business income under article 7 of the OECD Tax Model Convention. The same solution is applied in the case in which, the beneficiary acquires the right to make multiple copies but solely for the purposes of exploitation, in the framework of his own affairs. This is the case of site licenses, corporate licenses or network licenses, which remunerations will therefore constitute business income under the tax treaty.
Finally, if the beneficiary receives information on concepts and principles on which rely the programme (such as algorithms, programming language or techniques of the concerned software), then there is transfer of secret information implying that the remuneration could only be qualified of royalty and therefore may

[181] Article 13, 5 of the OECD Model Convention.
[182] Franco-American Tax treaty of 31 August 1994.
[183] Franco-Italian Tax treaty of 5 October 1989.
[184] Franco-Russian Tax treaty of 26 November 1996.
[185] Commentaries of the OECD's Committee on Fiscal Affairs, of September 1992 and as stated in the version of April 2000, C (12) n°12 to 17.

be subject to a withholding tax if the OECD MC is not followed (with the exception of exempted operations within the European Union[186]).

Second, we will refer to the case in which all rights are transferred to the beneficiary. As a matter of fact, when the payment is the counterpart of the full ownership of the software, OECD MC considers that this payment does not constitute royalty but income of business activity[187] or capital gain[188]. The reason for which the payment could not constitute royalty is that the counterpart is not the ability to use certain rights, since these rights have been totally acquired by the beneficiary.

Another case is also referred to under the OECD commentaries and concerns the assumption in which an intermediary acquires the right to distribute copies of the software. This situation is specially mentioned through the commentaries after the revision of July 2008, providing that when there is a transaction through which a distributor makes payments in order to acquire and distribute copies of software (but without getting the right of reproducing the software), these payments shall be treated as business profits and this independently of their distribution mode, either through physical support or electronic means. Indeed, the same justification is given to set aside the qualification of royalty which is that payments in such circumstances are only done in order to get software copies and do not remunerate any right to use the software's intellectual rights[189].

Last, we can refer to practical distinctions made by B.Gouthière, in the particular case of software concession in order to better understand former principles. The main question according to him is about the transfer or not of know-how simultaneously to the right to use the software. Meaning that when the beneficiary acquires the mere right to use the software without transfer of any technical knowledge or know-how, the main criteria being that he does not have access to the software's source code, which would enable him to modify or adapt the software, then payments done for such transfer could not be treated as royalties. Therefore remunerations done in these circumstances may only constitute business income since the software is considered as a mere working tool in that case.
Yet if the beneficiary conversely detains the source code and thus is able to modify and adapt the software to his own business needs, then payments arisen in this last case would on the contrary constitute royalties.

The software example is interesting as it could be applied in the same logic to all digital products. Royalties are qualified as such for simple reasons, when payments remunerates the transfer of the right to use copyright products or in a broader way products arisen from the transfer of secret information. Though, when payments arise to remunerate the right to use the product without any transfer of particular know-how or remunerate acquisition of the product itself, then qualification of business income applies as provided under articles 5 and 7 of the OECD Tax Model.

This tax treatment applying to software and depending on the rights acquired by the transferee provided under OECD commentaries is extended according to these same commentaries to all digital products, also referred to under article 12. Commentaries thus specify that such principles applied in the case of payments for software are also applicable to transactions relative to other digital products such as images, music or texts, which use is intensified through e-commerce development[190].
Therefore, in order to determine if payments occurred constitute or not royalties, commentaries provide that the main issue to be resolved is the core reason for which payment is done and thus rights acquired by

[186] Please refer to part II.D.1.a) for a reminder of the exemption conditions.
[187] See articles 5 and 7 of the OECD Tax model.
[188] See article article 13of the OECD Tax model.
[189] OECD's Commentaries, C(12) n°14 .4.
[190] See Commentary, C(12) n°17.1.

the transferee. Then concluding on what was already said, royalties may therefore only be characterised when payments remunerate the use or the right to use intellectual property rights or know-how, other payments constituting either business income or capital gains.

Yet, these principles which seems easily comprehensive in theory may however give raise to practical uncertainties and thus potentially lead to double taxation, this risk being previously emphasized by the doctorate in law Frédéric Huet[191] but also by foreign authors through specific examples.
For instance, for illustration purposes, a distinction must be made between transactions implying physical delivery of tangible products and offline provision by means of an electronic ordering process. These types of transactions do not generally involve any transfer of intellectual property rights and thereby may not be qualified of royalties but exclusively of business profits[192]. For instance, if Spanish customers access the website of a French resident company to order a physical copy of a software, copies will be taxable as business profits if not attributable to a Spanish permanent establishment. However qualification issues arise if the transaction not only involve the physical delivery of software but also allow Spanish customers of downloading additional software packages. In fact, whether these transactions should lead to the transfer of the mere use of software constituting business profits or alternatively lead to transfer of intellectual property rights constituting thereby royalties, may give rise to uncertainties. Therefore, if no characterisation of this particular situation is settled through tax conventions, double taxation could take place. If Spain qualifies such payments as royalties and thus levies a withholding tax, whereas France considers these payments as business profits, then our country may on that account refuse to grant relief from double taxation[193].

Besides, another example can be given with regard to Poland and Italy that time, which reserve the right to tax royalty at source, applying thus a withholding tax to such payments. In this case, bilateral conventions have to solve the risk of double taxation arising from relationships between these two countries and thereby provide that the state of residence of the beneficiary should grant a tax credit equal to the amount paid in the state of source of such revenues. Another solution would be to grant an exemption based on the same amount to avoid double taxation.

To conclude, these examples show despite the treatment provided under OECD Commentaries in the software example and applied to all digital products, that however there cannot be exhaustive and provide treatment for all situations that could arise in digital transactions' context. Then, as highlighted through previous illustrations various and daily digital transactions may give rise to qualification uncertainties which treatment is not mentioned in conventions regulating bilateral inter-State relations, ultimately leading to potential double taxation risks.

Moreover, a last example of qualification uncertainties may be given since OECD principles and commentaries, are not always accepted by all countries, which could adopt a wider interpretation of royalties in order to apply a withholding tax. As a result, some revenues that are deemed to be qualified of sales transactions according to the OECD's point of view will though be considered as royalties. These deviations will thus be included in bilateral conventions and we can refer as an example to tax treaties concluded by Italy and Spain.
These countries provide for a wider definition of royalties in some of their conventions, and will provide that income relative to the transfer of the ownership of elements included in the definition of royalties fall

[191] As previously quoted under part II.D.2.b).
[192] A.M. DELGADO GARCIA and R.O. CUELLO, "Direct Taxation of Electronic Commerce in Spain", *ET* 2013, 22-23; R. WESTIN, *International Taxation of Electronic Commerce,* Alphen aan den Rijn, Kluwer Law International, 2007, 257-258.
[193] A. COCKFIELD, W. HELLERSTEIN, R. MILLAR and C. WAERZEGGERS, *Taxing Global Digital Commerce,* Alphen aan den Rijn, Kluwer Law International, 2013, 150; G. GEMIS and N. DE KINDER, "Royalty's or not, that's the question : het kwalificatievraagstuk in een e-business-wereld", *AFT* 2001, 102-103.

within the scope of this last article (12), provided that less than the full ownership is transferred. We can see in the light of what have been explained before, that transfer of ownership should normally lead to qualification of such revenues as business profits or capital gains, but do not give raise to royalties under the OECD interpretation.
This shows the additional complexity added by each country's point of view, which must be taken into account considering each case's particular circumstances through attentive analysis of relevant conventions.

Besides, a last example will enable us to show that time that digital transactions which imply different levels of transactions, will not only imply the sales of a digital product to the end consumer, but will also imply to take into account the upstream contract concluded by the services' provider which implies to split profits made by this latter, to apply relevant tax treatment to each part of his revenues.
As an example, we can refer to the Apple's iTunes Music store application, which will enable the customer of downloading music on his hard drive for personal enjoyment, usually at a minimal charge. No particular intellectual property rights are granted in this case implying that payments will constitute business profits. However Apple earnings are estimated at 20% of each payment done in this context, meaning that only this amount of the payment will be subject to business profits taxing rules. For the other remaining 80% they will be transferred to the copyright owner, this amount being paid for the transfer of limited distribution and reproduction rights, which may thus constitute royalties[194]. However, depending on each case's particular circumstances and thus on the terms in our example of the license agreement, Apple may be regarded as a distribution intermediary without the right to reproduce the data, implying that such payments would be qualified on the contrary of business profits[195], which confirms complexity generated while qualifying revenues.

b) The case of cloud computing contracts

i. Cloud computing possible tax treatment

Most common cloud computing contracts are those who imply making available the software as a service with all additional services offered to the user, then we will not come back to the treatment of the software itself as already explained through previous paragraph. In fact, even if commentaries do not deal with cloud computing services so far, principles previously laid down for the software should be applicable to the extent possible, keeping in mind technical specialities of cloud computing.

Considering the definition given of various cloud computing schemes under our first part[196], we however can exclude application of capital gains qualification, as the rights obtained by the consumer in such transactions never imply the transfer of full rights over an asset, since the user only obtain mere access to the cloud provider's facility, this last one keeping full control over it. Thus payments done in this context will either be subject to royalties' qualification considering the tax convention provisions, for instance if it includes in its royalty definition payments for rentals of commercial, industrial or scientific equipment. Though, these payments could also constitute technical fees if the tax treaty deals with such fees or business income[197]. We will now briefly consider different cloud computing transactions and treatment that could be applied to such agreements considering their own specificities and assuming the fact that even in the absence of any precision relative to cloud computing in the OECD Model Convention, they are not

[194] OECD TAG, *Tax Treaty Characterisation Issues Arising from E-commerce: Report to Working Party No. 1 of the OECD Committee on Fiscal Affairs*, 1 February 2001, 20-21.
[195] OECD Commentaries, 2014, Art. 12, §14.4.
[196] Please refer to part I.B.2.
[197] OECD (2014), *Addressing the Tax Challenges of the Digital Economy*, p. 132; Heinsen/Voss, *INTERTAX*, Volume 40, Issue 11, p. 587.

excluded insofar.

- *Saas Services*

These types of transactions imply that the user will be offered the use of the cloud provider's software via the Internet. What should be considered to determine tax treatment of revenues paid in exchange of this use is not the transfer or not of the software itself but the rights acquired by the user within cloud computing contract.

First the transfer can be limited to partial rights necessary for the user to actually operate the program, in such case, rights do not fall within the definition of royalties considering the fact that this transaction implies the use of the software for the user's personal or business motives. Then rather than article 12 (royalties), article 7 relative to business income will apply to such payments[198].
Second, the other type of cloud transaction may imply the partial transfer of rights encompassing this time the right to exploit the program, meaning the right to distribute it to the public, or to modify and display it. In this case, revenues are most likely to be characterised as royalties, since payments are made for exploitation purposes and correspond to rights normally benefitting to the author. Considering the fact that royalties are commented as being rights which would constitute infringement in the absence of a license granted by their holder, we can conclude that the right of exploitation leads to qualify such payments of royalties, thus subject to article 12 tax treatment.
Last and as previously said, normal transactions could lead to the transfer of full rights, which is not the aim of Saas services for reasons explained under the relevant part dealing with such transactions, then it is not appropriate to extend more on this assumption, which would lead to capital gains' qualification, applying thus article 13 of the OECD MC.

However and as also seen before[199], it is exceptional in practice that the cloud provider offers use of software developed by him. In fact, the software will usually be designed not by the cloud provider himself but by a third party, then an upstream contract is concluded with this latter enabling the cloud provider to use and exploit the software. Consequently, such payments will be qualified of royalties since the agreement will generally provides for the right to exploit copyrighted software in order to reproduce or to distribute it to his customers.

- *Iaas Services*

Infrastructure as a service, imply for the provider to make available his infrastructure to customers via the Internet too and such payments will be characterised as business income according to article 7 of the OECD Model Convention, since they do no imply transfer of any intellectual rights or information non conveyed to the public.

Though the main question that is obviously posed by such transaction in the framework of our study is to determine whether the infrastructure itself could constitute a permanent establishment enabling the country in which it is located, to apply taxation to income attached to this establishment. The question remains to know if the infrastructure could lead to qualification of a permanent establishment as previously explained[200] and we have to remind in the context of cloud computing that such infrastructure (constituted

[198] OECD Commentaries, article 12, paragraph 14.4.
[199] See part I.B.2.
[200] Refer to II. C. 2. c) i. and ii.

by a server) should not be a mere technical device but rather form a significant part of the business activities. The server in the framework of cloud computing transaction play this leading role, since users pay for the use of the infrastructure which is the main object of the cloud provider's business. More the server rendering Iaas and Saas services could thus easily constitute in other countries' point of view a permanent establishment since it is not necessary for them that the personal establishment is operated by physical intervention.
However and as also seen before, it is still not the case for our country which subordinates such qualification to the condition of physical staff constituting otherwise necessary preparatory and auxiliary activities[201]. As a reminder it considers that it is only in exceptional circumstances, in which the server operates the whole business itself that such characterisation could be recognized which has not been the case yet under our legislation.

More in the case of Iaas services another problematic have to be raised, since as developed earlier[202] some countries include in their definition of royalties, payments done as a counterpart for the use of industrial, commercial or scientific equipment[203]. This problematic was already dealt with under the 2001 TAG Report in relation to former ASP transactions and data warehousing, allowing a parallel in the framework of Iaas services to thus be done.
It provides that in the aim of determining the nature of the contract as a service contract or a lease contract, should then be taken into account all facts which are relevant for the substance of the transaction. Therefore, the Iaas contract does not necessarily implies that the computer equipment used will enable qualification of the contract as a lease of equipment. In fact, even if it implies to provide processing or storage capacity to users, cloud contracts also includes additional services with regard of maintenance needs of the hardware, which remain at the provider's charge. More, the provider also retains the full control and possession of the underlying equipment. Last the provider will have customers which means that the equipment will be shared by all users implying for all above reasons that payments should be classified as business income, derived from a service contract[204].

- *Support services*

All additional services provided in these transactions will also give raise to remuneration, which is for qualifying purposes considered as business income. Conversely such payments do not characterise royalties except as seen before in the case when fees for technical services are included in the definition of royalty within the concerned tax convention. Otherwise and in most common cases, additional services will be subject to business income taxing rules (article 7).

All of these developments show how difficult and complex is the application of general principles laid down before, while faced to concrete situations implying the novelty of digital products. Therefore, a case-by-case analysis is needed in order to adapt to each situations' particularities and to each conventions' provisions.

[201] Please refer for legal explanation to part II.C2.c).i and ii.
[202] In the part relative to the distinction between royalties and services under II.D.2.b).
[203] This is for instance the case for tax treaties between China and Belgium or for another example the convention between Austria and Brazil.
[204] A. BAL, "The Sky's the Limit – Cloud-Based Services in an International Perspective", *Bull.Int.Tax.* 2014, 519; OECD TAG, *Tax Treaty Characterisation Issues Arising from E- commerce: Report to Working Party No. 1 of the OECD Committee on Fiscal Affairs*, 1 February 2001, 12-13; O. HEINSEN and O. VOSS, "Cloud Computing under Double Tax Treaties: A German Perspective", *Intertax* 2012, 591.

ii. <u>Potential implementation of the "rule of accessory" applying within bundled contracts</u>

We will now focus our analysis on particular rules, which may apply in the framework of cloud computing transactions in order to simplify treatment of revenues remunerating such transactions, since they constitute bundled contracts implying the provision of a product and the supply of services relative to the product made available.

We have to remind that we already dealt with the case of cloud computing transactions through accountancy of bundled transactions, thus we will not remind domestic rules that were previously explained while searching for a general characterisation of digital products and thereby reference made to applicable accounting rules on the matter[205]. Considering the aim of this second part focusing on cross-border interactions implied by digital trade, we will consequently focus on the "rule of accessory" provided by the OECD through its commentaries in order to better understand how to deal with the specific situation in which a transaction includes transfer of product (either tangible and especially intangible in our context) and provision of services linked with the product from which users benefit.

As previously seen (under the part relative to the distinction between royalties and services[206]), we can distinguish service agreements from contracts providing the transfer of know-how however these contracts are not necessarily encountered in their pure form. Thus, mixed contracts may exist, combining both elements, meaning the transfer of particular knowledge and the provision of services in the framework of the same contract. In this case the principle is to decompose the total amount according to different benefits provided in case in which prices are distinguished in the contract[207] and to submit each of its parts to the relevant tax regime (either business income or royalties).

However, there are situations in which one of the elements of the contract is by far the main part of the contract and in this case "the rule of the accessory" should apply according to the OECD commentaries[208]. Meaning that when one element constitutes by far the subject matter of the contract, all remunerations done under this contract are thus subject to the same tax regime applying to the contract's main service. This solution applies for instance to franchising agreements, which imply the transfer of a range of specific skills in addition to the transfer of the right to use a trademark. Therefore, amounts paid through such contracts, remunerates in part the trademark concession, the other part remunerating services performed under these contracts by the franchisor. In such circumstances, it is often impossible to disaggregate the total amount paid for each element of the contract (in the absence of any subdivision within the contract of the global price), thus applies the accessory rule from a taxation point of view, which would lead to consider global remuneration as royalty since the right to use the trademark constitutes the subject matter of franchise contracts.

This same solution would also apply to previous examples taken to illustrate different software contracts (Saas). Then in the case in which a contract provides both the right to use the software and the sale of materials or the provision of services, the OECD suggests to ventilate the total price according to each part of the contract and to apply the tax treatment specific to each part thus identified, until there is an element of the contract which constitutes by far the subject matter of the contract (which would imply applying taxation rules applying to the contract's subject matter to all payments made under the bundled contract).

[205] As a reminder please refer to part I. B. 2. b).
[206] Please refer to the part II.D.2.b).
[207] Please refer to rules explained under part I. B. 2. b).
[208] See Commentary, C(12) n°11.6.

Nonetheless these solutions and thus application of the “accessory rule” are only provided from the OECD point of view whereas French taxation is silent on the matter or less detailed since we have to refer to accounting principles[209]. As previously explained[210] we distinguished two cases, the case in which the contract itself notwithstanding the overall price determines the price of the product from the price of services provided, in this case no difficulties arise since the company will recognise income for distinct amounts, as fixed within the contract.

However, in the case in which no distinct prices are fixed by the contract to divide the overall cost between the product sold and services related to such product, the overall income as previously said is recognized at once when the product is sold and as counterpart a provision for services to be rendered is accounted. However accounting rules indicate that this solution is only possible provided that the provision of services constitute the accessory of the product’s sale.

We could therefore consider that this domestic accounting condition constitutes the symmetrical path of the OECD commentary referring to the accessory rule, since it leads to the same consequences.

Indeed, the whole cost could only be accounted in once when services are the accessory of the product’s sale, then considering that tax regime is based on accountancy under French law, the same tax regime will thus apply to the whole income.

This implies in the software’s example application of royalties taxation regime to the full registered amount, even if in practice the overall cost will include the provision of services taxed as a consequence under the same regime than the subject matter of the contract, since they supplement the software’s right to use, for which they are performed (recognition will be made of the full amount when no distinct prices are fixed within the contract, provided that services constitute the accessory of the product’s sale). More and regarding consolidated accounts, no solutions are provided concerning a potential accessory rule as found under accounting texts for individuals accounts, which complete our reflection on the matter.

Through these examples in purpose of explaining application of the accessory rule, we can notice the potential simplification induced by such characterisation, implying to apply taxation relative to the digital product’s use (royalties) to the whole contract covering then services which are normally constituting business income if royalties are the counterpart of the product being the subject matter of the contract.

Then this tax treatment could be detrimental especially to developed countries such as France which does not apply withholding taxes and even in the exceptional case in which finally a withholding tax is applied, copyright as seen before are also exempted for cultural aims (except for the software) which could lead to compensate tax administration losses in the digital domain.

Indeed, France would be able in these circumstances to apply taxation to such products, which are common in digital context (cloud computing through software as a service) and thereby enables extending taxation to all services provided under the same contract (normally only taxed by the service provider’s state of residence).

[209] As provided in the Mémento Comptable 2015, point 575 for the sales of good assorted of services provision.

[210] Through the relevant part : I.B.2.b).

Intermediate conclusion

This second part highlighted qualification issues that time impacting taxation itself and logically resulting from the absence in national common rules of general characterization of digital products.
As a matter of fact and despite accountancy and taxation rules applying to basic digital products, taxation rules are not provided towards core values of current digital growth (data, cloud computing).

Digital actors have obviously taken advantage of this legislative lack, building complex optimization schemes relying on the wide use of such intangibles.
More their innovative business models using these new values to circumvent current legislation makes it really difficult to source income generated by such products and to localize either income or the taxpayer. Not to mention the fact that no physical presence is needed within such digital transactions, allowing concerned undertakings to keep under thresholds normally leading to taxation.

All of these strategies reveal our delay towards digital growth and tax regulations' non-adaptation, both on a domestic or international level.
As a matter of fact, digital environment actors not only rely on legal national defaults but also on the combination of all domestic regulations, failing to provide with harmonized definitions and generating consequently, tax avoidances due to national law differences.

Indeed, clear and certain qualification of digital transactions is made really difficult even if some general principles are given in theory, obliging to a case-by-case characterisation, which is really complex as shown before. No steady concepts of royalties or business income can be outlined, the distinction being too vague within electronic commerce and impacting as a result, the allocation of taxing powers between involved states. This leads to double taxation difficulties but for most it is more a matter of double exemptions, which manage to get to digital actors, relying on qualification differences.

After dealing with all tax difficulties and rules susceptible to apply to digital actors, pointing out advantages and drawbacks to which they are subject and especially benefits, considering the legislative gap since taxation rules did not evolve to adapt to digital growth, we will close our study by dealing with potential alternatives limiting taxation losses in such domain.

III. Possible solutions countering highlighted digital issues

A. Broadening the qualification of royalties to digital transactions

1. Applying a withholding tax to Internet transactions

As seen through our precedent developments, some countries and especially developing countries have tended to apply a withholding tax unlike OECD recommendations in order to compensate imbalanced relationships with developed countries. This enables them through taxation to counter differences that are not always taken into account trough the OECD Model Convention. Therefore, we can think of applying such taxation to take into account the unbalance created by digital actors for countries, which are having difficulties taxing products of digital commerce.

a) Current possible use of article 182 B in domestic tax law

Under French tax law, no particular measures targets fees derived from specific activities implying the use of technologies in the provision of services and thus treats them as a special category of income, enabling states to tax digital revenues.
We can however think of article 182 B in that aim, which applies a withholding tax in the absence of any tax treaty, to revenues paid by debtors exercising their activity in France and made by them to individuals or undertakings subject to income or corporate tax and which do not have a fixed establishment in French territory. We already discussed royalties (while searching for a definition of royalties in domestic law[211]), which are subject to this tax in the absence of conventional law and clarified at that time the fact that it applies not only to these latter but also to other types of income, which shall be distinguished.

As a result, in the framework of this article are targeted at point c) payments made in remuneration of services of any kind, supplied or used on French territory. We can then consider that these payments necessarily cover fees for activities merely involving the use of technology in the delivery of the service. Indeed, replacing us in the context of the article, we remind that it focuses on payments made to individuals or undertakings subject to personal or corporate tax and which do not have a fixed establishment on French territory, while services are supplied or used within our territory, which necessarily implies the use of technology at some point amongst other possibilities. Then and in order to emphasize the link between the article's context and the services implying the use of technology and more precisely the use of Internet in the delivery of the service, we can also refer to the ministerial reply to Chazeaux[212], providing that tax authorities apply a withholding tax (under the condition that they are no tax treaties exempting from it) to amounts paid for services of provisions made on the Internet network.

So common tax law without any specific provisions, enable tax authorities to apply the withholding tax to such Internet services, since the service will be either delivered or used in France due to amongst others options through downloading via the Internet, while the provider do not dispose of any fixed establishment in the country. Indeed, the Minister is faced with a situation in which he is asked if the Internet supplier's presence materialized by a reserved space on the hard disk of a French server, could constitute a taxable presence and thus may characterize a French fixed establishment triggering taxation. Without further development on that point, since it has already been specifically dealt with[213], we can first mention that he reminds that the Internet enables the increase of commercial transactions without any physical presence on the territory. He added that the creation of a website in France by a foreign company,

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[211] Please refer to the relevant part II.D.1.a).
[212] Ministerial reply of Chazeaux, n° 15728, Official Journal of National Assembly, 26 october 1998.
[213] Refer to II. C. 2. c) i. and ii.

using computer means of a third-party ensuring them access to French users does not constitute without any physical location on French territory, a fixed establishment in our country.

Therefore, it can be inferred from what have been explained for digital actors using immaterial transactions and more broadly any services implying the use of technology in the delivery of the service, that they fit in the context of article 182 B, since they rely on the default of characterizing a fixed establishment within our country in the absence of any physical presence and are thus covered by the scope of article 182 B, provided that Internet actors are subject to personal or corporate income tax.
This article in the absence of tax treaties may at some point considering its scope, cover digital services and imply that payments made by French users and remunerating such services may be thereby subject to a withholding tax under French law. This would constitute an interesting remedy since source taxation as opposed to the sales' criterion triggers taxation when the service is supplied or used within French territory, resolving at the same time problems mentioned for finding the place of taxation.

Then in our search for solutions to issues raised in our second part, we can conclude that existing provisions could be used against Internet services, justifying thus application of a withholding tax considering the impossibility to tax directly digital actors settled abroad and trading immaterially within our territory.
Though we have to remind the limits of this article which is provided for its application in an international context, deprived from tax treaties regulating inter-State relations, which is not common case. As a result, we could think of an alternative which would imply including directly within the tax convention itself electronic services as part of the royalties' article, with the aim of submitting such payments to a withholding taxation.

b) Inclusion of explicit provisions providing for Internet services as part of royalties

i. <u>Broadening the royalty article to Internet services</u>

Instead of solutions mostly applied from developing countries (as seen under the relevant part distinguishing royalties from services[214]) in order to apply a withholding tax (using either technical services or industrial, commercial or scientific equipment) when imbalanced relationships, we could think in this perspective of directly including within the royalty definition, income derived from digital transactions.

As a matter of fact, this would imply for the OECD Model Convention to include in its definition of royalties under article 12, income generated within digital transactions in order to ensure effective apprehension of such revenues. Then only application within an international context could ensure that digital actors which are at their ease in cross-country relationships, would be taxed through this definition and thus could not avoid unilateral application of the measure, by circumventing one country and harming thereby its economy.

In this aim, it is necessary to provide a wide definition of digital income in order to encompass all possible revenues derived from these transactions and above all to take into account further developments, considering digital growth and its ability to constantly innovate (innovation being one of the most important part of digital actors' expenditure).

[214] See part II.D.1.b) and II.D.2.b).

ii. An idea already suggested for technical services by the UN Model

This idea has already been partly suggested by the United Nations Model, which do not refer directly to income derived from Internet services but which provides this idea with regard to revenues generated by technical services or commercial, industrial and scientific equipment.
They could be included in the article relative to royalties or they can be dealt with in a separate article.

The main purpose of this proposition is to expand taxation on income derived from technical services[215] and in this aim, three alternatives are offered by the UN Model. Technical services are defined, with regard to following alternatives, as "managerial, technical and consulting services"[216].
The first alternative would be to allow the source country to tax residents of other countries for technical services.
The other alternative would be to limit the source country in taxing income from technical services performed in the source country.
Then, the last proposition would be even more restrictive, since the source country should only be enabled to tax income from technical services performed for more a minimum period of days and on a net basis.

However despite several propositions with regard of the taxation power's scope subordinated to more or less conditions, the same basis remains and implies integrating within the royalty's article revenues from technical services and fees for rentals of commercial, industrial or scientific equipment. This inclusion should enable to encompass in the technical fees' definition income from digital services, and thus enable source state to levy taxation against digital transactions.

iii. Entitle the source state to apply a withholding tax to such income

The purpose of including Internet services to the best, within royalties' definition or technical fees, is to enable the source state of applying a withholding tax to such types of income.

However, enabling taxation from the source state is not the rule provided under the OECD Model Convention as already explained through general rules. Indeed, the state normally enabled to apply taxation is the state of the beneficial owner of such payments and the only case in which the source state is empowered to levy a withholding tax is when the beneficial owner carries on a business in this last state and when royalties arise through a permanent establishment situated therein.

Therefore in order to make sure that previous idea leads to effective results, the OECD Model Convention must also expressly provides for the taxation power of the source state, limited with regard to specific income derived from digital transactions.
This would be justified by issues raised in this particular domain as explained through our second part, making it very difficult for the source state to benefit from value generated in his country and usually escaping from taxation (or applied very low taxation) due to optimization schemes from which benefit actors in digital context. Some countries even without the ability given by the OECD to the source state to apply taxation have taken a lead in applying withholding tax to such income under qualification of technical services fees, included in the tax convention under royalty's definition. Therefore unlike the OECD Model Convention, many countries apply a withholding tax at the source of the income, while

[215] UN, E/2013/45-E/C.18/2013/6, http://www.un.org/esa/ffd/tax/ninthsession/index.htm, MN 58.
[216] UN, E/C.18/2013/CRP.5, http://www.un.org/esa/ffd/tax/ninthsession/index.htm, p. 7.

providing directly for it through the Convention itself would prevent disagreements and potential double taxation.

More we have to remind that as seen before countries levying taxation also generally provide for exemption in the domain of copyright in order to avoid boundaries against cultural development. Though this exemption does not include software, a first step would then be to make sure that digital payments are not taken into account within this exemption applied to copyright by providing a larger definition (than the mere software mention) despite the potential restriction of cultural goods' circulation.

iv. Limits relative to the status of OECD principles and commentaries

Despite the potential impact that could have the previous proposition, we have to say that its effectiveness can be doubted considering the fact that the OECD principles and commentaries are not binding. Indeed as shown through previous examples in our study, many states even as member states do not follow all OECD principles and freely organize their relations with other states within bilateral conventions, thus not complying with interpretation given under such commentaries.

It is relevant to consider what status is granted to such commentaries which place according to B. Gouthière must not be exaggerated since for some, they try to create law by adding to the original text instead of explaining it.
Yet, he reminds that such commentaries are not part of tax treaties as they have not been submitted to the same procedure (relative to the treaty approbation before Parliament) and must therefore only be given an indicative character.

Considering this limit attributed to OECD commentaries, changes offered to apprehend digital value should be included in the article itself in order to make sure that such changes would be effectively applicable.
Then all precisions should to the extent possible be included in the article in order to make sure that payments of digital environment are taxed, as said before, the most appropriate solution being to provide for a wide definition enabling to apprehend all products involved and that could be involved in the future. Other secondary details may be explicated through commentaries taking into account the fact that under our legislation, is only referred to commentaries existing at the time of the tax treaty conclusion, meaning in other words that authorities could not refer to commentaries issued subsequently to the tax convention conclusion[217] (since states in this situation did not have the opportunity to agree on the interpretation that may be given under these commentaries).

2. Ensure effective application by preventing circumvention of the withholding tax

After thinking of a way to enable States through tax treaties to apply taxation of digital actors, we have to make sure that these conventions are being effectively applied, implying to prevent any abuses of such treaties. In fact and as also explicated previously, digital enterprises are optimized entities which through adapted organization reach the result of benefitting from treaty advantages (through

[217] Council of state, 30 December 2003 n°233894, SA Andritz.

intermediaries established for this purpose) while avoiding on the other side all tax disadvantages (by making sure that no triggering criterion may be characterized) as demonstrated through our second part[218]. This is why we also have to discuss within the treaty shopping assumption, new solutions that could be brought to prevent actors from avoiding current taxation on royalties.

In this aim, we can thereby refer to concrete measures under provisions regarding the BEPS project relative to harmful tax competition (Action 5) and treaty shopping (Action 6), which are not yet implemented but aim to be so by the end of 2015. Before dealing with these concepts, a brief explanation can be given in order to understand how companies manage to abuse of tax conventions. Abuse is characterized each time that the taxpayer of a country with which France for instance did not conclude a tax convention, intrudes an entity between him and the French resident, in a country which benefits from a tax convention with France, in order to benefit indirectly from this tax treaty through this entity. After this brief explanation, we will now lay down principles that are currently debated to prevent further abuses, since current rules (of the beneficial owner for instance) are not sufficient.

a) The substance and transparency requirement

With this object, we will explicit these provisions, starting with Action 5 of the BEPS project entitled "countering harmful tax practices more effectively, taking into account transparency and substance". We have to remind that the first report of the OECD on the matter was drafted in 1998, entitled "Harmful tax competition: an emerging global issue", then 15 years has passed since this report and the project now dealt with. Indeed, to counter more effectively harmful tax practices, the BEPS Action Plan commits the Forum on Harmful Tax Practices (FHTP) to redevelop the work on harmful tax practices, focusing on improving transparency, thus based on spontaneous compulsory exchanges of rulings related to preferential tax regimes.
More, their work should also focus on substance as implied by the title of the Action Plan n°5, therefore requiring substantial activity for the granting of any preferential regime. More it is asked to evaluate preferential tax regimes in the BEPS context and it will also have to engage with non-OECD members on the basis of the existing framework, proposing for revisions or additions to that framework.

As a consequence, the FHTP is asked to deliver three outputs, first a review of member countries' preferential regimes, then a strategy to expand participation to non-OECD members and finally proposals for revisions or addition to the existing framework.
Concerning this first goal with regard to the review of existing preferential regimes, the emphasis has been put on the elaboration of a methodology in order to set out a substantial activity requirement, notably in the context of intangible regimes, which is directly relevant within our study on digital environment. Thus, countries have agreed with the need of strengthening the substantial activity requirement and several approaches are explored with the goal of aligning taxation of profits with substantial activities. Once an approach will be agreed, preferential regimes identified will then be assessed to integrate the criteria of substantial activities required to the granting of such regimes.
Now, on the transparency requirement, a framework has been set out in the report and will have to be applied to identified preferential regimes and to other regimes too. Finally, the FHTP has started with that aim reviewing regimes of member countries but also of associated countries[219] as asked in the OECD/G20 Project on BEPS, more time being given for these latter to the completion of the work.

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[218] Please refer to part II.B.
[219] Associate countries under the OECD/G20 Project on BEPS are: Argentina, Brazil, China, Colombia, India, Indonesia, Latvia, Russia, Saudi Arabia and South Africa.

After this brief summary of goals attached to this previous part of the Action Plan, we will now explain in a same way, primary goals given under Action 6 entitled "Preventing the granting of treaty benefits in inappropriate circumstances".

b) Fighting treaty shopping

Action 6 is relative to treaty abuse and in particular to treaty shopping which is one of the most important BEPS concerns. Thus, are identified in that aim three objectives that should lead for some to the amendment of the OECD Model Convention, in order to include these provisions preventing treaty abuses.
First, is provided that should be developed provisions regarding the design of domestic rules to prevent the granting of treaty benefits in inappropriate circumstances, then should also be clarified that tax treaties are not intended to be used to generate double exemptions, finally tax policy considerations should be identified, in order to help countries before deciding to enter into a tax treaty with another country.

With this aim the report offers for alternative approaches and focuses on the common goal, which is to include sufficient safeguards in order to stop treaty abuse and in particular prevent treaty shopping. This flexibility is shown through the report, which requires a minimum level of protection that should be enforced in the OECD Model Convention and permitting then, these provisions to be adapted to states' specificities, in the context of bilateral negotiations. For better understanding, examples are given of difficulties that may arise in the context of national implementation of such provisions.
For instance, some countries may be subject to constitutional or European restrictions preventing them from adopting the exact wording of the model provisions, other countries may already have domestic anti-abuse rules that effectively prevent treaty abuses, and others may be limited by their administrative capacity, preventing them from applying detailed anti-abuse rules and requiring then more general principles.

With that aim, rules to be adopted have to take into account two distinct situations distinguished by the report, the first situation being the case in which a person tries to circumvent limitations provided by the treaty itself, and the second situation being the case in which, a person tries to circumvent the provisions of domestic tax law using treaty benefits. The first case implies logically to include anti-abuse rules in the treaty itself while the second problem could not be resolved exclusively through treaty provisions and requires therefore domestic anti-abuse rules.

To summarize briefly what such rules involve we will start with the first case, implying first to include in the convention a clear statement through which contracting states precise when entering into a treaty, that they intend to avoid creating opportunities for non-taxation or reduced taxation through tax evasion or avoidance, or treaty shopping arrangements.
Then specific anti-abuse rules shall be included in tax treaties such as the "LOB rule", meaning the limitation on benefits rules as included by treaties concluded by the United States. Such regulation reduces the scope of the treaty, which normally applies to persons who are residents of a contracting State. Indeed, the LOB rule provides that a person will only be entitled to the benefits of the tax treaty, under the condition that he constitutes a "qualified person" with regard to the complex regime of the LOB legislation, including many conditions under which a person is eligible to the convention benefits.
Third, in order to address other forms of treaty abuse including treaty shopping situations, that would not be covered by the LOB rule, the report reminds to add a more general anti-abuse rule based on the

principal purposes of transactions or arrangements (the principal purposes test or PPT rule). This last rule includes principles already recognised in commentaries on article 1 of the OECD Model Tax Convention. Therefore this rule provides that "a benefit under this convention, shall not be granted in respect of an item of income or capital if it is reasonable to conclude, having regard to all relevant facts and circumstances, that obtaining that benefit was one of the principal purposes of any arrangement or transaction that resulted directly or indirectly in that benefit, unless it is established that granting that benefit in these circumstances would be in accordance with the object and purpose of the relevant provisions of this convention".

Last and going back to the case in which, a person tries to abuse of provisions of domestic tax law using treaty benefits, the report recognises in such case that the adoption of anti-abuse rules in tax treaties are not sufficient to prevent tax avoidance strategies, seeking to circumvent provisions of domestic tax law.
Then, these abuses must be stopped through domestic anti-abuse rules, which may also include rules on other aspects of the Action Plan (for instance, Action 2 on neutralising the effects of hybrid mismatch arrangements, Action 3 on the strengthening of controlled foreign companies rules, etc.). Indeed, the work previously explained is attached to its combination with domestic tax rules, making sure therefore that the granting of tax treaties benefits, would not lead to the avoidance of domestic anti-abuse rules.

These principles which have to be spread over member states' legislations by the end of the year 2015 as previously said, did not lead yet to any current enforcement under our legislation.
After these developments that could lead to future application, we could think now of more general rules aiming to source digital income through adaptation of tax legislation to digital domain.

B. Adapting current rules to digital actors' new business models

Apart from the need to prevent digital actors from abusing of tax conventions, it would also be appropriate in the aim of preventing further tax avoidance, to adapt current taxing rules to digital actors' specificities. Indeed and as explained through our second part highlighting issues arising in digital environment, digital actors rely on current lacks and measures' disadvantages to built optimized schemes, avoiding as a consequence any taxation which should normally apply.

1. Implement particular rules to digital actors' specificities

a) Refusal of new rules especially designed for digital actors

Authorities refuse to create specific rules applying to digital actors in application of the already mentioned tax neutrality principle for which countries agreed through the Ottawa conference. Then in order to justify further alternatives proposed, we can personally argue that these principles merely aim to adapt to digital actors' particularities as presented previously, which enables them on the contrary of other actors to avoid taxation. More they do not imply implementation of specific taxation, which would harm the equality principle, but merely lead to the evolving of current concepts toward such actors in order to follow advance taken, due to digital constant innovation.

However, it is not the position taken by reflection committees as can be shown through an interesting European work managed by the European Commission, creating an expert group on October 2013 on digital taxation within the context of the BEPS project and aiming to ensure with that view European harmonization of potential upcoming rules. This group was thus invested with the mission of thinking of means of taxing digital commerce in the European Union enabling the Commission to make proposals to enhance the European taxation framework with regard to digital economy. This lead to a final report issued on the 28 of May 2014, offering for adaptation of current taxing rules[220].

It is essential to deal with this report, since it questions thoughts formerly provided under French studies and leading to the thinking of new concepts, such as the digital taxable presence, which will be discussed further[221].

Indeed the European report searching for solutions, advocates the non-implementation of a new concept of "digital taxable presence"[222]. It reminds that it have been argued that the collection, processing and monetising of data must be reflected in the definition of a taxable nexus, implying that at some stage, "the extensive collection of personal data in a country over the Internet could trigger a taxable nexus in that country". However in addition, it ads "that this does not occur under current tax rules. The absence of such taxable nexus means that there is no taxable presence to which profits could potentially be attributed, even if this was considered as an appropriate international allocation of profits". Therefore the group, which has extensively considered this question, has come to the conclusion "that there is currently no valid justification for such a fundamental change specifically for digital activities". Indeed according to the group "there is no convincing argument why the collection of data via electronic means in a country should in itself create a taxable presence in that country".

Then, facing the refusal of adopting new concepts particular to digital actors, we can lay down current principles, while searching for means of adaptation to digital environment.

b) Review of the concepts of representatives and of the exemption towards preparatory and auxiliary activities

With regard to the prior refusal of creating a digital taxable presence, the group offers instead to review the concept of permanent establishment or of dependant agent (international tax standards) in order to adapt them to digital changes. It reminds that such concepts in their definition imply "minimum form of physical presence and permanence" though in digital economy physical presence and permanence are often not required to establish significant business operations in a foreign market.

Therefore the group considers that given new business models applied in digital economy, a review is necessary and should focus on two aspects of the existing concepts of permanent establishment[223], which are: the remote contracting (with the distinction between dependent agent and commissionaire) and the definition of the "preparatory and auxiliary activities" exemption.

First with regard to the remote contracting, the group provides that interacting with potential customers has become much easier within digital era, thus conclusion of business arrangements and contracts has become the norm. Then "instead of having representatives in a foreign market that have the authority to sign contracts, they may have people on the ground that provide information and support for contracts that are then formally concluded over the internet". Therefore, foreign businesses would be tempted to use commissionaires (as previously distinguished from the dependent agent) allowing them to stay below the permanent establishment's threshold.

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[220] Final report of the Commission expert group on taxation of the digital economy, of 28 May 2014 and press release IP/14/604 of the same date.
[221] See part III.D.2.
[222] See the Final report, part 5.2.3.1. « No new concept of 'digital taxable presence' », p.47 and following.
[223] As defined under article 5 of the OECD Model Tax Convention.

Consequently "the group supports work within the G20/OECD BEPS project considering whether and under what circumstances sales of goods or services of one company in a multinational group should be treated as effectively concluded by dependent agents, considering the respective civil law perspective. This should ensure that where a foreign online seller of tangible or digital products or a foreign online provider of advertising or other services has an established presence in a country, a permanent establishment cannot be formally circumvented, for example by concluding contracts via the internet or via a commissionaire agent".

Finally, with regard of the second threshold that should be reviewed according to the group, we must refer to the scope of the preparatory or auxiliary activities' exemption, within specific domain of digital economy. Indeed, "proximity to customers and the need for quick delivery are typically key components in the business model of an online seller of physical products. International tax rules must reflect that in such cases, the maintenance of a local warehouse constitutes a core activity of the seller and is not the way businesses are organised. Auxiliary activities have become core activities and vice versa".

Therefore and as a conclusion on that question the group recommends that all these realities implied by digital commerce shall be taken into account in the definition of exceptions to the current permanent establishment's concept, in order to prevent digital actors of using current definitions to keep their activity under the taxation triggering threshold, allowing them to avoid taxation due to international tax rules' steadiness.

2. Reverse the non-adapted existing approach through standards based on the sales' criterion

As previously shown through either domestic or international rules, taxation criterions are not adapted to digital actors' business models, which enables them to easily circumvent characterization of what should normally lead to taxation under both regulations. For more details of these issues with regard to current taxation criterions and as a reminder we send you back to relevant parts of our study[224], focusing for now on the ability to reverse the current logical applied within adaptation purposes.

a) Implement a destination-based approach: characterization of economic nexus through the concept of full business cycle

The full business cycle quickly referred to previously[225], would enable adapting current logic to digital actors by reversing the sales' approach into a destination-based approach, making of the consumer the starting point of relevant taxation, which would erase many difficulties relative to allocation of income within digital context.
As seen before with regard to the factor sales and its inefficiency as main criterion under French and international legislation, to attribute profits with the context of digital economy, we can now think conversely of the destination-based approach.

As highlighted previously, the difficulty considering digital actors is to attach with regard of existing rules relative either to the criteria of 'business carried on in France' (French corporate tax territoriality) or the criteria of permanent establishment (in conventional relationships), benefits to such types of actors, as the sales' criterion imply tangible presence while they are characterised through massive use of intangible

[224] See part II.B.2.b) and c).
[225] See part II.B.2.b).iii.

assets, dematerialised transactions, innovative business models and optimized from the start from a tax point of view.
All those specificities make it really difficult to identify those whom are liable to taxation, this is why thinking of reversing the taxation problem and thinking instead from a destination-based approach would seem logical, and would therefore facilitate the sourcing of digital goods and services.

More to support this idea and as previously mentioned while explaining the concept of business carried on within French territory for corporate tax purposes in the absence of tax treaties, we dealt with a particular concept unknown from other countries which is the concept of full business cycle (which applies in the absence of tax treaties). This concept uses the destination-based approach and lead to an interesting decision, which could be used in the context of digital commerce in the absence of adequate existing rules.
As a reminder, within domestic law, in the absence of a fixed permanent establishment on French territory and in the absence of the alternative criteria of dependent representative, another criterion allows to characterise activity on French territory in the case of a series of commercial, industrial or handcraft operations, directed towards a fixed purpose and when taken together, constitutes a coherent whole[226]. The classical example given through case law[227], is the case in which a foreign company resales in France, goods directly purchased in the country or through a representative without independent professional status, which thus characterises by this series of operations a full business cycle, triggering French taxation under corporate tax, even in the absence of any establishment on the territory. For another example, was for instance decided[228] in the case of financial operations, that a company with a foreign registered office, which habitually carries out pawn loans, with regard to credit purchases by French residents of motor vehicles, registered in France, through representatives established in France and paid to this effect, constitutes a full business cycle, justifying thus French taxation. More, a foreign company which do not have in France any store or establishment, but which carries out in France operations of representation for the account of a French company is subject to French corporate tax, even if it did not establish itself invoicing[229].

From all those examples, we can see that the concept of establishment in the absence of any material installation or representatives, does not prevent French taxation, when operations are carried out on French territory by foreign companies, intended for a same purpose and constituting a cohesive whole. Thus, what is essential through this concept is the destination of operations, which are finally carried out on in French territory, independently of any establishment within the country. This could finally enable to tax digital actors, which act from foreign countries, as they do not need to be established physically due to massive use of dematerialized transactions to carry out their activity in our country.

Some could say that all previous examples, lead finally to the use of representatives in order to ensure materially, transactions characterising full cycle of operations and that digital actors do not need this additional help, preventing therefore transposition of previous case law to the specific domain of digital economy. However another case can be replied, since it would be fully transposable to the case of digital commerce and fully illustrates the destination-based approach principle.
It is the case in which a foreign company collects in France advertising orders from clients within French country, intended to be diffused in France through radio to the destination of French listeners[230]. This series of remote operations either through orders or diffusion using radio frequency, shows that even in the

[226] Official Tax Bulletin, BOI-IS-CHAMP-60-10-10, n°210.
[227] As a reminder, Council of State, 22 May 1963, n°46870,
[228] Council of State, 19 May 1965, n°58784.
[229] Council of State, 26 September 1960, n°45001.
[230] Council of State, 13 July 1968, n°66503.

case of a series of dematerialised operations, a full business cycle still have been characterised under French case law, justifying thus French taxation.

This last example confirms the relevance of the destination-based approach and currently transposing it to electronic commerce is possible, in the absence of tax treaties, enabling therefore to identify such operations when granted to users on our territory and justifying then, French corporate taxation without all drawbacks pointed out through the factor sales.
However, this would imply in practice the setting up of specific judicial procedure, in order to apply the full business cycle concept to digital commerce, since this concept only emerged through domestic rules and case law and would also imply renegotiating all tax treaties to include this French concept within international taxation standards.
Though, in order to support the idea of the destination-based approach's efficiency in sourcing digital goods and services, we can refer to VAT law in which such position was recently adopted.

b) Concrete example of the destination-based approach used within B2C[231] *relationships under VAT Law*

A new regime is enforced since the 1st January 2015[232] under VAT regulation with regard to electronic services and has to be mentioned in order to emphasize the relevance within digital context of the destination-based approach.

As a matter of fact, from this date, telecommunication services, broadcasting, television services and above all electronic services, furnished to non-taxable customers are taxed in the place of establishment of the client, including the case in which the supplier is established in the European Union. This unified regime provided under article 259 D of the General Tax Code, based on the place of establishment of the customer, prevents any distortions of competition resulting from different VAT rates. Therefore all mentioned services, furnished to non-taxable customers will be located within French country, when the customer is established or reside in French country regardless of the place of establishment of the provider.

Services furnished electronically which are the most interesting in the case of our study are widely defined as "including services furnished on Internet or on a electronic network and which nature renders their supply essentially automated and involving minimal human intervention, and impossible to ensure in the absence of information technology. Are thus only concerned services delivered over the Internet or electronic networks, which do not correspond either to deliveries of tangible personal property or supply of traditional services, available through other communication services or telecommunication services"[233]. Are thus notably covered by the rule above explained (non-exhaustive list under article 98 C of Annex III of the General Tax Code), software online supply and updates, supply of images, texts and information, database etc. This shows that for such specific services and considering particular difficulties encountered in VAT law, has thus been enforced the rule under which, electronic services when provided to non-taxable customers (business to consumers relationships), shall then be considered as located in the place of establishment or residency of the consumer regardless of the supplier's own establishment. Then the destination-based approach appeared to be the safest solution in order to make sure that such services are taxable without any competition distortions related to distinct VAT rates throughout European Union.

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[231] Meaning business to consumer relationships.
[232] Derived from the transposition of directives 2008/8/CE of 12 February 2008 and 2008/117/CE of 16 December 2008.
[233] Official Tax Bulletin, BOI-TVA-CHAMP-20-50-50, n°340 to 400.

As a conclusion, all of this shows and confirms that in my modest opinion the destination-based approach could resolve many issues derived from digital commerce and would constitute a more efficient way than current territorial rules for sourcing digital goods and services, by reversing the usual approach. However, we must note that this would imply in practice to reform the whole international tax rules, which as seen before are based on taxation granted to the State of residency of the company excepted when a permanent establishment can be characterised in another country.

C. The laying down of new concepts specific to digital environment

Countries as expressed previously are reluctant to the application of specific taxation towards electronic commerce considering the framework set out through the Ottawa conference (1998), providing for the principle of tax equality. In this respect, no specific rules should apply to digital commerce actors in order not to limit development of this domain.
However, this dating back to 1998, we can imagine in this context that such growth and use of advantages generated by digital innovation against authorities to avoid taxation, was not expected.

More the equality principle applies to identical or similar situations, though as shown through our second part raising issues deriving from digital actors' business models, it notably shows that such actors cannot be put at the same level than any other casual trader since they are not benefitting from the same advantages towards amongst others, taxation purposes.
Therefore it would be legitimate in this view and considering their distinct situation to apply a different treatment in order to take into account novelty implied by such schemes, in the aim of ensuring taxation of digital benefits.

This is why in my opinion it is appropriate through this part to still enumerate specific taxation proposed, applying to the sole digital domain and thus being adapted to its specific nature in order to restrain further taxation losses. As a matter of fact, laying down these proposals is appropriate since in my view it would lead to apply more effectively equality between different actors, since it would permit taxation of digital actors which are currently not contributing to our economy despite value captured in our territories, putting them thereby on the same level than all other actors.

We are thus going to focus under following paragraphs on potential solutions provided under a national and European point of view, though we will first mention, before beginning our developments, the OECD opinion on the matter, in the framework of the BEPS/G20-OECD Action Plan n°1 relative to digital taxation.
Indeed this European report issued by the expert group on digital taxation intervenes in the context of BEPS project of the G20 and OECD redefining in particular, concepts of taxable presence, the European report aiming therefore to ensure harmonization of measures, which will potentially be enforced by Member States with regard to the BEPS project[234].
This OECD report emphasizes the anomaly related to digital actors, considering the significant part of their turnover issued outside from their territory and subject to low taxation of countries in which they have their registered offices. All measures provided under the BEPS report should normally be spread over legislation of Member States by the end of the year 2015, in conjunction with the G20, which approved the plan at the Saint-Petersburg Summit of 5 and 6 September 2013. More, a multilateral tool is being elaborated, in order to allow interested countries to modify their existing network of bilateral tax

[234] BEPS Report published on 12 February 2013.

conventions[235].
All these initiatives are supported without reservation by French country and it was indicated that France is "strongly involved in expert groups which have to ensure concrete translation. In this framework, France ask for primary solutions to be found in order to resolve double exemptions, to strengthen anti-abuse rules and to adapt such rules in order to better take into account profits issued from the digital sector, currently under-taxed"[236].

However before these solutions are implemented, we could think of national alternatives offered by unilateral thoughts of EU countries on the matter, aiming to take initiatives to stop taxation losses.

1. The domain name as a permanent establishment (PE)

This concept is based on a German proposal, which was searching of creating a digital permanent establishment, characterized on the basis of actors' virtual presence within a country. Then the taxable nexus under such proposal was established through domain name, implying that websites finishing by a German identification (.de) should lead to create a taxable nexus[237] allowing Germany to tax profits that could be attached to business carried out through this website.

Subsequently, it was thought of creating a public register for the registration of the "de" domain, however doubts were issued as to the procedural enforceability of such taxation abroad, which could lead to practical difficulties not yet resolved.

More, the fee derived from the transfer of use of a domain name is not encompassed by article 12 of the OECD Model Convention, leading Germany to lose its rights to tax at source such transactions[238].

In addition and above all, we can doubt the efficiency of such measure which has not been implemented, considering the fact that as for other taxation criterions, it can be easily circumvented by digital actors, which would avoid characterization of a taxable nexus by switching from a ".de" domain name to a ".com" domain name without any significant change of the website page[239].

Then other alternatives can be thought of, especially considering proposals made in our own country.

2. Virtual permanent establishment characterized through the "regular and systematic monitoring" of data

This particular concept of a virtual permanent establishment characterized through digital presence relying on the monitoring operated by digital actors on data, results from a French proposal discussed under the fifth part of the Collin and Colin report[240]. No current regulation enables to consider the collection, processing and monetizing of data as taxable nexus, or the collection of data via electronic means as creating a taxable presence under our country's legislation.
Nevertheless, searching for more profitable alternatives to the concept of permanent establishment, the

[235] As provided by the OECD release of 19 July 2013.
[236] As provided through ministerial replies, see notably Reply to Le Callenec, n°23556 (JOAN) of 3 December 2013.
[237] Pinkernell „Internationale Steuergestaltung im Electronic Commerce" ifst no. 494 p. 162 et seq.
[238] Pinkernell „Internationale Steuergestaltung im Electronic Commerce" ifst no. 494 p. 163.

[239] Pinkernell „Internationale Steuergestaltung im Electronic Commerce" ifst no. 494 p. 163.
[240] See Report, part 5.1, p. 121.

report Collin and Colin, considers that data collection, with regard to its importance in the value creation of digital enterprises, should be used to characterise virtual permanent establishment, justifying consequently taxation from the country in which data are being collected[241].

They begin by reminding drawbacks of the permanent establishment in a conventional context as the OECD have a material approach of such establishment, which could not be characterized by data or software as distinct from the server, since they do not include itself any tangible property. More the OECD refers to a fixed place of business with a certain degree of permanency, then computer equipment could only characterize such establishment provided that it is fixed, excluding therefore from this concept any application carried out through cloud computing platform, which is more of a volatile platform on the Internet. After showing disadvantages of the concept of permanent establishment, reference is made by the report of the position of French tax authority, which is stricter towards the permanent establishment as already discussed, since it necessarily implies physical presence on the territory.

Then, they provide that it is essential to adapt the conventional concept of permanent establishment in order to take into account what is called by Collin and Colin of "free work", referring to French users' collaboration in the production and value creation of foreign businesses. As a reminder, free electronic services are used by digital actors' strategy to collect French users' data, which are then priced on another side of their business models.

As a solution, Collin and Colin refer to the idea of a virtual permanent establishment proposed among others by the French digital national council (CNNum[242]) and by the senator Philippe Marini[243], reminding that the concept has not been defined yet.

They offer to consider that a company supplying service on the territory of one state, by means of data used from the regular and systematic monitoring of web users of this same State should be considered as disposing of a virtual permanent establishment in that State.

They justify the use of this concept by the lack of relevance of the fixed place of business in characterizing the place from which the substance of economic activity is carried out, in current digitalization context.

They also remind that implementing this concept and generalizing it to the whole digital economy, could not be done without modifying international tax law, as provided by the OECD Model Convention and bilateral tax treaties, following more or less this model.

Characterization of permanent establishment at the place in which services are provided, due to data collected from the regular and systematic follow-up of users is a long-term objective, which will take time to be enforced if one day it is implemented, that is why the Collin and Colin report also provides for short-term solutions.

Indeed, it refers to fiscal control in the corporate tax area, which would enable characterization of permanent establishment through analysis of the reality of the activity conducted by representatives in France (such as subsidiaries) of emblematic companies within digital economy. This proof can be given by demonstrating that the subsidiary constitutes a fixed place of business in France, through which operations of the foreign company are performed or by demonstrating that the subsidiary is a depending agent disposing of the power to engage the foreign company, in the carrying out of its business activities in France.

For greater details on the dependant agent and appreciation of the existence of such agent from a French

[241] See Report Collin and Colin, part 5 relative to proposals, p.121 and following.

[242] Conseil National du Numérique, opinion n°8 of 14 February 2012.

[243] Through the Information Report made in the name of the Senate finance committee, of 27 June 2012.

point of view, notably with regard to subsidiaries, we send you back to the relevant part of our study[244]. We can just remind that France is attached to the respect of legal reality when characterising a dependent agent, meaning that notwithstanding that he is dependent economically, he is not invested with an independent professional status and could not legally engage its principal towards third parties (Zimmer). Though, commentaries of the OECD Committee on Fiscal Affairs[245] show a more flexible approach, enabling characterization of a dependant agent when he is empowered to conclude contracts, while requesting and receiving orders without finalisation in an official way, these orders being directly sent to a warehouse from which are delivered goods and when the foreign company only approves routinely such transactions.

Going back to long-term objectives and to the proposal of the Collin and Colin report, providing for an incentive taxation on the collection and processing of data, this was notably commented by the CNNum[246]. It agrees with the foregoing opinion and the necessity to think of changes derived from digital economy and especially the place of data in the current value chain considering users' "free work".
The CNNum with regard to this proposal enounces the need to determine a specific status for data and go further by establishing a typology of data involved in digital economy and generating value in digital activities. This solution would allow to handle the non-adaptation of corporate tax, also reminded by the CNNum, reminding of the wide use of immaterial transactions in digital commerce, from which actors dispose of an extended trading area without any foreign establishments or subsidiaries, managing therefore financial arrangements to lower taxation.

Then we can conclude of all what have been said that this interesting proposal, even if it did not lead yet to any realization under our legislation, of taxing actors based on the regular and systematic monitoring of data in our country (characterising a virtual permanent establishment), would be more appropriate to digital actors and would therefore compensate territoriality issues since the Internet releases its actors from any borders.
Besides this principle is being more widely used and accepted as for example, in the framework of a G5 meeting held in Paris[247] on fraud and tax avoidance, encompassing concerned finance ministers. On this occasion, solutions have been highlighted within a press release of 28 April 2014, where it was said that a more flexible interpretation of territorial taxing rules should be carried out without prohibiting, the adoption of new concepts such as the digital taxable presence.

3. Tax incentives conciliating data merchandising and data protection law

After defining the possible virtual establishment characterised by the regular and systematic monitoring of data on a territory, the report Collin and Colin suggests then implementation of tax incentives in that area, such as for the carbon tax, applying to the collection, processing and monetizing of personal data, issued from users located in France.

Its logic aims to discourage through taxation practices non-complying to objectives pursued and conversely encourage through taxation's reduction or exemption, practices respecting objectives set out in data legislation. Collin and Collin naturally defines the two objectives that tax law shall pursue in that area which are first, the potential for economic development offered by personal data and second, the limitation

[244] Part II.C.2.c).iii.
[245] Commentaries of article 5 paragraph 5, n°32.1.
[246] Report of September 2013, available on the CNNum official website.
http://www.cnnumerique.fr/fiscalite/
[247] Between France, Germany, United-Kingdom, Spain and Italy.

of dangers over the protection of public freedoms generated by data process' practices not under control.

The report ads that all the problematic is then to converge business models based on exploitation of such data and counter-models based on the protection and the restitution of such data. It also details the scope of its proposal that should only apply to data issued as already said from the regular and systematic follow-up of users' activities, these data processing being the most sensitive with regard to the protection of public freedoms with opposition to those collected punctually.

Then the tax would only apply beyond a threshold expressed over an amount of users, which has to be fixed with regard to the distinction of identified users and anonymous ones. It justifies this threshold by the fact that the need to reinforce public freedoms with regard to use of data only arises in the presence of massive data aggregates. This threshold is thus favourable to start-ups, which would not be constrained by novel taxation and will ease administration of such tax, by reducing the amount of concerned taxpayers.

Finally such taxation would be based on a unit rate per user followed, rate determined depending on the positioning of the company, with regard to a behavioural grid according to objectives pursued by taxation. Therefore, more the company adopts behaviours characterized as complying with objectives defined, when collecting and processing data, less the unit rate will be. Conversely, more the company shows non-compliant behaviours and more the tax unit rate will be, according to the planned grid. Unfortunately in the absence of any current recognition of the taxable presence with regard to the factor data, this taxation has not been implemented yet and all these pertinent ideas submitted by the report are stuck to the stage of proposals.

4. Specific taxation applying to digital domain

Last, we can as our final part refer to specific tax measures thought of in the aim of limiting taxation losses, by applying new measures to digital environment.

a) Bit tax

Our country already proposed insertion of new taxation for digital enterprises, apart from the tax incentives (based on the collection of data) provided under the report Collin and Colin and taking the name of a bit tax.

This idea of creating a tax on bits seems likely to be attributed to Arthur Cordelle, who raised it for the first time in 1994 in the Club of Rome. This proposal was then taken over by an expert group, which concluded through their report done for the European Commission in 1997, to the necessity to adapt global tax systems to the development of information society.
Through this report[248], this adaptation could consist in the adoption of specific taxation to digital commerce such as the bit tax. This tax takes into account the volume of information transferred or of electronic communications. The bit (binary digit) refers to the elementary unit of measure and allows evaluation of the importance of digital information transit, from a computer to another. Thus, it is like a proportional consumption tax, relative to the amount of data transferred, when digital exchanges occur.

This tax was justified by the fact that emergence of new information and communication technologies enabled an important growth of productivity. Then it was logical to find a way to tax directly this

[248] Report of the high-level expert group: "Building the European information society for us all", CE-V/8-97-001-FR-C, April 1997.

productivity at its source and compensate for instance disadvantages of VAT law, which does not enable to take into account the value of information transferred electronically, only considering the economic value of the transfer.

However the European Commission rejected this idea[249] and the Parliament provided in a resolution "that new taxes should not be imposed to electronic commerce in order not to penalise this sector comparing to other commercial activities"[250]. Indeed, still under this resolution, the Parliament provides that it could lead to rising risks of double taxation, and that difficulties issued from this sector should be resolved at an international level, under the principle of tax neutrality. France shared the same position and therefore rejected adoption of the bit tax[251], which ends our development on the subject.

b) Sales tax

Another tax specific to digital commerce has also been discussed in our country and was submitted by Ms Falque-Pierrotin[252], which is the sales tax. Assuming that the context of electronic transactions and of intangible goods, avoid all forms of taxation while the added value transits on the network, she proposed the idea of introducing through tax conventions, the principle of a sales tax, which would be collected by the destination state.

However the difficulty arises regarding the way of implementing such taxation and of the way of collecting it, considering especially actors who will be in charge of this task. Under this proposition, the trusted third party could play a leading role in such taxation, either by providing at the request of the customer, a tax validation service of the transaction or by collecting automatically at the states' request, taxes on such transactions, which would have been previously validated.
Though this interesting idea considering further, our analysis of the pertinence of a destination-based approach in sourcing digital goods and services, did not receive yet any positive outcome in our country.

For other taxation proposals, we can refer to the complete analysis of the CNNum in its report on digital taxation[253], which lead to the result that no consensus can be reached for the adoption of specific taxes in our country. We will however lastly enumerate these tax proposals in public debate.

c) Online advertising tax

First, is referred to the online advertising tax, which has as its object to transpose to the Internet the current tax on advertising broadcast by sound or television. This proposal according to the CNNum would enable to establish an equal treatment between sectors, but could also risk failing in achieving its objectives, penalising thereby French actors.

It reminds that a major part think that this tax could be avoided by global digital companies and would lead to make support this tax by sole French advertisers and finally end by impacting on prices, applied to

[249] Communication of 15 April 1997, COM (97)0157.
[250] COM (97)0157 –C4-0297/97.
[251] See Memorandum submitted by France to Member States of the European Union, of 28 February 1998 "Telecommunications" and of 9 March 1998 "Ecofin".
[252] Through the report submitted to the minister in charge for the post office, telecommunications and to space, and to the minister for culture: « Internet : enjeux juridiques » : French documentation Paris, 1997, p.83.
[253] Report of September 2013, p.17 and following available on the CNNum official website.

consumers. This measure seems to the CNNum too complex and in addition would not end taxing companies, which do not have any establishments in France.

More, the profits that could be issued from such taxes are relatively low compared to efforts that are needed from French tax administration to collect this tax, which could finally lead to more costs than planned incomes. However, it was relevant to note this idea, which demonstrates the initiatives undertaken by our country in digital domain.

d) Tax on click

Second, a tax on click was proposed, which is considered as profitable to press companies, provided that editors commit not to object to their contents being indexed on search engines.

Most actors with regard to this tax highlighted the risk of undermining the net neutrality, whether some contents could be removed, users thus not having access to all information available and implying therefore that the tax may end by harming web users.

More, concerning the tax collection, the planned device would require from operators to become "clicks meters" serving tax administration's needs and leading potentially to data confidentiality and protection issues.

e) Tax on electronic services (Tascoé)

Then, was also proposed a tax on electronic services (Tascoé), which aims to transpose to digital sector the tax applied on commercial premises (Tascom). This tax would include a deductibility system for actors using both means of trading.

However, contributions on the matter show that these implementing provisions are not being enough clear and equivalences defined between the Tascoé and the Tascom, are not obvious for all actors involved by such taxation.
Indeed, deductibility regimes as planned would not correspond to joint distributions' models, between physical distribution and online distribution. Meaning for instance, that a distribution undertaking, which creates an independent subsidiary for its online distribution could not benefit from the deductibility regime of the Tascoé.

f) Tax on bandwidth

Finally, a tax on bandwidth was proposed and as for the tax on click, it would also lead to require from telecommunications' operators according to the CNNum, to become tax intermediaries serving tax administration and resulting above all in data protection risks.

Besides, such taxation could lead to unjustified taxation distortions between major bandwidth consumers (users of search engines, host websites of videos, music etc) and intermediary consumers (cyber-merchants for instance).

Furthermore, the circumvention by the contents suppliers of French interconnection points would penalise other actors (national actors) who could not use other networks' infrastructures than national ones.

Intermediate Conclusion

Our final part aimed to show under which solutions digital issues may be countered through first a new and broadened qualification including digital products within royalties' concept, in order to apply a withholding tax to such income.

But not only qualification issues are struggled, since the difficulty of recognizing electronic products leads to the difficulty of sourcing income generated by such transactions, implying the urgent need of adapting current triggering criterions.
With that goal, adapted tax rules are proposed either through improvement of current criterions or complete reverse of the prevailing approach (destination-based approach).

Finally, complete new principles are also offered to further reflection, considering that there are fully thought taking into account digital actors' specificities (virtual permanent establishment, tax incentives, tax on bit etc.).

All of these proposals stuck at the point of discussions in the absence of any implementation, show the difficulty to find solutions, which could satisfy all parties involved and which would ensure equal treatment, complying therefore with the general principal of tax neutrality.

In my view, the only certainty that could be set forth is that if such taxes could one day be implemented, it would be within international level or at least European level, in order to ensure their real impact on digital actors (and in particular global actors), preventing them of avoiding national unfavourable systems.
More, it is necessary that such measures are negotiated internationally, since unilateral tax schemes would negatively impact our economy, by isolating us and reducing our competitiveness in a context in which digital technology interferes in all sectors.

Overall Conclusion

Our study as a result aimed to show what harmful impact has the digital economy on taxation and more precisely on characterization of income. In fact, no clear and unified qualification focuses on such products leading to national tax systems' disparities from which benefit digital actors. More apart from these known products lacking from qualification, some are not valued at all, leading to wealth creation escaping from our countries' legitimate taxing power.

New digital transactions abilities (electronic transfer) are also not taken into account, leading to the absence of taxation applying to these new delivery systems on which, rely digital actors.
Besides, optimized schemes are organized around their new multi-sided business models in order to maximize tax avoidance, thanks to all advantages from which they benefit due to their particular nature.
This leads to many issues, already developed, for countries in sourcing digital income itself after difficulties of qualifying it, in the absence of any permanent establishment purposefully avoided by digital actors, to prevent triggering taxation of their business activity.

This is why our study finally aimed to propose solutions in order to make sure that all presented issues are highlighted with the aim of being taken into account in the future, through the search of alternatives despite what was decided on the absence of implementing a specific taxation (due to the tax equality principle).

This is justified through different personal thoughts considering first that the tax equality principle shall only apply to identical situations, while digital actors benefit from advantages from which cannot benefit other traditional undertakings.
Therefore, they should not be treated the same way, considering that they do not rely on identical means or business schemes and have the ability to avoid tax legislation by using new technologies not available to all actors and still not taken into account by our out dated legislations.

Finally and in my opinion the equality principle implies taxation for all, therefore requiring to use any means either by adapting current rules or creating specific ones to ensure taxation of all actors and particularly digital businesses, which are carefully avoiding contribution to our societies unlike others, while benefitting from considerable value created within our countries.

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