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Master Thesis

Evolution of the Digital Contracts in the European Union

By

HAO SIYU

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Declaration of Authorship

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I, hereby declare that, I am the author of this thesis and it is my original research work. This work has not been submitted anywhere else, either in part or whole, for a degree or other academic credits. I undertake the sole responsibility for any inaccuracy in this declaration.

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ABBREVIATIONS

PECL—The Principles of European Contract law
CESL—European commission on common sales
DCD—Directive for the Supply of Digital Content
DSM—Digital Single Market
ECJ—European Court of Justice
EU—European Union
GDPR—the General Data Protection Regulation
IoT—Internet of Things
OSD—Directive for online sales of goods
TEU—Treaty of the European Union
TFEU—Treaty of the Functioning of the European Union
IMCO —the Internal Market and Consumer Protection Committee

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The Evolution of the Digital Contracts in the European Union

Introduction

In the society of the time, plentiful daily issues concerning the harmonization of law have to be faced by a lawyer, particularly in the European Union. It is well known that there is an affirmative example of cooperation, coordination and euphony in the European Union. In spite of that, there is still the need to face enormous contrasting and controversial challenges: since the differences of law between Member States within the European Union bring contract obstacles, creating an efficient and victorious legislation at the EU level is necessity, the so-called European Contract Law. In my personal perspective, it is possible to adjust 28 legislations of the Member States to a combination even so it will have need of the European Commission try all the best efforts to realize it.

The situation of harmonization has continually become better. The Principles of European Contract law (PECL) symbolize the first actual attempt, which lay the wheel in movement. The Commission regarded the adoption of a so-called Optional Instrument as the fine answer for the creation of a European Contract Law. So this ideal came into being, the proposal for a Common European Sales Law in 2011, which seemingly signified the light at the end of the tunnel. Nevertheless, the Commission had to withdraw the proposal on account of some oppositions from the Council.

Following the nonfulfillment of this initiative, the Commission has launched the Digital Single Market Strategy as a new approach in 2015, proposing two new directives that would partially take the place of the CESL, one on the supply of digital content to consumers and the other on online sales of goods to consumers. There are two aims: to give more full protection to consumers who pay digital content (consumers' right are unclear in the many Member States) or pay online goods, and to motivate more traders to supply goods in other member states.

On the basis of the figures used by the European Commission, there has been gigantic growth in online sales. However, the growth in "cross-border" online sales has been much lower, which transaction was happened between a trader in one Member States and a consumer in another Member States.[1] It is not difficult to see that something have

[1] "Only 18% of consumers who used the Internet for private purposes in 2014 purchased online from another EU country while 55% did so domestically": COM(2015) 634 final, p 2.

to be done to encourage and motivate the growth on trades in which traders and consumers to shop online between differences member states.

In addition, there is a need to clarify the law on the supply of digital content within domestic markets. Few member states launched their own specific legislation for digital contents on contracts and generally the legal position is completely unclear. Like, are these contracts to be treated as analogous to sales, even though nothing tangible is supplied and the consumer does not acquire ownership of anything? Or are they to be treated like services contracts? Or are they entirely sui generis? In conclusion, it is extremely hard to know what exactly the law is on digital contract for consumers and traders. Those query demonstrate that digital contract in the European Union is a study-worthy and problematic issue.

This thesis aims to consider the EU's unified digital contract rules in the context of the digital single market strategy to determine its legal perspective, barriers, and activities. Before this, this paper will go from the Commission's strategy to the two new proposed directives put forward by the Commission on December 9, 2015, in an attempt to sort out the status quo of the development of European contract law. In addition, it mainly analyzed the essential contents of Digital Contents Directive, such as how to define the conformity of the digital content with the contract, how to identify the rights relief system, how to deal with the relationship between national rules, so as to execute the traders and consumers between the instructions and the actual contract contents. Therefore, this this will be expanded in the following ways:

First of all, I would like to introduce the development of European Contract Law through time. The evolution of European Contract Law is the context of this thesis. I will elaborate on the harmonization path of European contract law, why harmonization is needed and how to achieve it. Besides, the first chapter will cover the legal basis of the EU and current legislation.

Secondly, I would like to assess the main common concerns of the two new proposed directives. Next, I will focus on describing and analyzing the digital content directive. For example, the scope of application, contract compliance, consumer remedies, and so on. By accessing the actual contents of the Digital Content Directive, I hope to find out the problems or obstacles generated by this proposal and bring about innovative regulatory methods.

Thirdly, I will try to conclude an assessment, find out some problems that may arise from the two new proposed, and try to give my opinion.

Chapter 1

An overview of the background

1.1 How does the concept of the European Contract law be defined?

First of all, there is no doubt that the concept of European Contract Law is completely required to be interpreted at the present. Nevertheless, in spite of the improvement of the European legislation by the endeavor of the European legislator, it is still a challenge for obtaining a clear definition of European Contract Law. Maybe the problem of lack of this definition has its origins in the differing definitions of the contract law of the 28 Member States in the European Union. Actually, there is no a real concept of "contract" in the European legislation, caused by the structural distinctions of the national legal systems. It is also crucial to grasp the significance of the role played by the cultural differences between Civil law and Common law systems and consequently why defining a contract at European level has been such an arduous task.

With this is mind, the national lawyers have to face different of law from his national one. This is possible despite all the different definitions of a contract: in the end, the only real variance between national legislations is probably represented by the different approaches.[2] However, it is still challenging to make all these differentiations compatible from a legislative perspective. Hence, a frequent solution has been the adoption of the most appropriate definition of contract depending on the legal framework, sometimes with references to the specific context[3]. Nonetheless, what is noteworthy is that the definition of contract is just the tip of the iceberg, because the role of contract is undoubtedly more pivotal than the meaning of itself, particularly fundamentally for the establishment of an "area of freedom, security, and justice" in the European Union and the role of the Internal Market.[4]

There is no doubt that the concept of contract in European Contract Law has developed by the enlargement of the European Union and the development of the Internal Market through the years. The European legislator has been looking for the most suitable law for the Member States and their citizens since the 60s. Likely, one of the most challenging challenges between the existing national legislations and new supranational legislation has been the necessity of a co-existence. As the executive body of European Union,[5] the European Commission was the key actor behind this process because of it endowed with the competence for detailing the new legislation proposals. The

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[2] Hein Kotz & Axel Flessner, European Contract Law – Volume One: Formation, Validity, and Content of Contracts; Contract and Third Parties, p. 3, Clarendon Press – Oxford, 1997.

[3] Reiner Schulze, New Features in Contract Law, Sellier. European Law Publishers, 2007, p. 16-17.

[4] Filomena Chirico, The Function of European Contract Law: An Economic Analysis, p. 15, in Pierre Larouche, Filomena Chirico, (Eds.), Economic Analysis of the DCFR – The work of the Economic Impact Group within CoPECL, Sellier. European law publishers, 2010.

[5] European Commission – About the European Commission: http://ec.europa.eu/about/index_en.htm

Commission launched an action plan which is one of the most related initiatives in 2003. The goal of this action plan is to considerably improve the contract law and drop the previous 'sector-specific approach' from a European perspective.[6] It is possible to affirm that through this action plan the Commission has been able to achieve two significant goals: firstly, casting light on which are the objectives of the typical framework of reference, and, secondly, emphasizing the role of the *acquis communautaire.*[7]

Through the simple introduction above, it is evident that significance of the contract law in Europe is emerging clearly, not only from a legislative point of view but also take into account an economic perspective.[8] Not hard to see, the contract is a crucial instrument, 'the cement of modern society' and enable the internal market to exploit the advantages itself, likewise in the daily life of every European Union's citizens.[9]

1.2 What are the issues of harmonization of the European Contract Law

The next essential step is how to find the best way to achieve a superb and suitable European legislation after stressing the significance of European contract law. To be sure, harmonization has always been thought of as a highroad among all kind of varying possibilities, which is already mentioned in the Treaty establishing European Economic Community (EEC Treaty of 1957). The significance of harmonization has been acknowledged, not only from the perspective of legislation but also because it can play a crucial position reducing cross-border barriers between Member States, which was stated by the European Parliament.[10] It is unimaginable progress that the estimation of the legislation would represent in 28 countries, and that may increase the number of transactions between citizens and businesses who come from differing Member States. It can also be stated that a positive chain reaction will coexist with the supranational laws of the European Union since the reconciliation of legislation between the Member States.[11]

The lack of harmonization on legislation is not only a current issue but also has been a problem from a long-term. As early as the 1980s, the European Commission was always looking for an acceptable and appropriate answer about legal uncertainty. Consequently, an exciting result was the creation of a group of experts led by Danish

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[6] Communication from the Commission to the Council and the European parliament, A More Coherent European Contract Law, An Action Plan, Brussels, 12.02.2003, COM (2003) 68 final

[7] Schulze, New Features in Contract Law, p. 14

[8] Chirico, The Function of European Contract Law: An Economic Analysis, p. 26.

[9] Jan Smits, Contract Law – A Comparative Introduction, p. 4, Edward Elgar, 2014: "This turns contract law – the rules and principles that govern transactions among parties – into the cement of modern society: it enables market actors to participate in economic and social life."

[10] Roger Van den Bergh, Forced Harmonization of Contract Law in Europe: Not to be Continued, p. 249, in Stefan Grudmann & Jules Stuyck (eds.), An Academic Green Paper on European Contract Law, Kluwer Law International, 2002: "In its Resolution of 16 March 2000 the European Parliament states 'that greater harmonisation of civil law has become essential in the internal market'.

[11] Leone Niglia, Pluralism and European Private Law, p. 1, Hart Publishing, 2013.

lawyer and professor Ole Lando. Through leading this team, the so-called 'Lando Commission', Lando can compare and analyze all the legislation of Member States and also was able to recognize the most relevant similarities and dissimilarities between different national systems in the European Union. The eventual goal of this team was to develop a set of rules which can apply to the creation of a European legal foundation and to take a step in harmonizing the contract law in Europe: therefore, the "Principles of European Contract Law" (PECL) is as the result of this work.[12]

Lando himself has defined the PECL as "a set of general rules aimed at providing maximum flexibility to accommodate the development of legal thinking in the future of contract law".[13] The concept of the Danish professor Ole Lando in the back of this project was to achieve leapfrog development in the context of European contract law and establish a legal basis which would never go out of date.[14] The Lando Commission tried to establish these principles as the legal bottom line of European Contract Law. However, the project was considered too arrogant and was therefore left behind.[15] However, it is certain that PECL has provided a new beginning for the European Union's internal legislative process and they are still recognized to this day as a significant landmark for the process of harmonization of European contract law.

The unification of European contract law would make the establishment of an "unbiased" rules different from the national legislation come true, which will bring benefits for the operation of the internal market.[16] The experts of the Lando Commission are aware of this because they know that economic benefits were inevitably gained from the common rules;[17] Lando thinks that there is no remedy but to create an "unbiased" rules of contract law, which can possibly assure the four freedoms of movement in the internal market.[18] The additional reason behind the coordination is that due to the different legislative nature of different countries, cross-border trade is not convenient and efficient under national legislation: Each national legislation systems has some special characteristics, from the European perspective, these characteristics are often inappropriate. At present, the legal systems of 28 countries in the European Union has achieved coexistence of their differences and characteristics so that unified legislation will be a significant choice. There is an example in the fact that the Euro have been used since 2002 by the Member States. Factually, the situation that existed before the new currency entered into force is very

[12] Ole Lando & Hugh Beale, Principles of European Contract Law, Parts I and II, prepared by the Commission on European Contract Law, The Hague, Kluwer Law International, 1999, p. 24
[13] Ole Lando & Hugh Beale, Principles of European Contract Law, Parts Ivi, prepared by the Commission on European Contract Law, The Hague, Kluwer Law International, 1999, p. 27
[14] Denis Tallon, Les travaux de la Commission Lando, p, 120, in Jamin, Mazeaud, L'harmonization du droit des contrats en Europe.
[15] Antoniolli, Fiorentini (Eds.), A Factual Assessment of the Draft Common Frame of Reference, p. 4
[16] Stefan Vogenauer, Stephen Weatherill, The Harmonization of European Contract Law: Implications for European Private Laws, Business and Legal Practice, Hart Publishing, 2006, p. 14
[17] Chirico, Larouche, Introduction, p. 1, in Economic Analysis of the DCFR
[18] Jan Smits, The Need for a EU Contract law: Empirical and Legal Perspectives, Groningen, Europa Law Publishing, 2005, p. 166

similar to the existing legislative situation.[19] Therefore, it can be imagined that the unification of different legislations in the European Union may attribute to the same advantages from not a legal perspective but also an economic view, with consequently reducing cross-border costs.

Last but not least, the differentiation of maximum and minimum consolidation cannot be ignored. This difference is particularly significant for the effect of the European Union legislation, and usually would effect a directive on the national legal system of member states. In reality, if there is a maximum (or full) coordination directive, the domestic law cannot go beyond the content of its internal regulations, and the past existing national legislation will be replaced. On the other side, if there is a minimum coordination directive, the national legislation has not only the obligation to follow the lower limit imposed, but also can come up with the higher legal standard.[20] Over the past decades, the European Commission has always opted the minimum coordination directives, but it chose a different method in 2015: it proposed two new fully harmonized directives. The directives are part of the same legislative initiative (Digital Single Market Strategy). Two separate topics about contracts from different angles become the contents of these two directives, namely, the supply of digital content[21] and online and other distance sales of goods.[22] The reason why the European Commission chose to usually change measures and decided to do maximum harmonization measures like a u-turn, I will try to analyze and focus on these two proposed directives in the third Chapter.

1.3What are legal and economic advantages of European Contract Law?

It can be clearly seen from the previous analysis how significant it is to realize the coordination of contract law; nevertheless, it is easy to argue with the harmonized European contract law. Even if it is hard to predict the potential benefits and adverse factors accurately, it is easy to confirm that the existing fragmented legislations situation produces how adverse effects is, particularly in cross-border trade and transactions between the Member States.[23] In fact, if companies are willing to operate abroad, they must bear certain costs, such as acquiring significant information about foreign laws.[24] Granted, the harmonization of European contract law may be thought about a required condition for the substantial development of the internal market.[25] It

[19] Jan Smits, The Need for a EU Contract law: Empirical and Legal Perspectives, Groningen, Europa Law Publishing, 2005, p. 3.
[20] Niglia, Pluralism and European Private Law, p. 185
[21] Proposal for a Directive of the European Parliament and the Council on certain aspects concerning contracts for the supply of digital content, 9 December 2015
[22] Proposal for a Directive of the European Parliament and the Council on certain aspects concerning contracts for the online and other distance sales of goods, 9 December 2015
[23] Helmut Wagner, Economic Analysis of Cross-Border Legal Uncertainty - The Example of the European Union -: http://www.fernuni-hagen.de/hwagner/download/371 maastricht_ 181004_final_ vers. pdf
[24] Smits, Contract Law – A Comparative Introduction, p. 30
[25] Chirico, The Function of European Contract Law: An Economic Analysis, p. 13.

may be paradoxical, in addition to the inherent value, European Union contract law has strategic value. Therefore, the European Union has always been very cautious mainly because contract law is normally part of the competence of the Member States.

The internal markets played a crucial position for the sustainable development of Europe, which was already clarified in the Treaty on European Union (TEU)[26]. There is an obvious barrier for realizing this objective due to the coexistence of 28 different legislations and European institutions have repeatedly stressed that, for instance some judgments of the European Court of Justice. The European Commission has been looking at this, striving for finding the optimal solution for citizens and companies.[27] In October 1999, the European Council held a special meeting of emphasizing the relevance of the problem in Tampere: all the distinctions between the national legislations of the Member States would compose barriers to trade, this is unacceptable.[28] The legislation divergences of Europe seems to be the Heel of Achilles for the economically sustainable development of the European Union, which is the analysis of the actual circumstance made by the Institutions over the years. For instance, buyers and sellers who come from two different Member States would likely to refuse to trade under another contract because it might look like a legal minefield.[29]

Another significant thing about harmonization of the European Contract Law that needs to be kept in mind is that the consumer must be the first beneficiary for the harmonization of contract law, because they are almost always the weakest part of the internal market. Unfortunately, the consumer would not gain enough protection due to the fragmentation of legislation at present. The level of consumer protection has the certain statement as legal roots, especially in the Treaty on the Functioning of the European Union.[30] Furthermore, there is no doubt that a clear and certain legal framework would take benefit to businesses.[31]

To sum up, this chapter has explained the reason why the coordination of the contract law is hugely significant to the European Union from the view of the aim of the European Union.[32] Even though the European Commission always took concrete actions in the past decades, owing to the cancellation of the Common European Sales Law (CESL), the Commission was back to the starting point, and opted for starting a

[26] Consolidated version of the Treaty on European Union, Art. 3.3.
[27] Smits, The Need for a European Contract Law, p. 123: "Does the existence of different contract laws in the member states form an obstacle to cross-border trade within the Union and does it increase the transaction costs of those engaged in such trade?"
[28] Presidency Conclusions, Tampere European Council, 15-16 October 1999
[29] Van den Bergh, Forced Harmonisation of Contract Law in Europe: Not to be Continued, p. 251.
[30] Consolidated version of the Treaty on the Functioning of the European Union, Art. 169.1
[31] Christopher M. Dent, The European Economy – The global context, London and New York, Routledge, 1997, p. 64
[32] Smits, Contract Law – A Comparative Introduction, p. 29: "The reason why the EU is active in the field of contract law is directly related to the main aim of the EU: the development of a European single market in which the free movement of goods, services, capital and persons is ensured and in which European citizens are free to live, work and do business wherever they want."

novel project, "A Digital Single Market Strategy for Europe (DSM).[33] This new proposal will be thoroughly analyzed in chapters 3.

Chapter 2

Status in Quo

2.1 How to realize harmonization of the European Contract Law?

It is clear that harmonization of the European Contract Law is desirable after analysis of chapter 1: the next step is to assess the best way how to achieve it. Granted, there are several possible approaches, but each of them does have itself merits and weaknesses. The directive is chosen by the European lawmakers as the primary approach since the start of the EEC/European Union. The directive stands for the legal act of the European Union, and the principal motivation behind it is through the directive the rapprochement of national legislation among the Member States.[34] The main characteristic of the directive is that it obliges only concrete results for Member States, but they are free to decide how to achieve the required results. On this account, a directive may be put into effect in varying ways among member states: the effect will be similar as if a law in the country would be adopted.[35]

It is significant to remember that the regulations are usually more popular than directives, and other legislation of the European Union. Because of its legal binding and directly applicable, therefore it does not need any implementation by national legislators. However, once directives are not enough precise and detailed so that it would increasingly result in differences between national legislation. Conversely, if directives cover the contents of the internal market, thus the Member States do not have much leeway while implementing them. From this view, the conversion process of the directive may be considered as a double-edged sword.

Moreover, if the ultimate goal of lawmakers is to secure that the final project of the digital single market remains consistent, then a regulation may stand for a preferable solution. A common approach is not only desirable, but it may be essential if the ultimate goal of the European Union is to remove the legislative fragmentation.[36] The regulations may be the “most far-reaching tool" of the European legislator.[37] By comparing these two legal behaviors, it can be appeared that a regulation has a unique

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[33] Communication from the Commission, *A Digital Single Market Strategy for Europe*, Brussels, 6.5.2015, COM (2015) 192 final

[34] Consolidated version of the Treaty on the Functioning of the European Union, Art. 288

[35] C. Twigg-Flesner, *The Europeanisation of Contract Law – Current Controversies in Law*, Cavendish Pub Ltd, 2008, p. 38-39

[36] Statement of the European Law Institute: Unlocking the Digital Single Market – An Instrument for 21st Century Europe, 2015, p. 12

[37] G. Ballarani, The transition from the Proposal of a Common European Sales Law towards the new Online Sales Act, 9 October 2015, p. 8

meaning. Therefore, it cannot result in the legal uncertainty caused by the execution of the directive. "That means it may sometimes not be clear how or to what extent the Court's application of the directive to one Member States' law should apply to a different form of implementation in another Member State".[38]

Even so, choosing a regulation also may cause some troubles. Of course, this would be a particularly functional tool for establishing a common legal substructure in the area of the European contract law. But without any specific enforcement procedures, the degrees of freedom of action is almost zero for national legislators. However, it is not possible that the national lawmakers of the Member States adjust their contract law systems with regard to the "unified" field, exactly as happened at the time of the conversion of a directive.[39]

In short, directives and regulations both have their merits and weaknesses. In the past few decades, European lawmakers have tended to adopt the minimum coordination directive, even though the last two ones (the Digital Content Directive and the Online Sales Directive) would opt for full coordination which proposed in 2015[40]. That being said, directives do not have addressed the existing problems and have not achieved the expected aims. At present, directives still have left the scattered problem of contract law.[41] So this is the reason why the Commission has strived for achieving the goal in a regressive manner, the so-called optional instrument.

2.2 How to look at the European Common Sales Law?

It should be known what is a default instrument: it can be seemed as a non-coercive legal method which the parties have not the responsibility of choice. This is a major difference compared with instructions or regulations: the new regime would not abolish the national legislation, only if the parties intentionally decide to do so. It is significant that if the parties decide to manage their contracts based on an alternative regime, all the costs generated from the existing differences among the national legislations would be avoided.[42] It is not hard to see the advantages of this optional instrument: it will ensure respect for national traditions, and it will allow for the coexistence of European legislation and legislation of the Member States. Therefore, it promotes the unification

[38] Scope of application and general approach of the new rules for contracts in the digital environment, Workshop for the Juri Committee, 2016, p. 10： "An advantage of a regulation is that the wording will be universal and any interpretations on the text given by the Court of Justice will be directly applicable, whereas a directive will be implemented in different ways in the various Member States. That means it may sometimes not be clear how or to what extent the Court's application of the directive to one Member States' law should apply to a different form of implementation in another Member State. Moreover, a regulation avoids difficulties for national legislators in knowing how far they can depart from the wording of a directive."

[39] Bernard Tilleman & Bart Du Laing, Directives on Consumer Protection as a Suitable Means of Obtaining a (More) Unified European Contract Law?, p. 89, in Grudmann & Stuyck (eds.), An Academic Green Paper on European Contract Law.

[40] See Bernard Tilleman & Bart Du Laing, p.89

[41] Ballarani, The transition from the Proposal of a Common European Sales Law towards the new Online Sales Act, p. 3-4

[42] The proposal for a Common European Sales Law: an e-business perspective, 2012, p. 9

of legislation and the variety of law.[43] As well, an alternative approach seems to be less intrusive than a coercive legal act, so it is likely to be more accepted.

The well-known example of an optional instrument is the European Commission's proposal for the European commission on common sales (CESL) in 2015.[44] In the perspective of Commission, the instrument represented a system of choice, free choice for all parties, and coexisted with the legislation of the Member States:[45] a project to be coordinated through directives was put on hold for the limited time. As a choice, its applicability depends on a clear agreement between the parties, known as the "blue button" idea.[46] By this means, there will be no passively substantive change in national legislation, because the CESL should be an alternative.[47] In addition, enough powerful extent of consumer protection was provided by this instrument, exceeding the previous minimum harmonization level of directives.[48] The CESL is striving for solving the problem of existing fragmentation: lawmakers decided to include the existing *acquis communautaire*, and the most related directives.[49]

However, some doubts were left about the valuable CESL due to its contentious legal basis. Actually, the commission expressed that it was represented by art.114 of the TFEU, in regard to the harmonization and rapprochement of laws in the European Union; and it added art.352 to deal with flexibility clause.[50] This choice, however, not only makes the experts suspect, but also did not get the support of the judges of the Court of Justice, as in the case of *Parliament v Council* case.[51] Here, it pointed out that the necessary for harmonization of European Contract Law does not exist if a legal act factually does not revise the existing national legislation of the Member States. Therefore, its legal basis would not come from in the art.114 of the TFEU. Thus, even with the commission's intention, the CESL can lend a hand to achieve the coordination of contract law, which was not possible in the art. 114 of the TFEU because the new instrument and national law of the Member States were coexistent.[52]

Even so, the Parliament still regarded the CESL as bullish. The only actual opposition was raised by IMCO (the internal market and consumer protection committee), which

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[43] Niglia, Pluralism and European Private Law, p. 106.
[44] Proposal for a Regulation of the European Parliament and the Council on a Common European Sales Law, COM/2011/0635 final
[45] Contracts for online and other distance sales of goods, EU Legislation in Progress, February 2015, p. 2
[46] Rafał Mańko, Contract law and the Digital Single Market – Towards a new EU online consumer sales law?, p.14
[47] See Rafał Mańko, p. 15
[48] H.Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p.8
[49] Marco Loos, The regulation of digital content B2C contracts in CESL, Centre for the Study of European Contract Law – Working Paper Series No. 2013-10, p. 3
[50] Ballarani, The transition from the Proposal of a Common European Sales Law towards the new Online Sales Act, p. 10
[51] Court of Justice of the European Union – European Parliament v Council of the European Union. Case C- 436/03 (2 May 2006), par. 44 Make clear that this case does not as such deal with the CESL
[52] Mańko, Contract law and the Digital Single Market, p. 16

had few opinions in regard to the actual influence of the proposal. The criticism focused on the contentious character of the optional instrument, which was regarded as an additional element of the existing fragmentation. However, after cautious evaluation, the parliament decided to pass a legislation resolution of the CESL in 2014.[53] When everything seems to be down the right path, by the end of parliament decided to change method and take back the proposal, after receiving some criticisms from the Council.[54]

2.3 What is the next step?

This unpredicted withdrawal by the European Parliament is partly a result of the contentious nature of the legal basis of CESL, but also because of the unsuitability of a selective regime under a fragmented legislative background.[55] With several possible routes, European legislators had to consider the best route again.[56] But to be sure, the European Union legislators will no longer use selective tools. Establishing a parallel legal system may help to avoid chaos in the state law systems, but it does not really make the coordination process of contract law better. Therefore, the Commission backtracked by scrapping the optional instrument and started taking into account a new way to go. The new tool needed to be "drafted in a direct way",[57] because it is the only achievable approach for businesses and consumers to understand the theme manner and establish mutual conviction between them and institutions.

Finally, on 6 May 2015, the Commission made clear its attitude and announced an opposite way of the CESL: the new Digital Single Market Strategy. Granted, the Commission chose again a directive as the foundation of the new program; the Commission thinks that the directive is the only legal act in the European Union that not only respects the domestic legislations of the Member States, and is also an aspect of guaranteeing legal certainty, which is different from the optional tool[58]. In addition, the new directive is based on two primary proposals, as mentioned above: the first involves digital content (“Digital Content Directive”, or "DCD") for the supply of and the second relating to the goods online and other remote sales (“Online Sales Directive" or "OSD").[59] The key to innovation lies in the two instructions providing a full harmonization: this choice by using the minimum coordinate instruction, completely broke the history of the Commission over the past few decades. As the consultation of

[53] Ballarani, *The transition from the Proposal of a Common European Sales Law towards the new Online Sales Act*, p. 10
[54] See online sales directive, p. 2
[55] See Mańko, *Contract law and the Digital Single Market*, p. 1
[56] Unlocking the Digital Single Market, p. 7
[57] Unlocking the Digital Single Market, p. 13
[58] See Mańko, p. 18-19
[59] H. Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p.6

the committee's 2015 demonstrated, this way may have found agreement with the stakeholders.[60]

These two proposals are different from the previous proposal of the CESL. First of all, they may be considered more intrusive than the CESL when they choose the maximum coordination. Secondly, with regard to the range of application, they are more "targeted", in other words, more narrower then before, because of they do not cover all the topics as before, which attempts to adopt a full approach.[61]

As the Digital Single Market Strategy itself, it is significant to remember that the best Commission's proposal would have some weaknesses. There is still a tough process to achieve the harmonization of European contract law, but the Digital Single Market Strategy can be regarded as an expectant indication. In the third and fourth chapters of the thesis, the emphasis will be placed on the salient characteristics of the Commission's new strategy and then focus on the features of two proposals.

Chapter 3

The Digital Single Market Strategy

3.1 Introduction of the Digital Single Market

The conventional view thinks that the CESL proposal was withdrawn because of the Commission opted to shelve the coordination problem. But factually this option was part of a new strategy aimed at creating "revised proposals to give full play to the potential of E-commerce in the digital single market".[62] A novel digital single market strategy was launched by the European Commission, which announced a legislative initiative on harmonized rules for the supply of digital content and the online sales of goods. As already mentioned, the main contents of the Digital Single Market ("DSM") strategy is represented by the two proposed directives, regarding to contract for the supply of digital content and contract for the sales of online and other distance goods.[63] The DSM Strategy has evolved from the cinders of optional instrument of the CESL in a certain sense. However, the current legislation does not satisfy people. It is undeniable that the CESL project is the reason why it still exists, although its legal nature is entirely dissimilar.[64] The two aspects of the final part of Directive have been mainly discussed:

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[60] Contracts for online and other distance sales of goods, p. 7: "During summer 2015, the Commission conducted a public consultation in which stakeholders had the opportunity to answer a set of 22 detailed questions on the online sale of goods as part of a questionnaire devoted also to the supply of digital content. A total of 189 stakeholders replied, and the Commission summarized their views in a brief document."

[61] H.Beale, Scope of application and general approach of the new rules for contracts in the digital environment,p.9

[62] Unlocking the Digital Single Market, p. 6

[63] See the online sales directive, p. 2

[64] Loos, *the regulation of digital content B2C contracts in CESL*, p. 4

the first is to study the DSM strategy macroscopically, the second is to analyze the merits and demerits of two instructions, and perform a detailed analysis.

First of all, how can one define a Digital Single Market? It can be seen as a market, with four basic freedoms guaranteed by the European Union and the promotion of cross-border transactions between consumers and businesses. All the stakeholders would gain benefits from the Market allowing them to easily conclude contracts with the partners of other Member States without causing any damage.[65] Actually, leaving alone the complexity brought by legal and contractual differences would reduce the degree of uncertainty.[66] At present, the coexistence of 28 divergent legislations is actually not helpful to the motivation for cross-borders trade, particularly for small companies. [67] Therefore, Jean-Claude Juncker, the President of the European Commission, introduced the DSM strategy in 2015: he was aware of that Europe had not solved the problem for a long time and so determined it was time to do it.[68]

Creating a Digital Single Market is a considerable challenge for the EU. There is need of joint efforts in the aspects of legislative, political and economic, but it is well worth it.[69] As mentioned before, the Digital Single Market Strategy may be regarded as a mutually beneficial situation for both buyers and traders[70]. For example, consumers could get a higher level of transparency and wider choice on the Internet shopping. Moreover, companies and traders are more likely to be attracted by foreign markets because of the specific simplification of legislation, the sharp fall in costs, and more suitable activities. Under the existing legal framework, the enterprises have to pay for daily expenses, if they want to continue to invest and launch projects in the other Member States: this is maybe one of the main reasons why the company, especially small and medium enterprises, prefer to keep their projects and economic activities in their own national field rather than in the other Member States. Even though any traders opt to venture abroad, also could be sure that the economy of Europe must deal with too many missed opportunities.[71]

For all these reasons, it is crucial to keep in mind that European lawmakers have strived for breaking down the existing obstacles over the years, but still failed to solve them. Although the proposal of the Digital Single Market exists with lacks of certainty in some aspects, the DSM strategy seems the proper solution. It is a part of the reasons for the recession of growth of Europe economy that the consumers are refrained from investing abroad by existing barriers. The Digital Single Market would bring the

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[65] European Commission, why we need a Digital Single Market: http://ec.europa.eu/priorities/sites/beta-political /files/dsm-factsheet_en.pdf

[66] See the online sales directive, p. 2

[67] Communication from the Commission, *A Digital Single Market Strategy for Europe*.

[68] European Commission, A Digital Single Market for Europe: Commission sets out 16 initiatives to make it happen, Brussels, 6 May.

[69] Communication from the Commission, *A Digital Single Market Strategy for Europe*

[70] European Commission - Fact Sheet, Questions and answers - Digital Single Market Strategy: http://europa.eu/ rapid/press-release_MEMO-15-4920_en.htm

[71] See the OSD, p. 18

European Union into a more environmentally-friendly market, and it would also make the Europe market more suitable for international investors.[72] The Digital Single Market may be a fit case of what is a place of freedom, security, and justice: there are no barriers, but there are many possibilities.[73] There is no doubt that this is an aspiring target, but absolutely would stimulate the growth of the economy of the European Union: according to the data of the European Commission, only considering whether this strategy will become a reality, it will produce about €415 billion, providing a friendly platform both for the new companies and existing enterprises to develop.[74]

3.2 What does the Digital Single Market brings: New approach

The Commission believes that the Digital Single Market Strategy is definitely vital. Therefore, on February 17, 2016, the European Parliament organized a seminar to talk over the current circumstances of legislations and how to improve the proposal.[75] In this seminar, the significance of this new strategy was highlighted. The amount of European citizens online and from the other Member States has persistently risen in the past decade. According to the Commission, the economy of Europe would work out itself if the obstacles to cross-border transactions and trades will be removed. Moreover, the event was a reaffirmation of the high level of uncertainty and doubt still existing for consumers and businesses. However, on the view of Ilona Wolfram, chair of the Dutch workshop, the Digital Single Market strategy can keep a positive attitude.[76] It is possible to create an appropriate legal environment that could to generate confidence in stakeholders and to ensure the sufficient protection for consumers.

Therefore, what is the opinion of the Commission? The idea is to make the current legal structure simple through digital content directives and online sales instructions, supplying an understandable set of rules (even if the target has been only completed in part).[77] Dirk Staudenmayer who is the spokesperson for the Commission at the workshop stressed that one of the primary goals of the two proposed directives is to clarify the conception of digital content and the most related issues about the sale of goods online. From his perspectives, only in this way can one let buyers and traders realize their rights and obligations, thereby boosting the economy of the European Union. Staudenmayer strived to illustrate this by contrasting the United States and the

[72] Communication from the Commission, A Digital Single Market Strategy for Europe
[73] European Commission, Digital Single Market – Bringing down barriers to unlock online opportunities: http://ec.europa.eu/priorities/digital-single-market_en
[74] Ibidem.
[75] Committee on Legal Affairs / Policy Department: Citizens' Rights and Constitutional Affairs – meeting 17/02/2016 (PM): http://www.europarl.europa.eu/news/en/news-room/20160211IPR13922/JURI-Poldep-C
[76] Workshop for the Juri Committee on Legal Affairs of the European Parliament, New rules for contracts in the digital environment, http://web.ep.streamovations.be/index.php/event/stream/160217-1600-committee-juri-poldepc
[77] Communication from the Commission, A Digital Single Market Strategy for Europe

European Union. Both the top runners in the development of the global economy, but the growth rate of the economy is extremely different.

Moreover, the factual distinction does not exist in the data of domestic transactions but in cross-border transactions. In the European Union, for example, the consumers who want to find a local product was three times more attractive than the same one in the other Member States. To alter that, the Commission strived for building new milestones for buyers and traders through the launch of a new set of compulsory rules.[78] In doing so and strive to clean and remove the existing problems of fragmentations, the thought of the Commission is as much as possible in the most straightforward way to write this two proposed directives, because after the CESL revoked, legal certainty has become a priority[79].

From the analysis above, it appears that the significance of boosting the maximum capacity of the EU's economy has been indicated by the comparison between the models of the European Union and the United States. The way how to meet with success in this target is given by the full coordination of the contract law in Europe, guaranteeing enough powerful protection for consumers, which could not be left unused. The Digital Single Market would have the ability to eliminate the significant barriers of the cross-border e-commerce among the Member States.[80]

In addition, the main problem that must be dealt with resolutely is not only the content of the legislations but also its scope and applicability. Consequently, the purpose of the two proposed directives is to realize the order and harmonization for the complicated legislation framework: on the one hand, by providing the rules for all citizens could accept, on the other hand, by improving the trust of all stakeholders in E-commerce transactions.[81]

Staudenmayer underlined another regulatory problem during the seminars was the digital content. In the current situation, only the Netherlands has proper and precise legislation to regulate this issue among all the 28 national legislation of the Member States. This is exceedingly affirmative for Dutch citizens because it means they would not have to tackle uncertain legislation.[82] In all the other Member States, they have several different definitions of the contract of this type: some are service contracts, while others is a rental contract. Thus, this way may cause the divide since each lawmaker would take differing remedial measures after the legal definition ensured. Another point to consider is that these regulations are usually mandatory. It is not hard to know why the businessman would prefer to invest only in the market of his own

[78] See the Online Sales Directive, p. 4
[79] Unlocking the Digital Single Market, p. 8
[80] See the Online Sales Directive, p. 14
[81] See the Online Sales Directive, recital (3).
[82] H. Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p.7

country.[83] If every lawmaker starts making new legislations, the situation will get worse, so the Commission decided to put forward the new and full coordinated directive.

Moreover, it is significant to remember that what has just been underlined at before paragraph was not only affirmed in the seminar on February 17，2016，but it is also substantiated by the statistics.[84] Despite the rapid growth of e-commerce, most European businesses do not yet make the most of the Digital Single Market. In fact, a related loss of investments was caused by the existing obstacles of the cross-border trade in Europe. According to the statistics, on the one hand, only 12% of European Union retailers sell online to consumers in other European Union countries, while more than three times as many (37%) sell online in their own country.[85] Differences in national contract laws are a significant obstacle for cross-border sales for four out of ten European Union retailers (39%) currently selling online.[86] Creating one-off costs for retailers selling to consumers by different national contract laws almost amount to €4 billion. On the other hand, European consumers also miss out on the potential of the broader choice of products and better prices. Only 15% of the European Union consumers buy online from other European Union countries, while almost three times as many (44%) buy online in their own country.[87] The low confidence of fundamental contract law rights plays a significant role in this situation. Following these statistics, we would realize how many untapped and non-negligible potentials there are in online trade sales of Europe. Therefore, the DSM Strategy may be conducive to remove the existing barriers and consequently alter the fragmented European legislations into a single one. Therefore, for companies and consumers, they can conduct investment more easily in places other than their own countries. Given the fact that the new strategy will become a reality, the wider choice of goods and products as a better availability will be dominated by consumers: they will save nearly €12 billion. If the same rules for e-commerce go into effect in all Member States of the European Union, more than half of the companies will stimulate energy for online sales in the other Member States.[88]

From the results of this analysis, it can be clearly seen that if the consumers and company want to make transactions abroad, lack of regulatory coordination may be the main reason of the costs that consumers and enterprises must tackle it every day. This is particularly unlikeable, because the existing obstacles of laws act as a deterrent for each European investor whatever the country of origin is. It is a challenge that the contract to cope with the laws of 28 Member States of the European Union. The statistics once again is proved what has been already expressed: enterprises

[83] Proposal for a Directive of the European Parliament and the Council on certain aspects concerning contracts for the supply of digital content, recital (1).
[84] European Commission, A Digital Single Market for Europe: Commission sets out 16 initiatives to make it happen
[85] http://ec.europa.eu/justice/contract/files/digital_contracts/digital_contracts_factsheet_en.pdf
[86] Flash Eurobarometer 396 "Retailers' attitudes towards cross-border trade and consumer protection" (2015).
[87] http://ec.europa.eu/justice/contract/files/digital_contracts/digital_contracts_factsheet_en.pdf
[88] Commission Staff Working Document, *A Digital Single Market Strategy for Europe: Analysis and Evidence – Accompanying the document*, Brussels, 6.5.2015, COM (2015) 192 final

acknowledged that they would not see any motivation to start the trade on the cross-border market if the framework of the legislations is not going to be changed.[89] However, the consumers also have to face all kinds of the preventable costs. For instance, they would often do not read all the terms of the agreements even when they choose to buy goods from the websites of the foreign European countries.[90] This choice (not entirely the best option) and the lack of knowledge about the laws of the other Member States often result in unpleasant results. Thus, it is easy to see why European citizens would adopt more straightforward legislation "because they are only better protected when buying goods online in their own country under their familiar domestic law".[91]

From an economic point of view, if the Digital Single Market Strategy would be adopted, the presumed revenues have been evaluated nearby €250 billion at the end of the next European Commission's mission.[92] This once again illuminates that the relevance of this issue is far only from a contractual and legal point of view.[93] In addition, the collected data about the status of consumers are equally important. In fact, if the Single Market becomes a reality, will they be more interested in overseas economic transactions and investments? More than half of the European Union consumers has given a positive answer; 23 % of them were enthusiastic about the possibility, and 34 % admitted that they need time to consider the chance, but viewed it as an interesting choice.[94] But if the Commission really wants to increase the confidence in their citizens, the proposal still needs to be improved.

3.3 Advantages and weaknesses of the Digital Single Market Strategy

It is time to know what the structure of the Digital Single Market Strategy is after a general idea of the proposal. As already mentioned before, the European Commission chose for changing the approach, with a narrower range of application, "the Proposal for A Directive on Certain Aspects Concerning the Supply of the Digital Content"[95] and "the Proposal for A Directive on Certain Aspects Concerning online sales and other distance sales of goods".[96] The Digital Single Market Strategy is based on three cornerstones:[97]

1. "Better access for consumers and businesses to digital goods and services across Europe", which means the first cornerstone may increases the possibilities of given

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[89] *Ibidem.*
[90] The Guardian, Terms and conditions: not reading small print can mean big problems, 11 May 2011: http://www.theguardian.com/money/2011/may/11/terms-conditions-small-print-big-problems.
[91] See the OSD, p. 2
[92] Communication from the Commission, *A Digital Single Market Strategy for Europe.*
[93] Communication from the Commission, *A Digital Single Market Strategy for Europe.*
[94] Flash Eurobarometer 413, Companies engaged in online activities, 2015: http://ec.europa.eu/pulic_opinion/
flash/fl_413_en.pdf
[95] See the DCD.
[96] See the OSD.
[97] European Commission, A Digital Single Market for Europe: Commission sets out 16 initiatives to make it happen.

better quality and quantity for the stakeholders, both in terms of quality and quantity. Therefore, the elimination of main dissimilarities between the online and offline trade is the key to remove the obstacles of online transactions on cross-order trade;[98]

2. "Creating the right conditions and a level playing field for digital networks and innovative services to flourish", which means that creating a good business environment and a regulation conducive to innovation can promote the creation of start-up companies and the development of undertakings;

3. "Maximizing the growth potential of the digital economy", which means that we must improve the market services and the market competition environment. At the same time, we must also make higher demands on the capabilities of the digital industry.

The first cornerstones, "Better access for consumers and businesses to digital goods and services across Europe", possibly had the highest correlation in the preparation of the proposals for the European Commission. The course of harmonization of European contract law may the only method to realize this ambition and improve efficient of E-commerce in Europe. As a result, the elimination of the existing obstacles is still an important part to make sure the overall success of the Digital Single Market Strategy, otherwise the increase of consumers and enterprises confidence will be a challenge in e-commerce.[99] A specific illustration of how the Digital Single Market strategy addresses the barriers of the online trade is the struggle against geo-blocking.[100] It is a frequent occurrence in practice: when the consumer wants to access the website of another Member State, it will lead to some form of restriction for the optimum browse. When a website re-routes consumers to another address of the link, it will occur another terrible situation of geo-blocking[101]. Even if the problem is surely not one of the biggest obstacles to be faced, it could still pose an important obstacle for consumers to shopping online in another Member States.

But there are also some gaps in Digital Single Market Strategy. One of the principal concerns put up by this proposal was the resolution of the Commission not to address the hot topic like the Internet of Things (IoT). In fact, while the strategy is also envisaged to improve the subject of supplying better digital goods and services for buyers and traders, the directive on the digital content makes it clear that the Internet of things is not regulated internally.[102] There are some doubts caused by this choice; As Vanessa Mak, a professor of the Tilburg University, pointed out at the symposium, the decision of the Commission is really debatable, due to the economic significance of the Internet of Things. In addition, the two proposed directives were based on a legislative framework that never goes out of dates. However, leaving a broad definition

[98] Communication from the Commission, *A Digital Single Market Strategy for Europe*
[99] European Commission, A Digital Single Market for Europe: Commission sets out 16 initiatives to make it happen.
[100] Communication from the Commission, *A Digital Single Market Strategy for Europe*
[101] European Commission, Questions and answers - Digital Single Market Strategy.
[102] See recital (17) of the DCD.

to the digital content, it is unclear why there is no mention of the Internet of things. Moreover, there is some doubt why the Internet of Things is excluded from the proposal since the definition of the digital content of article. 2 (it will be analyzed in the next paragraph). Just in case, it is explained in borderline situations, where it is hard to separate the role of the goods itself and the digital content in a simple approach, like an electronic car (for example, Tesla).

In order to figure out why this problem is to the point, IoT can be explained as "the global infrastructure of information society, based on existing and developing of interoperable connected to each other information and communication technology (physical and virtual) things to achieve the advanced service".[103] The Internet of things allows operating systems and devices (called *things,* including both physical and virtual devices) to be connected to the Internet: in this point, it would be appropriate within the proposal on digital content.[104] An explicit legislative framework of this issue will bring the increase of productivity of the enterprises and the available information, and the quality of the relationship with customers will be considerably improved.

Therefore, even if the European Commission has already stated that the Digital Single Market Strategy can bring advantages for the development of the IoT, the choice of excluding the IoT from the directive still cannot be understood.[105] However, given the background of consumer data protection and all the resulting problems of it, this exclusion may seem more reasonable.[106] In fact, data protection is the main focus of experts on the aspects of the Internet of Things. The protection of privacy is also one of the most significant aspects of a company.[107] What happens when a network attack or software fails for any reason? As the significance of data protection, from this perspective, it is entirely consistent that the European Commission decides to regulate it through separate legislation.[108] For example, it is good for all consumers that providing online services through cloud computing, but from a legal perspective, it may involve multiple issues. In fact, the cloud itself does not require the using of any specific software or hardware because the nature of itself, but allows consumers to upload documents online: in this point, it is a borderless system in practice. Therefore, protecting personal data may be though because it is not easy to pick out the applicable law.[109]

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[103] ITU-T Rec. Y.2060 (06/2012), Overview of the Internet of things, p. 1

[104] Jacob Morgan, A Simple Explanation of the 'Internet of Things', 13 May 2014: http://www. forbes.com/ sites/ jacobmorgan/2014/05/13/simple-explanation-internet-things-that-anyone-can understand/#4c297aff6828

[105] European Commission, The Internet of Things: https://ec.europa.eu/digital-single-market/en/internet- things#Article.

[106] London Datastore, The Trouble with the Internet of Things, 10 August 2015: http://data.london. gov.uk/ blog/ the-trouble-with-the-internet-of-things/

[107] McKinsey&Company, The Internet of Things: Five critical questions, August 2015: http: //www.mckinsey.com/
industries/high-tech/our-insights/the-internet-of-things-five-critical-questions

[108] ITU-T Rec. Y.2060 (06/2012), Overview of the Internet of things, p. 1

[109] Tim Turner, Cloud Computing and Data Protection: http: //www.

A bigger concern is the protection of personal data on the social medium, such as Wechat, Instagram and so on. Of course, the development of these social tools has brought significant advantages for promoting the communication between the users and sharing personal information online. The latter brings the problems also, however, because it often leads to privacy issues. For example, the users may keep tracked by social networks when the users act on anther platform, even if they have been logged off: this situation has already caught the attention of the authorities for asking about the protection of personal data.[110] From a legal perspective, another highly relevant and problematic issue is "right to be forgotten", which involves not only social medium but also search engines such as Google. This right allows citizens of the European Union to request removal of specific information about themselves from specific websites.[111]

The fact that personal information can be obtained online, which may pose a real danger to safety and privacy of consumers.[112] On the other hand, it is important to remember that the specific application of "the rights to be forgotten" may affect the database of the search engine in some way, adversely affecting other users. To regulate this complicated situation, the European legislators recently decided to introduce a new set of updated rules. On May 4, 2016, an official version of the new "General Data Protection Regulation" was released and took effect on May 25, 2018. Even if the new legislation is likely to be welcomed, given that the "right to be forgotten" is enshrined by article 17 of a specific rule, some doubts left since the standards adopted by the lawmakers. For example, why there was no mention of the data protection in the directive on the digital content since the two topics are relevant? From the perspectives of the Commission, two proposed directives from the Digital Single Market Strategy set out the quality of being future-proof: why they decided to explicitly excluding the Internet of Things and legislate to protect data after the proposal posed just one year later? What's more, since the thought of Commission was to harmonize the contract law and reduce the fragmentation of the legislations in Europe, why were new regulations be chosen? Perhaps the best solution is to recall the Internet of Things and data protection policies in digital content directives. In any case, it must be recognized that the ambition of the latest initiative is again to provide consumers with clear and better rules.

As can be seen from the analysis of this chapter, the key aim of the Digital Single Market Strategy is: the harmonization's road of the European contract law is through a set of clear and explicit rules, increasing quality and quantity in the cross-border trade, improving the confidence of electronic commerce for consumers and enterprises.[113] At

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actnow.org.uk/media/articles/CloudComp- jan12.pdf.

[110] Loek Essers, EU data protection authorities get serious about Facebook's privacy policy, 4 February 2015: http://www.pcworld.com/article/2879872/eu-data-protection-authorities-get-serious-about-facebooks-privacy-policy.html

[111] Search Engine Land, Right to be Forgotten: http://searchengineland.com/library/legal/legal-right-to-be-forgotten Please have a reference to the ECJ case instead of this one

[112] Francesco Lazzeri, *The EU's Right to Be Forgotten as Applied to Cloud Computing in the Context of Online Privacy Issues*, Op. J. Vol. I, n. I, 2015, p. 8

[113] See the Digital Content Directive, p.6

the same time, if the Commission really wants to make it useful for business and consumers, it does need to be reviewed and improve its content. The following chapter and chapter 5 deal with more technical issues.

Chapter 4

The Directive on contracts for the supply of digital content and the Directive on contracts for online sales and other instance sales of goods

4.1 Contrast with the previous legislations

After a thorough assessment of the Digital Single Market Strategy, it is time to analyze the two proposed directives put forward by the European Commission. First of all, it may be a useful reminder that a directive on the online and other distance sales of goods is not an entire novelty, since four directives about domestic and cross-border contracts have been implemented in this area over the years: The Consumer Rights Directive, the Electronic Commerce Directive, the Consumer Sales Directive, and the Unfair Terms Directive. The main distinction between the two proposed directives of the Commission and the four existing directives is that, in addition to consumer rights directives, they just stipulated for minimal coordination.[114] This shows that only a bottom level of consumer protection is regulated and national legislators can implement it further. Therefore, it can be understood that the results of this situation are absolute splits, on the one hand because of four different directives coexisted with each other and on the other hand because of different levels of consumer protection among the Member States in the European Union. Therefore, it is an idea that the two proposed directives will have more enlightenment on legislation. Some persons criticized the new proposal for online sales because it would only replace the Consumer Sales Directives, retaining the remaining legislative framework and three other existing directives. Obviously, the fragmentation will not be eliminated.

However, as pointed out by Staudenmayer at the seminar on February 17, 2016, the new directive will make the situation better in either way, from the minimum harmonization to the highest of coordination, and thus the benefits will consequently follow.[115] First of all, comparing with the existing cost of enterprises arose, the cost of the businesses will lower. For example, a comparative analysis of national law and

[114] See the online sales directive, p.4.
[115] Workshop for the Juri Committee on Legal Affairs of the European Parliament, New rules for contracts in the digital environment, http://web.ep.streamovations.be/index.php/event/stream/160217-1600-committee-juri-poldepc.

international legislation and the prerequisites for conducting activities abroad can be conducted.

A brief analysis of the four existing directives may be useful in order to highlight the innovative nature of the two proposed directives of the Commission. It is vital to keep in mind that the Consumer Sales Directive was adopted in 1999, considering that the current market has got results that were not even the imaginable when it comes to force,[116] it may be out of date already. The scope of the Consumer Sales Directive is broad， which covers all sales contracts with consumers, not just online contracts. However, it only provides minimum harmonization at the same time. For this reason, the directive will still apply when consumers want to conclude an online sales contract.[117] In terms of Consumer Rights Directives, the situation is totally different; first of all, because it is certainly the most recent. Secondly, it is the only one of the existing four directives to provide full harmonization. With this in mind, the Consumer Rights Directive, in certain sense, can be seen by the Commission as a standard for the development of the Digital Single Market Strategy; however, the scope of application of the Consumer Rights Directive is extremely broad, bearing in mind that it shields all contracts concluded by consumers. Finally, this directive introduced an advanced consumer protection system, such as the consumers is entitled to terminate the contract within 14 days.[118]

The Unfair Terms Directive is another directive of minimum coordination that covers all contracts between consumers and businesses (B2C).[119] The ratio behind this directive covering all B2C contracts is the cancellation of all unfair terms when concluding the contract. Finally, for the sake of complete review of the legal framework, the E-commerce Directive: Again, it is a minimal harmonization directive, and its range of implementation covers all online contracts. For the perspective of legislators, the way to protect the rights of consumers is to make the legislations explicit for online contracts. Through the aim of the Unfair Terms Directive, to "ensure the free movement of information society services" within the Member States of the European Union, it can be confirmed that there is not much dissimilarity between the Unfair Terms Directive and one of the Digital Single Market Strategy, in spite of it being passed 15 years ago.

After the brief analysis above, it is crucial to keep in mind that the majority of these four directives are quite outdated, considering the year when they were implemented. For example, the Unfair Terms Directive has existed more than twenty years, and the digital environment has completely undergone change at the same time.[120] For this reason, the Commission decided to implement a new strategy after the necessary review

[116] See Mańko, *Contract law and the Digital Single Market*, p. 10
[117] H.Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p.7
[118] See Mańko, *Contract law and the Digital Single Market*, p.8
[119] See Mańko, Contract law and the Digital Single Market, p.10.
[120] See Mańko, Contract law and the Digital Single Market, p.8

of modernized legislation. For the Online Sales Directive, the Commission decided to just eliminate the scope of application for the online sales and other instance goods sales contracts, and switch the level of harmonization from minimum to maximum. Therefore, in this view, in fact the new Online Sales Directive can be seen as the updated version of the Consumer Sales Directive. However, the old Consumer Sales Directive will not be revoked even if the proposal on online sales will pass. Conversely, its application will be limited to face-to-face contracts rather than covers all sales contracts with consumers, and all remote contracts will be included in the scope of the new directive. Although the change in legislation is absolutely positive, people are still confused about the inability to eliminate the risk of division.[121]

Because of the four existing directives, the emergence of two new directives would make the final results that although the purpose of the two directives was to intervene the legislation, separation may occur in practice. Because although the two directives deal with different issues, the DSM strategy shows the marginal differences between them. In addition, in some respects, the innovation of the proposal compares with the previous legislation, which may also arise some doubts. For example, in the absence of consistency, the online sales directive is similar to the previous Consumers Sales Directive concerning the aspects of the remedial measures for consumers, for which the new directive has no real improvement[122]. However, why legislators believe that Member States must eventually implement two Directives together, which is part of the same legislative project, but chose two Directives instead of just one.

It is crucial to keep in mind that the Digital Single Market Strategy is greatly dissimilar from the previous legislative project of the CESL. The most vital point is the range of implementation of the two proposed directives, which is more restricted and targeted than the European Common Sales Law. What's more, the real novel point of this change is from an optional legal instrument and a parallel regime to a full harmonization directive which is mandatory.[123] There is no doubt that this switch is positive and useful, and the specific regulation of the higher level is required at the same time. However, it may not be denied that the new mandatory regulations would be more powerful approach than the CESL to interfere with the legislations of the Member Stated in the European Union. [124]

There are several differences between the CESL regarding the scope of application of the directive on the digital content (DCD). The online sales directive will only regulate the sale of goods. The Digital Content Directive stipulates what content would be regarded as digital content at article 2.1;[125] even if all downloaded digital content was

[121] See Mańko, Contract law and the Digital Single Market, p.8
[122] The new proposal for harmonized rules for the online sales of tangible goods: conformity, lack of conformity and remedies, Workshop for the Juri Committee, 2016, p.7
[123] See the Online Sales Directive, p.2
[124] H. Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p. 5
[125] See the Digital Content Directive, art 2.1

included by the previous optional instrument, the so-called 'digital services' was included in DCD.[126] For instance, the trader provides the consumers with access to data for a while. The Commission decided to limit the scope of application of these two proposed directives: the switch is from the CESL which adjust the contracts concluded by consumers with businesses (B2C) and between two businesses (B2B), to the two proposed directives which regulate only the B2C contracts. Finally, another fundamental difference between these two projects is the geographic scope of these directives, which will govern domestic and cross-border contracts. In contrast, the CESL applies only to contracts that are concluded outside the country, resulting in a troublesome situation in the two-tier system.[127]

The difference between the CESL and the DCD as below shown:

	Scope of application	Contract type of regulation
DCD	Domestic and cross-border contracts+ goods sales contracts	B2C
CESL	Contracts concluded outside the national context	B2C+B2B

Just since it has no longer been regarded as relevant contents so that certain matters exclude from the scope of applications, which is one of the most suspicious of the proposed directives compared to the CESL. For example, why did the legislator exclude the B2B contracts from these two directives, which were regulated in the CESL? So the two proposed directives only are limited to the B2C contract (specified in article 3 of the Digital Contract Directive). When a small and medium-sized business purchases certain software, why not apply the same rules that are available to consumers? Moreover, sellers are willing to provide consumers and businesses with the same information, which seems more logical: this is not applicable whether the B2B contracts are not included. Another issue that may arise from the newly proposed directive is the exclusion of certain services from the scope of application of digital content directives, such as those services that do not primarily provide digital content, as identification can sometimes be more complicated.[128]

Legal experts believe that the withdrawal of the CESL represents a new beginning rather the end of the story. This decision may raise some doubts, as it is the opposite of the optional instrument. From the view of legislations, the proposed action falls within the scope of the treaty, because of the article 114 of the TFEU.[129] Therefore, the proposals had the backing of legal experts for its legal basis. Unlike the optional instrument of the CESL, the two proposed directives also aimed at the role of the internal markets of the European Union, but the legislations of the Member States

[126] See H. Beale, p.11
[127] Proposal for a Regulation of the European Parliament and the Council on a Common European Sales, art. 4.1
[128] See H. Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p.27
[129] See the Online Sales Directive, p.5

would need to be ultimately implemented into the national law. It is necessary to apply the merits of its own nature to the Member States' legislation. In this way, the Dingle Single Market Strategy would not subject to any legal controversy like the CESL.

For most legal experts, the CESL was considered as a complete failure. But the importance of the proposed CESL has been reiterated many times by Staudenmayer. In his view, the mistakes made in previous projects was extremely meaningful, to help understand what was wrong. From this perspective, the CESL should be seen as a significant step on the road of the convergence of the European contract law, otherwise the DSM Strategy would never be discovered. The mistakes precisely done with the Common European Sales Law have prompted the Commission to opt for abandoning the optional instrument with mild scope in favor of a new and issue-focused approach. The new approach focuses on those aspects that were perceived to have affected its functioning of the market. One of the disadvantages of choosing such an approach is that some vital aspects have not been included from the scope of implementation of the two proposed directives. For instance, an entire damages rule.[130] Most of these issues provided adequate protection for the consumers, so this is the reason why they had been included in the CESL. So, it is worth noting that the shift to a more focused approach was understandable, but some gaps can be avoided.

Targeted full coordination was identified during the workshop. This means that the specific obstacles for cross-border trade will be considered as a crucial aspect of the Commission's handling. Such an approach was considered beneficial, from the optional instrument to a full harmonization through directives. This was confirmed by the spokesman for the consumer organization of the European Union during the conference. Another legal basis for supporting the two proposed directives, as provided in article 5 of the TEU, is conform to the principle of proportionality and complementarity of the European Union. For the new strategy, the Commission ensured that it respects the principle of proportionality. This means that any measure of the EU resorts to must not exceed the ends which are to be pursued.[131] As Staudenmayer confirmed, if the Commission continues to choose the minimum harmonization directive as before done, which will cause companies not to utilize a single set of regulation, as the fragmentation of laws based by the previous directives. In the certain sense, minimum harmonization may be more beneficial for the consumers. But the high levels of consumer protection have been maintained now, it seems no longer essential to choose a measure which is detrimental to the interests of the enterprises.

4.2 An assessment of the two proposed directives

In fact, the aim of the DSM strategy is to eliminate the obstacles in the internal market like contracts, economic, cultural and legal obstacles.[132] In particular, the two

[130] The new proposal for harmonized rules for the online sales of tangible goods: conformity, lack of conformity and remedies, p. 6-7

[131] See Mańko, Contract law and the Digital Single Market, p.7

[132] Fernando Gomez, Juan Josè Ganuza, Economic Underpinnings of European Private Law

directives of largest harmonization, the main characteristics of the DSM strategy could be demonstrated at Articles 4 of the Digital Content Directive and Article 3 of the Online Sales Directive. This is extremely meaningful, especially for consumers and businesses, which brings many benefits:[133] consumers are protected by the same degree of protection for all countries in the EU. The Online Sales Directive will set up a single bill for overseas transaction in the future, which also greatly demonstrates the characteristics of the DSM strategy. If there is a set of single rules, then many companies will no longer have to bear unnecessary risks because of complicated rules, but if one only relies on the efforts and support of several countries, there is no way to complete the legislation. It may be that the adoption of measures at the EU level will be more effective than a certain country in its efforts.[134]

In the future development, the question of which interests are more important is the main issue that the Commission needs to solve and answer. Companies interests or consumer interests? During the preparation process, people find that consumers are worried that shopping on foreign websites is not safe. In particular, when considering product liability disputes and returning goods, consumers often choose to abandon their shopping because they are not familiar with foreign laws and trading rules. This means that if foreign websites want to open markets in other countries, they must spend more costs.[135] The fundamental reason for this issue is that there is no unified digital contract legal system between countries. If a unified rule can be established to describe the rights and obligations of consumers and merchants, then consumers will no longer worry about not shopping on other countries' websites.[136] In fact, the Consumer Rights Directive has given all EU consumers a set of unified rules. Therefore, the domestic law did not have any relevance anymore because the unification of rules for all the consumers.

The choosing of explicit rules will promote the growth of business investment abroad as entrepreneurs are encouraged to become more active in international markets.[137] Competition is a key factor in the growth of Digital Single Market.[138] If clear rules can be worked out, it will be very easy to confirm when the goods conform to the contract concluded. However, some problems may be caused by the lack of clarity in some rules of both directives. This factor, added maximum coordination, will determine which national lawmakers will not have the chance to make new rules about remedy and damage. The Commission confirmed in the workshop that the choice has been made by cautious assessment as a result of several consultations with stakeholders. About the subject of compensation, the idea is to create a principle of damages, also give the reader an interpretation of damages: from the perspectives of Staudenmayer, this means

Harmonization, p. 53, in Reiner Schulze, Hans Schulte-Nolke, European Private Law – Current Status and Perspective, Sellier. European Law Publishers, 2011

[133] See the Online Sales Directive, preamble (8)

[134] See the Online Sales Directive, p. 7

[135] See the Digital Content Directive, preamble (5)

[136] See the Online Sales Directive, p.11

[137] See the Online Sales Directive, p.11

[138] See the Digital Content Directive, preamble (46)

that if a consumer is a victim, he should be able to return to the previous situation as if no damage occurred.[139]

Article 14 of the Digital Content Directive only involves the economic damage, because this kind of damages is regarded as the most related, and ignoring all other types of damage, such as moral damage or indirect damage, which is still within the scope of legislation in the Member States.[140] This may be troublesome because national legislators are being denied the possibility of making new rules to ensure that consumers are adequately protected. The only freedom given to them is the possibility of clearly defining how damages are enforced. Therefore, choosing the scope of targeted application and maximum coordination avoids a more accurate and complete principle for the related theme, such as damages.

On the harmonization of the European Contract Law, Professor Hugh Beale who is a specialist of English Law extremely contributed to the Digital Singe Market strategy. He is assessed as one of the pathfinders of the European Contract Law. A former member of the Lando Commission, which was in the back of the PECL （"Principles of European Contract Law"）and then of the specialist Association to expand on the CESL proposal. In his view, the transition is a favorable selection from an optional instrument of all-inclusive harmonization to a directive of specific and focus scope. Professor Hugh Beale is from the UK, which means he experienced how it feels like having a specific and explicit legislation about digital content. Because the United Kingdom is a Member State, having single legislation on the aspects of the digital content (the Netherlands is only one of the Member States in the European Union having targeted legislation about the digital content as I mentioned at Chapter 3.2). Therefore, in his point, the Digital Content Directive is exceeding beneficial and valuable for the legal certainty. Because most of the Member States still do not stipulate precise legislation on the aspects of the digital content, the Digital Content Directive shall bring specific and available legislation to the residents of the European Union.

However, it is should be noticed that selection of a full coordination directive can also cause some negative effects: for instance, the country has taken higher than the maximum coordination directive (namely the Online Sales Directive) of the consumers protection level, such as Sweden, (they have a complete mechanism of protection of consumers rights, through a variety of specific regulations to comprehensively protect the consumers rights), in this situation, the level of consumers protection will be lower than before. This defect is a direct consequence of the full coordination of online sales instructions. Unlike previous consumer sales orders, national legislators have been unable to introduce new levels of consumer protection as before: in countries like Sweden, new levels of protection will be lower than before.

[139] See the online sales directive, art. 14

[140] The new proposal for harmonized rules on certain aspects concerning contracts for the supply of digital content, Workshop for the Juri-Committee, 2016, p. 28

Although Professor Hugh Beale thinks the new directive has some advantages for the consumers, he also stresses that some issues should be adjusted in more suitable approach. Article 14 of the Online Sales Directive can be an arguable rule, which stipulates access to remedies for non-conformity of the goods within 2 years. The option of setting a deadline may affect the interest of consumers in certain aspects. There is no doubt that consumers are willing to attain more warranty period as possible. But the legislation needs to keep a balance between consumers and merchants. Moreover, the EU's merchants provide an option to conclude a service contract for a longer warranty. This is also an efficient solution. From this perspective, the Online Sales Directive is not efficient shelter for the consumers.[141] The lawmakers, on the other hand, choose the same two-year period, under which the burden of proof is undertaken by the seller in case of contractual non-conformity.[142]

Another controversial rule is included in the Online Sales Directive, which is the termination to contract for the consumers. First of all, from the name of these articles, it seems just article 13 stipulate this affairs ("the consumer shall exercise the right to terminate the contract")[143] and article 9 handle with this affairs. What's more, article 13 itself is concerned with non-conformity: for instance, as prescribed in paragraph 1 of article 13 that the "the consumer shall exercise the right to terminate the contract by notice to the seller given by any means",[144] but does not mention how the notice should specifically perform for the consumers.[145] Furthermore, how to regulate the application of the right is not stated in this article. The selection of the Commission looks contradictory because the consequences do not reach the proposal of lowering the divergence of national legislation on this issue without any novel regulation.[146]

In addition, the principle of termination is not specified as a precise series of regulation in the Digital Content Directive. Especially, the fact that consumers are not allowed to use the urgent termination of the contract as a general rule, which creates some suspicion. In article 12 of the DCD, if the digital content does not meet the requirements of the concluded contract, getting the product version to meets the conformity with the contract is the first step. Only in situation where this is unlikely to happen, the second step is to reduce the price or terminate the contract on the basis of conditions. Article 11 also creates extra uncertainty — "Where the supplier has failed to supply the digital content in accordance with article 5 the consumer shall be entitled to terminate the contract immediately under article 13".[147] — Which further come up with an

[141] H. Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p, 19
[142] H. Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p, 19
[143] See the Online Sales Directive, art.13.1
[144] See art.13.1 Online Sales Directive
[145] V.Mak, The new proposal for harmonized rules for the online sales of tangible goods: conformity, lack of conformity and remedies, p. 10
[146] The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, Workshop for the Juri Committee, 2016, p. 25
[147] See art.11 of the DCD.

assumption that consumers would terminate contracts instantly once they could not provide the goods. It is crucial that the requirement is to correctly recognize between the two presumptions and to maintain the right to an immediate termination in any case.[148]

Given all the factors, what are the principal features of these two directives? First of all, the legislations are technically impartial. Furthermore, they are striving to construct a legal foundation that will not go out of time. The purpose of the European Commission is through the introduction of these two proposed directives, to make clear the ideas of the directives and to propose a uniform set of rules so that solutions could rapidly and directly be found when problems arise. Article 2 of the Online Sales Directive is probably the most relevant piece of legislation, since the meaning of distance sales contract is clarified by it.[149] It is absorbing to note that the application scope of this article can be seen from this definition, the contract "by means of distance communication a contract" is also covered: therefore, this item not only includes the online sales, but also covers all the contracts, such as by phone, email or mail way agreed by contract.[150]

Although to improve the legal certainty is the focal purpose of the two proposed directives, there are some defects and gaps, which are not regularly useful for the readers. As stated before, Article 2 of the Digital Content Directive should be regarded as the basis for the DCD, but introducing a wild definition has decided at the same time the lack of legal certainty and clarity. In fact, Article 2 is distinguished into three types of the digital content: "(a)data which is produced and supplied in digital; (b)a service allowing the creation, processing or storage of data in digital form; (c)a service allowing sharing of and any other interaction with data in digital form".[151] The only same characteristic of which is the existence of the digital form. As a result, considering the huge distinctions between them, it is possible to deal with different situations in the same approach.[152]

As can be seen, the rules of termination are stipulated by Article 13 according to title of articles, but another presumption of immediate termination is stipulated by Article 11 and termination of long–term contracts are stipulated by Article 16 in fact. Obviously, it is not amicable for the readers. It should pay attention to Article 16: at first glance, it seems merely stipulates termination of long-term contract on the preface, but actually this matter is covered by Article 13 and 15.[153] The lack of clarity occurred

[148] V.Mak, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content (termination, modification of the digital content and right to terminate long term contracts), p. 8-9
[149] See art.2. (d) of the DCD
[150] H.Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p. 12
[151] See art.2 of the DCD
[152] V.Mak, The new proposal for harmonized rules on certain aspects concerning contracts for the supply of digital content, p. 9
[153] V.Mak, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, p. 8

in the title of articles and also occurred in the content: only reading article 12.5 and article 13 together, the reader can understand that the termination of contract is applied only when the contract lacks conformity. For this reason, it may be better to combine the last paragraph of Article 12 with the content of Article 13????. Therefore, it is the better approach that adopting a single article for just a single matter because recalling other articles is not essential.[154] Although having a focused way, all subjects do not fall in the regulation of the Commission.

Online sales and other distance contract are all regulated by the Commission, and excluding all kinds of offline sales. This approach is not supported by the consumer's institutions. Staudenmayer explains that the thought of the Commission is: first of all, on the consultations of the proposal of the Common European Sales Law, the European Parliament was merely willing to support a legal instrument of online sales.[155] Moreover, from the view of economics, this type is the more relevant market. Finally, this option is a result of the strategic method. Because the Commission has not any database about offline sales at that time, comparing to the one on online sales.

4.3 Concluding remarks

Although there are some unclear rules on the Digital Single Market, I still have to say, the Digital Single Market strategy is a wonderful approach launched by the Commission. On the workshop, Staudenmayer points out that this strategy is striving for realizing three goals: first, the DSM is a passage from minimum harmonization to full harmonization; secondly, it is to strive for building a new system of remedy; third, it is to strive for clarifying the rights of consumers; finally, the real strength of the two proposed directives is based on some advantages for consumers brought by the application of the two proposed directives in practice.[156] Therefore, the Commission would like to realize all goals through the Digital Single Market.[157] First is to increase the confidence of consumers; second is to promote cross-border transactions. For the consumers, it means that the same rules apply to any transaction in any Member States;[158] for traders, choosing foreign rules will no longer occur so that the costs of handing with different laws will be reduced.[159]

Chapter 5

[154] V.Mak, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, p. 8
[155] Workshop for the Juri Committee on Legal Affairs of the European Parliament, New rules for contracts in the digital environment, http://web.ep.streamovations.be/index.php/event/stream/160217-1600-committee-juri-poldepc.
[156] Workshop for the Juri Committee on Legal Affairs of the European Parliament, New rules for contracts in the digital environment, http://web.ep.streamovations.be/index.php/event/stream/160217-1600-committee-juri-poldepc.
[157] H.Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p. 25
[158] See the OSD, p.13
[159] See the DCD, preamble (6)

The proposal for a directive on Certain Aspects Concerning Contracts for the Supply of Digital Content

5.1 Brief Introduction to the Digital Content Directive

On December 9, 2015, the European Commission announced a proposal fully called Proposal for a Directive of the European Parliament and of the Council on Certain Aspects Concerning Contracts for the Supply of Digital Content (which I will refer to as the "Digital Content Directive" or "DCD").[160] The DCD has important economic and legal meaning. In terms of economic significance, the purpose of the DCD is to promote the development of the unified digital market, in response for the challenge brought by the rapid development of the digital age, and taking advantages of the digital opportunity to further promote the rapid growth of the digital economy in Europe.[161] In terms of the legal sense, the Digital Content Directive and the proposal for a Directive of the European Parliament and of the Council on Certain Aspects Concerning Contracts for the Online and other Distance Sales of Goods ("Online Sales Directive" or "OSD")[162] both are crucial legislations after failed attempt of the European Common Sales Law. Because the rules of the DCD focus on the defect standard of the subject matter of contracts, the default relief, termination of contracts law and so on, which is the core content of the performance system of the obstacles in the traditional contract law. Therefore, the Digital Content Contracts has great significance for the coordination of the European contract law in the future.

The Digital Content Directive applies to the bilateral contracts concluded by the supplier and consumers, and "the supplier supplies digital content to the consumer or undertakes" under the contract.[163] According to article 2 (1) of the DCD: The "digital content" is composed of two categories, "data" and "service". "The data which is produced and supplied in digital form, for example, video, audio, applications, digital games and any other software, all belongs to 'digital content' ".[164] The "Service" is also divided into two categories, "a service allowing the creation, processing or storage of data in digital form, where such data is provided by the consumer",[165] and "a service allowing sharing of and any other interaction with data in digital form provided by other

[160] Proposal for a Directive of the European Parliament and of the Council on Certain Aspects concerning Contracts for the Supply of Digital Content (Text with EEA relevance), COM (2015) 634 final, (2015/0287 (COD), 9/12/2015.
[161] Communication from the Commission, A Digital Single Market Strategy for Europe
[162] Proposal for a Directive of the European Parliament and of the Council on Certain Aspects Concerning Contracts for the Online and other Distance Sales of Goods, COM (2015) 0635 final, (2015/0288 (COD), Brussels, 9/12/2015
[163] See Digital Content Directive, art.3.1
[164] See Digital Content Directive, art.2.1
[165] See Digital Content Directive, art.2.1.(a)

users of the service".[166] The two services are based on the source of the data as the main criterion for differentiation, namely the data is provided by consumers themselves or by other users. The typical representatives are "cloud computing"[167] and "social media"[168] in the two types of services. As can be seen, the scope of the Digital Content Directive is truly extensive, and the intention of the DCD is to make certain that the directive can adapt to the rapidly developing and changing digital age without being eliminated immediately.

5.2 Conformity criteria of digital content with the contract

The conformity of the digital content with the contract is an important content of the Digital Contract Directive. The DCD is based on the defects standard of the subject matter in the ordinary contract, and makes detailed provisions with the specificity of the digital content. The rules established by the DCD, including subjective standards and objective standards in their types as following the currently prevail approach.[169]

5.2.1 Priority of subjective criteria

Article 6(1) of the DCD stipulates the subjective criteria of the conformity of digital content with the contract. In other words, the content promised in the contract must be conformed firstly. For this, the contractual agreement of the parties has a decisive significance.

First of all, digital content shall cohere with "the quantity, quality, duration and version and shall possess functionality, interoperability and other performance features such as accessibility, continuity, and security".[170] But the parties must already prescribe these characteristics in "any pre-contractual information which forms an integral part of the contract".[171] As can be seen, several essential elements of the conformity are listed in article 6.1.(a), including functionality, interoperability, accessibility, and security. There is no doubt that the significance of the security of the digital content should be highlighted. But what kind of the criterion of technology security is needed in the contractual situation, which is not mentioned in the DCD? However, the definite and trustworthy standards are not formulated by most of the Member States in Europe, so that this element (security) may not possess the defined contents in the short time. Still,

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[166] See Digital Content Directive, art.2.1.(b)

[167] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Unleashing the Potential of Cloud Computing in Europe, SWD (2012) 0271 final, < https://eur-lex.europa.eu/legal-cotent/EN/TXT/?qid=15284040902401%uri=CELEX:52012SC02 71>

[168] See Digital Content Directive, recital. (11)

[169] See eg annex art 99–102 CESL; H.-W. Micklitz and N. Reich, 'The Commission Proposal for a 'Regulation on a Common European Sales Law (CESL)' – Too Broad or Not Broad Enough?', http://ssrn.com/abstract=2013183

[170] See Digital Content Directive, art.6.1.(a)

[171] See Digital Content Directive, art.6.1.(a)

when the suppliers are not able to forecast the intrinsic security defects happening at the beginning of supplying the digital content, the consumers may find and fix it since the burden swift of the DCD. Moreover, the responsibility for the security risks is only underlined by the suppliers when the digital environment has changed (for instance, the consumers install another software later). For realizing how crucial role played by the digital environment for the function of digital content, the interoperability of digital content is exceedingly stressed by the DCD. The interoperability means "the ability of digital content to perform all its functionalities in interaction (not portability) with a concrete digital environment (in other words, hardware and software particularly the operating system)". [172] In terms of functionality and interoperability, there are requirements of the parties for nature of the digital content.

There are three reasons: first of all, the nature of the digital content determines that it must interact with other digital devices so that it can properly operate. This interaction involves: not only hardware factors such as the processor operating speed, graphics card characteristics, but also software factors such as operating system and player version. Furthermore, the scope of functionality refers to how to use digital content, and whether it exists technology limitation protected by area coding. Thirdly, normal operation of digital content should be compatible with the consumer's hardware and software environment. When digital content appears defective caused by incompatibility with digital environment of consumer, and this compatibility shall be the responsibility or control of the supplier, or the consumer shall install it according to the instructions provided by the provider but the incompatibility resulted from defects of instructions, at this situation, the digital content itself shall not be deemed to comply with the agreement.[173] However, Recital 26 of the DCD states that "it should also refer to the absence or presence of any technical restrictions such as protection via Digital Rights Management or regional coding".[174] It means that these restrictions as the part of the contract are not forbidden by the DCD, thus, the suppliers are able to freely limit the using of digital content within the bounds of the environment of their own instruments or software. The interoperability of digital content may cause issues: can the suppliers suggest the consumers that the digital content shall be merely devised for a specific environment; or are the suppliers obliged to clearly inform the consumers which type of the digital environment will make the digital content inoperable because of the necessity of transparency? Under any circumstances, the suppliers shall prove that they adequately performed the notification obligation for the consumers as stipulated in article 9(2) of the DCD.

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[172] See Digital Content Directive, art.2.9

[173] Aurelia Colombi Ciacchi and Esther van Schagen，"Conformity under the Draft Digital Content Directive: Regulatory Challenges and Gaps－An Introduction"，in Reiner Schulze, Dirk Staudenmayer and Sebastian Lohsse eds, Contracts for the Supply of Digital Content: Regulatory Challenges and Gaps，Münster Colloquia on EU Law and the Digital Economy II，Nomos，2017，p.106.

[174] See Digital Content Directive, Recital (26)

Secondly, the digital content shall conform to the special purpose "which the consumer requires it and which the consumer made known to the supplier at the time of the conclusion of the contract and which the supplier accepted".[175]

Thirdly, the digital content may "be supplied along with any the instructions and customer assistance" as proved in the contract.[176]

Finally, the digital content should "be updated" according to the contractual agreement.[177] Moreover, the beta-version is given the priority by the subjective criteria. In practice, the suppliers of the digital content frequently publish the beta-version. For this reason, the parties know that the version still has defects or loopholes, the purpose of the trial is exactly to precisely obtain the necessary feedback in advance to the elimination of loopholes. This is especially significant for innovative small-scale enterprises. Importantly, prioritizing the statutory objectivity standard of conformity (which I will discuss in the next section) may hinder the development of such enterprises activities. Moreover, this item puts the decision of whether and when the digital content needed to patches or be updated necessity on the hand of parties.[178]

When judging whether the digital content conforms to the contract, the subjective standards as above should be applied preferentially, which is the requirement of the freedom of contract. The parties of the contract should have the right to determine the specific content and terms of the contract.[179]

5.2.2 Objective standards of lack of conformity

Although subjective criteria are prior to objective criteria, this is based on a precondition that there is a clear and detailed (i.e., transparent) agreement in the contract,[180] whether by general terms or individual agreements. Namely, the conformity of digital content with the contract can be assessed based on objective criteria only when there is no explicit standard in the contract. Without an agreement, the conformity standards of objectivity as stipulated in article 6 (2), and article 7 and 8 of the DCD shall be applied.

a) General objective criteria

The objective criteria for whether the digital content is suitable, which means "the digital content shall be fit for the purposes for which digital content of the same

[175] See Digital Content Directive, art.6.1.(b)
[176] See Digital Content Directive, art.6.1.(c)
[177] See Digital Content Directive, art.6.1.(d)
[178] See Digital Content Directive, art.6.4
[179] See Mak, "The new proposal for harmonized rules on certain aspects concerning contracts for the supply of digital content". Workshop for the Juri Committee on Legal Affairs of the European Parliament, New rules for contracts in the digital environment, http://www.epgencms.europarl.europa.eu/cmsdata/upload/a6bdaf0a-d4cf-4c30-a7e8-31f33c72c0a8/pe__536.494_en.pdf, p.15
[180] See Digital Content Directive, art.6.2

description would normally be used including its functionality, interoperability and other performance features such as accessibility, continuity, and security".[181] Although such objective criteria surely bring with certain inevitable uncertainty as a result, the situation gets worse in certain ways since the European Commission strives at making this standard clear. First of all, article 6.2.(a) stipulates "the digital content is supplied in exchange for a price or other counter-performance than money".[182] Such distinction of exchanges would effect a fair competition for business frameworks supported on direct payments and those footed on merchant operation of (personal) data. Secondly, Article 6.2.(b) tries to clarify the criterion which is thought about by the DCD, "any existing international technical standards and applicable industry codes of conduct and good practices".[183] In terms of the objective standard, because digital legislation often lags behind commercial practices, and digital products have the extremely high professionalism and updates are exceedingly quick, it is useful for introducing industry standards, technical standards, and timeliness into the objective criterion. Also, this is a breakthrough of digital contract rules for the traditional defects theory. It sounds reasonable for abiding by these standards, but actually the European Commission does not lay down any requirements about procedure makings or which institutions can stipulate standards. This gives too little care to the thinking of legal consumers' representations or the interest of consumers. [184] Comparing with the encouragement of the trade institution and other representative organizations as per recital (28) of the DCD, ignoring the interests of consumers may an intentional choice for rapid implementation. Have to say, there is nowhere the criterion of rational expectations of consumers. Thinking about all the above, Article 6 actually could not improve the level of consumer protection for the digital content.[185] The digital content belongs to the individual stipulation of the parties as per article 6.1, which means that in practice the suppliers would preliminary design the terms and conditions. Therefore, heavily abstraction about this directive may lead to the unbalance with deliberation for the common requirements of similar types of contract. [186] While only when these regulations are missing or opacity, the objective standard of article 6.2 make sense to replacing invalid elements for the validity of contract as a whole.

In addition, the digital content in practice "shall be supplied over a period of time, and in conformity with the contract throughout the duration of that period".[187] In aspects of editions of the digital content, if there is no contrary agreement, "digital content shall

[181] See Digital Content Directive, art.6.2
[182] See Digital Content Directive, art.6.2.(a)
[183] See Digital Content Directive, art.6.2.(b)
[184] Faber, Bereitstellungspflicht, Mangelbegriff und Beweislast im Richtlinienvorschlag zur Bereitstellung digitaler Inhalte, in Wendehorst and Zöchling-Jud (eds), p.58
[185] V.Mak, The Regulation of Digital Content Contracts in the Optional Instrument of Contract Law, European Review of Private Law 6-2011, 729. Http: // www. Epigen. Europarl. Europa. Eu / cmsdata / upload / 4a1651c-0db0-4142-9580-89b47010ae9f / pe_536.493_print. Pdf, p.15
[186] H.Beale, Scope of application and general approach of the new rules for contracts in the digital environment Workshop of JURI-Committee of the European Parliament, p.20-21.
[187] See Digital Content Directive, art.6.3

be supplied in conformity with the most recent version of the digital content which was available at the time of the conclusion of the contract".[188]

b) Integration of the digital content

The unconformity of integration of the digital content was stipulated in article 7 of the DCD. A certain digital environment is generally needed by the operation of digital content. For example, the software purchased by the consumers can be used by operating with computer hardware. As can be seen, the function of digital content mostly depends on other digital content, software or environment, which may cause certain problems. When the digital environment alters, or the services suppliers stop the services depended on the digital content, the digital content may break down even though the digital content has no defects.

According to article 2 (8) of the DCD, the digital environment means "hardware, digital content and any network connection to the extent that they are within the control of the user".[189] Based on the operation of digital content relies on digital environment, thus article 7 of the DCD stipulates: "Where the digital content is incorrectly integrated into the consumer's digital environment, any lack of conformity resulting from the incorrect integration shall be regarded as lack of conformity of the digital content if":[190] firstly, "the digital content was integrated by the supplier or under the supplier's responsibility".[191] Secondly, "the digital content was intended to be integrated by the consumer and the incorrect integration was due to shortcomings in the integration instructions where those instructions were supplied in accordance with point (c) of article 6(1) or should have been supplied in accordance with article 6(2)".[192] In other words, the digital content shall be directly integrated into the software and hardware of the consumers. If the suppliers make mistakes in integrating the digital content, the incorrect integration would be regarded as the unconformity of the digital content with the contract.

This article is the same with the rules from the Consumer Sales Directive[193], the responsibility of the suppliers is similarly limited to an integration made by themselves or wrong instruction supplied by themselves. This term looks good for a supplement and extension of the goods sales' principles, but actually it would make the margins of this term unclear. Especially, when the suppliers operate the implementation: when consumers activate an integration, is this to be regarded as the behaviors made by the suppliers? How about the consumers install an App on an App routine of his smartphone? Like consumers install an App in iTunes Store. Is this behavior regarded as the integration performed by the suppliers? The digital content exceeds the range

[188] See Digital Content Directive, art.6.4
[189] See Digital Content Directive, art.2.(8)
[190] See Digital Content Directive, art.7
[191] See Digital Content Directive, art.7.(a)
[192] See Digital Content Directive, art.7.(b)
[193] Directive 1999/44/EC, art.2.4

controlled by the suppliers since the supplier is out of control of the digital environment, it is logical that the suppliers shall shoulder the responsibility when wrong integration routine supplied without any erroneous operation by the consumers.

The problem arose from the burden of proof about the exact application of digital content. In terms of article 9.1 of the DCD, "the supplier bears the burden of proof for the correctness of the given assembly instructions. Furthermore, he must prove the digital content's conformity with the contract".[194] Moreover, "the consumer bears the burden of proof for his digital environment" in terms of article 9.2.[195] In fact, the integration routine installed correctly depends on the digital environment of the consumers. From this perspective, all of problems could not be solved by those rules. The suppliers shall comply with the regulation of article 9.3, when the consumers performed the obligation of cooperating with the suppliers in checking the consumers' digital environment. This approach is similar to the regulations of capital market law because the assessment of online goods and services can be mechanically implemented, thus "know your consumers" at previous is useful to be accepted.

It is surely keep in mind that this approach does not include the offline goods which internet connection is not be needed after installation. Moreover, article 7 excludes that the digital content which used to be accurately applied, despite that currently loses itself the function (because the digital environment changed rather than the suppliers caused). For example, the consumers link with a services supplier who has already ended their services.

c) Defects of right

The legal deficiencies and major deficiencies both are covered by the conformity of the Digital Content Directive. The former is exceedingly crucial for the digital content, since the digital content itself is restricted by intellectual property rights. Article 8 of the DCD stipulates that the digital content shall have not any defects of right. According to this provision, "At the time the digital content is supplied to the consumer, the digital content shall be free of any right of a third party, including based on intellectual property, so that the digital content can be used in accordance with the contract".[196] And if "the digital content is supplied over a period of time"[197], so that the warranty obligation of defects as above mentioned for the suppliers should keep "for the duration of that period".[198] There is no doubt that this term is not offended against the principle of territoriality. Because the field limited by the specified clauses of the contract, which the rights limitation about territory included.[199] Even if article 8 protects the consumers

[194] See Digital Content Directive, art.9.1
[195] See Digital Content Directive, art.9.2
[196] See Digital Content Directive, art.8.1
[197] See Digital Content Directive, art.8.2
[198] See Digital Content Directive, art.8.2
[199] Proposal for a Regulation of the European Parliament and of the Council on ensuring the cross-border portability of online content services in the internal market COM (2015) 627 final 2015/ 0284 (COD), http://ec.europa.eu/newsroom/dae/document.cfm?action= display&docid=12524.

would not be prejudiced by the third party rights, but it would not be regarded as the limitation for any rights of the title owner. The Digital Content Directive clearly exclude the copyright law from its scope of regulation ("This Directive should not deal with copyright and other intellectual property related aspects of the supply of digital content".[200]), so that protecting individual rights of copyright owners are not affected. If this "defect" (the third party rights is within the digital content supplied by the suppliers) exists in the digital content at the beginning, the suppliers shall underline this responsibility. Since closely relevance between defects of right and copyright so that it would be analyzed explicitly as below.

First of all, reasonable expectation of consumers intertwines with license contract. The biggest controversy about the conformity standard is whether or not to introduce the standard of "reasonable expectations of consumers". Some people think that reasonable expectations should be used as the criteria for save clause.[201] In the contract for the supply of the digital content, consumers cannot obtain full ownership of digital content, and obtaining of rights only through approach permitted to use. The expectation of consumers on the functionality and usability of the object depends on the holder of intellectual property rights and the operator in large extent. It also depends on the license terms, and the fairness and reasonableness of such terms itself are difficult to be assessed. Due to the intangibility and innovation of digital content, there is no general standard for judging reasonable expectations of consumers in contracts for the supply of digital content. The logical starting point for reasonable expectations of consumers is often related to whether the operator informs the buyer about the information of use restriction related to the digital content (for example, private copying is permitted only in the exceptional situation), and the fairness of the standard terms itself containing the use restriction. This is in turn related to the fairness and effectiveness of the format clause itself containing the use restrictions. In other words, license agreements and defects of right are logical prerequisites for reasonable expectations of consumers.

In the system of traditional defects, the core of contents is generally defect of the object, and the discussion of the defects of right is often focused on specific types of contracts. However, in the contract for the supply of digital content, the defects of right are particularly important, and the object of contract for the supply of digital content is mostly the transfer of rights to property use rather than the transfer of property ownership. "At the time the digital content is supplied to the consumer, the digital content shall be free of any right of a third party, including based on intellectual property, so that the digital content can be used in accordance with the contract(Article 8 of the Digital Content Directive)".[202] If the supplier ceases to provide the relevant digital content because of infringing on the rights of third party, the third party rights

[200] See Digital Content Directive, recital (21).
[201] Aurelia Colombi Ciacchi and Esther van Schagen, "Conformity under the Draft Digital Content Directive: Regulatory Challenges and Gaps－An Introduction", Contracts for the Supply of Digital Content: Regulatory Challenges and Gaps, p.117
[202] See art.8.1 of the Digital Content Directive.

may substantially violate the consumer from using the digital content. Therefore, the supplier is obliged to ensure that the provided digital content does not harm the rights of third parties, such as copyrights that are related to digital content and prevent consumers from using digital content. Obviously, the permission agreement is a point of convergence of institutions between digital content conformity and rights. However, as the Digital Content Directive does not cover the transfer of reproduction rights of digital content or permission issues, the Member States should introduce more explicit regulations in the future. For example, when operators sell digital content, they have the obligation to guarantee the existence of permission.[203] In fact, digital content with limited rights can also be declared through negatively quality agreement. That is, it is clearly stated in the contract that the object has certain limitations, such as limitation of the use rights, or it can only be compatible with the software provided by the same provider.

What's more, the cross between the right to use and copyright. There is a natural connection between digital content contract and intellectual property law, but there are also natural contradictions at the same time. This contradiction is rooted by the difference between the value of right and definition of property. In contracts of sales, the seller is obligated to transfer the ownership of the subject matter. The starting point of the contract law is that the buyer obtains all the rights of the subject matter and the subject matter conforms to the concluded agreement in the contract. But as far as intellectual property law is concerned, obtaining a copy of the digital content does not mean having the copyright of digital content. On this occasion, contract law and intellectual property conflict on the understanding of digital content's right as object of transactions. Although it has appeared in the sale of goods, the contradictions in the intangible digital content is more highlighted. Most of the digital content belongs to the intellectual property, especially the object of copyright law. When transferring digital content, the party providing digital content does not provide original data, but only a copy of the data is provided, which is still under the control of the copyright owner. One part of providing digital content can transfer physical carriers of digital content for the consumer, but the ownership of digital content is not transferred, and the intellectual property of digital content still belongs to the obligee, the consumer just use the digital content by express or implied license.[204] In other words, the obtained competence of consumer about digital content is different from the right to complete ownership, and there exist certain restrictions. The reasons for this dissimilarity mainly lies in the different point of view with regards to the author's right for the contract law and intellectual property rights. Protecting rights of the copyright owner is a starting point of the intellectual property law. The contract law is based on the licensee's point of view. Therefore, when does consider the reasonable expectation of the buyer and rights

[203] Reiner Schulze, Dirk Staudenmayer and Sebastian Lohsse, Contracts for the Supply of Digital Content: Regulatory Challenges and Gaps－An Introduction, Contracts for the Supply of Digital Content: Regulatory Challenges and Gaps, p.28

[204] N. Helberger，M.B.M Loos, Lucie Guibault, Chantal Mak and LodewijkPessers, Digital Content Contracts for
Consumer, p.46

of the copyright owner, more detailed rules shall be introduced. For example, copyright owners will face more though challenges, which brought by an illegal copy of digital content, low-cost sales and unauthorized use of digital content. For this reason, neither expanding the specificity rights of the copyright owner, restricting the copyright of digital content for the buyer, or through the new technology to control the spread and sales of digital content. For example, measures of technical protection, protection of digital copyright, conditional access and systems of access control, digital watermark and tracking technology. Through these approaches make the copyright owner obtain accurate information how to use of his work.[205] In addition, for the obtained digital content of consumers, the quality agreement of the provider and the consumer concluded in contract, which can be incorporated into a negative quality agreement, namely a precise agreement that the use of a product has certain limitations. Furthermore, the owner of copyright may affect consumer rights such as privacy and freedom of expression for the right to develop digital content.[206]

Last but not least, the special nature of license contracts. License contracts mostly apply the general principles of contract law. Because it is limited by the historical background of the legislation of the contract law, the general principles of the contract law are mostly based on object transactions. Therefore, in the design of rules, the special nature of copyrighted works should be considered on aspects of work particularity's protection. The sales of copyrighted works are divergent from tangible objects, and control of the seller for the object of transactions is not be completely cut off by copyright. On the contrary, when selling goods, the obligations of the seller and the buyer are usually terminated after the delivery of the object, and when selling the copyrighted work, such control may even continue after the transfer. For instance, the control of use and form for works. Therefore, appropriate rules should be introduced for tangible or intangible property in the license contract. License contracts and sales contracts should be properly distinguished. Copyright infringement may also lead to breaches of contract. Differentiation between tangible things and intangible things should also be considered.[207] In addition, traditional copyright law emphasizes that the territoriality of rights and digital content will change the regional features of copyright law in a certain sense.[208] The consumer has more restrictions on the use of digital content than traditional consumer products. For example, digital forms of audio or video playback have regional geographical restrictions. The connection between the copyright and how to restrict about the contract for the supply of digital content is also a matter of coordination between contract law and intellectual property law. When signing

[205] N. Helberger，M.B.M Loos, Lucie Guibault, Chantal Mak and LodewijkPessers, Digital Content Contracts for
Consumer, p.45

[206] N. Helberger，M.B.M Loos, Lucie Guibault, Chantal Mak and LodewijkPessers, Digital Content Contracts for Consumer.

[207] Stojan Arnerstl, Licensing Digital Content in a Sale of Goods Context, GRUR Int., 2015, p.882.

[208] David G.Post, How the Internet Is Making Jurisdiction Sexy (again) , International Journal of Law and Information Technology, Vol. 25, 2017, p.253.

contracts for the supply of digital content, it is necessary to pay more attention to the limitations of license agreements of end-user.

5.2.3 Conclusions

The subjective standard and objective standard of the Digital Content Detective reflects the characteristics of digital content, but there are still some problems, especially with objective standard. First of all, for the subjective standard, even though the interoperability and functionality elements of the quality agreement are in line with characteristics of the digital content, due to the professional advantage of the operator, the stipulated content is often highly professional and difficult for the consumer to understand. Therefore, the quality requirement of the above factors leads to overlarge space of content agreed by the operator in the certain extent, which is unfavorable to the consumer. In terms of objective standard, the timing of risk transfer for complex products of digital content is more difficult to be confirmed. For example, a contract for the supply of digital content with continuity in a certain period, or a contract for the supply of digital content with both hardware and software, there is the certain difficulty in combining industry standards and contract prices when confirms the purposiveness of complex products of digital content.

What's more, whether the enumeration method of the Digital Content Directive on the conformity with the contract should exhaust the characteristics of digital content or adopt an open attitude to reserve space for development. At present, there is still a lack of a clear position.[209]

Thirdly, the Digital Content Directive does not deal with common problems in practice. For example, if the supplier loses control of digital content during the installation process, or if the supplier proves that they have fulfilled obligations of correct installation, or that the digital content has been changed due to a patch or upgrade, the changed digital content whether or not be protected by original security rights, these issues is still lack of clear rules;[210]

Last but not least, the contract is also adversely affected by the definition of conformity. The reason is that the standard of conformity reflects the particularity of the typical payment for contracts for the supply of digital content, such as version, function, compatibility, limitation of time, accessibility, continuity, and security. The above-mentioned content as a typical performance of the contract is different from the typical performance in the traditional contract law with the sales contract as a prototype. In the case of one-time immediate payment, such as providing the creditor with a service of 3D print at once, this special typical payment resembles a sales contract. When the

[209] Aurelia Colombi Ciacchi and Esther van Schagen, Conformity under the Draft Digital Content Directive: Regulatory Challenges and Gaps－An Introduction, 2017, p.112-120

[210] Gerald Spindler, Vertrge über digitale Inhalte－Haftung, Gewhrleistung und Portabilitt，Vorschlag der EUKommission zu einer Richtlinie über Vertrge zur Bereitstellung digitaler Inhalte, MMR, 2016, S.219 ff.

performance is continuous provided, such as providing audio to the creditor for a period of time, this type of payments is more similar to service contracts.211 Differing types of performance will lead to differences of performance in the contractual risk burden and the defect warranties right. For example, the sales contract is focused on the burden of risk. After the risk is transferred, the rules of sales law will be difficult to handle the update requirements of software properly, and it will not be able to deal with the defects caused by the update. Similar problems also exist in continuous access to cloud computing contracts.[212]

5.3 Remedial system of the directive on digital content

The Digital Content Directive particularly stipulates the liability system for suppliers of digital content contracts, that is, the relief in rights system of the consumers, mainly including remedial performance, price reduction, cancellation, and compensation for losses. The supplier' breach of contract is a precondition for these remedies, including "any failure to supply the digital content; any lack of conformity which exists at the time the digital content is supplied; and where the contract provides that the digital content shall be supplied over a period of time, any lack of conformity which occurs during the duration of that period".[213] All of these are not only an indispensable part of European Consumer Protection Law[214] but also bring with some specific elements to the supply of digital content.

5.3.1 Supplementary performance

When the digital content lacks conformity with the contract, according to the first sentence of article 12.1, "the consumer shall be entitled to have the digital content brought into conformity with the contract free of charge, unless this is impossible, disproportionate or unlawful".[215] With regard to the restriction for "disproportionate", the second sentence of article 12.1 defines that its judgment as supplementary performance is "the cost it imposes on the supplier is unreasonable",[216] and lists two reference factors for judging certification costs are unreasonable: firstly, "the value the digital content would have if it were in conformity with the contract".[217] Secondly, "the significance of the lack of conformity with the contract for attaining the purpose for which the digital content of the same description would normally be used".[218] The restriction of "unlawful" has significant meaning, because the digital content provided

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211 Reiner Schulze，Supply of Digital Content: A New Challenge for European Contract Law，in Alberto De Franceschi ed, European Contract Law and the Digital Single Market, The Implications of the Digital Revolution，Intersentia, 2016, p.136.

212 Christian Wendehorst, Die Digitalisierung und das BGB, NJW, 2016, S.2612.

213 See Digital Content Directive, art.10

214 European Consumer Protection Law, http://www.legislation.gov.uk/ukpga/1987/43.

215 See Digital Content Directive, art.12.1

216 See Digital Content Directive, art.12.1.(a)

217 See Digital Content Directive, art.12.1.(b)

218 See Digital Content Directive, art.12.2

by the suppliers may often have been limited by the upstream right holder. When the suppliers remediate the digital content of disconformity with the contract, it may violate the restrictions of these rights. The suppliers can claim that this remedy will result in "unlawful" noun is missing therefore the suppliers refuse to Supplementary performance. This rule of "unlawful" noun missing thus has wide space for the application.

5.3.2 Reduction and Compensation

Consumers can also request price reductions when the digital content lacks conformity of digital content with the contract in the light of article 12(3) of the DCD. The price reduction is also a kind of secondary remedy right following the classic hierarchy of remedies. Only when remedies of the suppliers cannot be demanded because certain reasons or cannot reasonably be expected, then the price reduction or termination of the contract can be advocated. The specific amount of "the reduction in price shall be proportionate to the decrease in the value of the digital content which was received by the consumer compared to the value of the digital content that is in conformity with the contract".[219] Consequently, the approach of article 12 is same as the concept of prior legislations in the Consumer Sales Directive.[220] "The consumer shall be entitled to have the digital content brought into conformity with the contract"[221] – "if the supplier fails to do so within a reasonable period of time" – "shall be entitled to either a proportionate reduction of the price in the manner set out in the decrease in value".[222] Thinking about that the dissimilar nature and categories of contracts are covered in the DCD, thus the directive is flexibly stipulates without any "fixed deadlines for the exercise of rights or the fulfilling of obligations related to that digital content".[223]

Article 14 stipulates that the right of consumers to claim damages. The first sentence of article 14.1 states that "The supplier shall be liable to the consumer for any economic damage to the digital environment of the consumer caused by a lack of conformity with the contract or a failure to supply the digital content".[224] For the amount of compensation for damages, the second sentence of article 14.1 states that "Damages shall put the consumer as nearly as possible into the position in which the consumer would have been if the digital content had been duly supplied and been in conformity with the contract".[225] However, the Digital Content Directive only stipulates that the losses caused by consumers' "digital operating environment" are compensable. It does not include damages to digital content itself and possible indirect damages. For example, if the digital content contains a virus, computer documents of the consumer are deleted or the losses caused by theft of bank account funds.[226] The explanation in Recital (44)

[219] See Digital Content Directive, art.12.4
[220] Polished tiles, case65/09&case87/09, EU:C:2011:396.
[221] See Digital Content Directive, art.12.1
[222] See Digital Content Directive, art.12.3 and 12.4
[223] See Digital Content Directive, recital (36)
[224] See Digital Content Directive, art.14.1
[225] See Digital Content Directive, art.14.1
[226] V. Mak, the new proposal for harmonized rules on certain aspects concerning contracts for the supply

of the DCD also limits the damages of compensation to “hardware or software” as if it intends to exclude other losses from the scope of compensability. There is a view that this restriction may seriously reduce the level of consumer protection.[227]

5.4 Termination of the contract on digital content

5.4.1 Right of Termination for the Failure to Supply

The Digital Content Directive stipulates the circumstances under which the consumer is entitled to rights of termination in article 11, article 3.3 and article 16.1.[228] Article 11 deals with the right of cancellation of the consumer's failure to provide a digital content contract. The supplier of the digital content of contract is obliged to provide digital content to the consumer or a designated third party in light of article 5.1, and “the supplier shall supply the digital content immediately after the conclusion of the contract, unless the parties have agreed otherwise”.[229] If the supplier fails to provide digital content in accordance with the provisions of article 5, the consumer is entitled to terminate the contract under article 11 immediately, that is, there is no need to urge the supplier and set a remediation period for him to continue performing. The consumer can directly terminate the contract.[230] However, the instant termination right does not apply to the permanent digital content carrier specified in article 3.3 because the right of termination of the permanent digital content carrier has already been included in the European Consumer Rights Directive.[231] According to this Directive, the consumer can only terminate the contract after setting the remediation period. Moreover, the short stopping of supply of digital content shall not be regarded as non-conformity with the contract in terms of article 12.[232] The problem may be caused by the situations of interruptions. If the services are included in the contract by the suppliers, for example, short stopping for maintenance and lack of entrance on the website of suppliers or Cloud Services. In this approach, the suppliers can avoid their responsibility and indirectly impose restrictions on the remedies of consumers. What’s more, as for not opting Annex article 107, the Digital Content Directive does not keep out the contract

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of digital content, workshop for the Juri Committee on Legal Affairs of the European Parliament, New rules for contracts in the digital environment, 2016, p.25-27

[227] H. Beale, Scope of application and general approach of the new rules for contracts in the digital environment, p.22

[228] The provision of Article 15.1 of the DCD also concerns to consumer's right of termination, but this article mainly stipulates the change of long-term digital contract, so it is omitted in here.

[229] See Digital Content Directive, first sentence of art.5.2

[230] See Recital 35 of the DCD.

[231] Directive 2011/83 / EU of the European Parliament and of the Council of 25 October 2011 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, http://eur-lex. europa.eu/legal-content/EN/TXT/? Uri = celex% 3A32011L0083.

[232] However, due to various types of contracts related to digital content that cannot be defined in the digital content what can be considered to be "short" the duration of the interruption, so leave this decision to the court.

which exchanges for monetary, giving the same rights like other people to consumers who "pay" for their data.

5.4.2 Right of Termination for the Lack of Conformity

Paragraph 3 of article 12 specifies that the right of the consumer to terminate the digital content when it is not conformity. To sum up, the right of rescission in this article has three elements—the severity of non-conformity, secondary, and non-conformity.

a) The Secondary Nature of the Right to Rescission in case of Non-conformity

The secondary of the termination right refers to the fact that the various rights arising from the breach of contract are exercised in a certain order, and the right of termination is the right of the next priority. Specifically, in the event of disagreement on digital content, the consumers may first request the supplier to remedy their performance in accordance with article 12, paragraph 1. Only if the remedial right cannot be exercised due to certain reasons, consumers can get the right to terminate. Article 12.3 specifically specifies four situations that meet the requirements of the secondary nature: "First, the remedy to bring the digital content in conformity is impossible, disproportionate or unlawful; secondly, the supplier has not completed the remedy within the time specified in paragraph 2; thirdly, the remedy to bring the digital content in conformity would cause significant inconvenience to the consumer; fourth, the supplier has declared, or it is equally clear from the circumstances, that the supplier will not bring the digital content in conformity with the contract".[233]

The justification of secondary requirements is the principle of strict adherence to contracts. By setting stricter contract relieving requirements, the contract should be continued as far as possible. Because the supplier took the opportunity to perform the contract for the second time, they can eliminate the breach of contract by making up for the deficiencies in the digital content. In this way, the contract is finally fulfilled and the destiny of the liquidation of the contract due to the termination is avoided.

b) The Severity of Non-conformity

The right to termination arising from non-conformity is also subject to the severity of non-conformity. Article 12.5 stipulates a clear stipulation on this: "The consumer may terminate the contract only if the lack of conformity with the contract impairs functionality, interoperability and other main performance features of the digital content such as its accessibility, continuity and security where required by article 6 paragraphs (1) and (2). The burden of proof that the lack of conformity with the contract does not impair functionality, interoperability and other main performance features of the digital content shall be on the supplier".[234] Therefore, the consumers have the right to terminate contract without any other notices for the suppliers. What's more, the

[233] See Digital Content Directive Art. 12.5.
[234] See Digital Content Directive, Art.12.5

consumers have not the right to terminate the contract when the suppliers are not given the remedial chance by consumers to make the digital content into conformity with the contract.[235] And there is an interesting situation that should be noticed: the digital content directive clearly stipulates in article 6.1.(b) that "the conformity of the digital content with the contract shall be fit for any particular purpose for which the consumer requires it and which the consumer made known to the supplier at the time of the conclusion of the contract and which the supplier accepted".[236] It means a failure to fit for the particular purpose for which the consumer requires it can be regarded as the non-conformity with the contract. Therefore, this case at least belongs to the open types of "other main performance features"[237] as per article 12.5 of the DCD.

However, there are some cases which are still not mentioned by the European Commission. For example, if some slight and insignificant defects increase as time goes on, which may have the right to terminate the contract. Even though these minor defects shall be not regarded as the reason of termination of the contract, the overlapped effect of these minor defects would affect the "functionality, interoperability and other main performance features of the digital content"[238] of the digital content with the contract in terms of article 6.1 and 6.2 of the DCD. This covers frequent and short-time interruption of the supply of the digital content, for instance, the users frequently have not access to the social media in a long time. The cases of these minor defects may receive some queries, but it could be more preferable that these types are included in the scope of the Digital Content Directive for avoiding disputes in the future.

Article 12 of the DCD does not clearly stipulate the non-conformity cases of minor defects with receiving a lot of criticism.[239] However, the structure and scope of the non-conformity cases of minor defects are regarded as clear, even though the more precise and transparent description of article 12 of the DCD may be preferable and advisable.

As clarified by the Commission, the right of consumers about partial termination is also included in the rights of termination. If the contract is signed within a certain period of time, the consumers shall only have the right to cancel the portion of contracts that compatible with the non-conformity of the digital content.[240] Although it is not to be stated in the DCD, the right of partially dissolution of the contracts is also true for the contracts with dissimilar digital content or added services. Source?

As the severity of no-conformity often requires case identification in judicial decisions, it is difficult to give a unified and clear standard beforehand. The Directive lists some

[235] See Fauvarque-Cosson, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, p.9
[236] See Digital Content Directive, article 6.1. (b)
[237] See Digital Content Directive, art.12.5
[238] See Digital Content Directive, art. 6.1 and art.6.2.
[239] See Fauvarque-Cosson, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content ,p.11.
[240] See Digital Content Directive, art.13.5, recital (46)

important elements for references, such as the function, compatibility, and security of digital content. These elements are directly related to the basic expectation of consumers when they enter into contracts. When such elements do not meet the requirements of the contract, they can be clearly identified as constituting serious non-conformity. At the same time, the burden of proof inversion rule applies to this termination right, for instance, the supplier proves that the disconformity with contract does not meet the severity criteria. This rule reduces the burden of consumers seeking relief in the certain extent.

c) Right of Termination in Long-term Contracts of the Digital Content

The right to terminate in long-term digital content contracts is stipulated in article 16.1. The long-term contract stipulated in the article includes the contract in "indeterminate period" and the contract for "initial period plus any continuation period exceeding 12 months".[241] For long-term contracts, the consumers have rights to terminate the contract after the first 12 months. The right of rescission under this article is an arbitrary right of termination. Except for the "12-month period" as a qualifying condition, the consumers do not need to have other special reasons to exercise the right of termination under this article. Moreover, other types of right of termination prescribed in the DCD are not affected by this article. For example, the consumers may obtain the right of termination according to the relevant provisions when the digital content is defective.[242] The policy rationale for the arbitrariness of consumers is to seek a balance between promoting competition and protecting investment. On the one hand, the digital market is a highly competitive market. The good operation of competition depends on consumers having more freedom of choice. On the other hand, the parties will generate trust after they concluded a long-term contract with each other, so this termination right will effect investment based on the contract for the supply of digital content.[243] In order to find a proper balance between the two. On the one hand, the Digital Content Directive stipulates the arbitrary discharge rights of consumers in long-term contracts, and on the other hand, it stipulates that the "12-month period" is a prerequisite for the limitation of the rescission right.

5.4.3 Legal Consequences of Termination

The legal consequences of termination of the contract are stipulated in articles 13 and 16 of the DCD respectively. The legal consequences provided for in article 16 apply to the cancellation of long-term contracts pursuant to article 16, paragraph 1, of the DCD, and the legal consequences of article 13 apply to other cancellations if no digital content is provided (article 11) or cancel the contract because the digital content is not in agreement. Since the legal consequences of these two provisions are often overlapped, this article introduces article 13 and compares the differences between the two

[241] See Digital Content Directive, art.16.1
[242] Fauvarque-Cosson, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, [EB/OL].[2017-09-08],p.10
[243] See Recital (46) of the DCD.

provisions. Moreover, the regulations of these two provisions are also similar to the General Data Protection Regulation (which I will refer to as the "GDPR") so that there is also some comparison between the GDPR and the DCD (I will elaborate in the next paragraph).

I) Obligations of the Suppliers

1. Obligation to refund

According to article 13.2. (a) of the DCD, the supplier shall return the price to the consumer without delay (without payment delay) within 14 days after receiving the consumer's cancellation notice. This is the main difference from the dismissal effect as stipulated in article 16 of the DCD. Article 16.3 clearly stipulates that the consumers shall pay the price of the digital contents provided during the corresponding period before the contract is canceled. The main reason for this difference is that the canceled effect stipulated in article 13 applies to cases where the supplier fails to provide the digital content (as per article 11) or the digital content is in accordance with the contract. The consumers should not pay for digital content that is not provided or because of the use of defective digital content.[244]

However, the DCD does not provide for the refund as provided in the article 13.1 of the Consumer Rights Directive. Moreover, article 13 of the DCD does not provide any instruction for payable interest at the time of deferred reimbursement.[245] Although the suppliers must repay any price paid by the consumers, the situation becomes more complicated if the consumers use a currency that is not actually reimbursable to paid (counter-performance other than money). The Commission tries to address this problem by requiring suppliers not to use any personal or other data used to exchange the digital content when the consumers terminate their contracts.[246]

2. The obligation to Stop Using Data

The consideration for the digital content provided by the supplier can be either money or data provided by the consumer in light of article 3, paragraph 1 of the DCD. How to deal with the data obtained by the supplier after the termination of the digital content contract is a peculiar problem arose by the digital content contract. In this regard, article 13.2. (b) of the DCD firstly stipulates that the obligation of the suppliers to stop using the data. Just caught sight of article 13.2.(b), it seems to merely suit the "free" contracts, in fact the second portion points out that the collection of the data in any contractual relation for providing the digital content shall not also be utilized after terminating contracts. The supplier shall take all measures that can be expected to stop the use of

[244] See Recital (41). This standpoint comes from a judgment of ECJ. See EuGH, ECLI: EU: C: 2008: 231 = NJW2008, 1433, 143

[245] See Fauvarque-Cosson, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, p.14.

[246] See Digital Content Directive, art.13.2.(b).

the following two types of data: 1) the data provided by the consumer as considerations for obtaining digital content; 2) the supplier collects the data related to the provision of digital content, including content provided by the consumers. However, the suppliers can continue to use the third type of data; 3) the digital content generated jointly by the consumers and other users who continue to use these data. At this time, the supplier of digital content contracts should also has right to continue to using such data.[247] Owing to, the Digital Content Directive does not include the application of the Copyright Law, so that other makers may still be possibly subject to the remedies of copyright by consumers under the domestic law in the European Union.

Article 16.4 of the DCD provides for almost the same obligation to stop using data. The main difference is that this paragraph contains the exceptions provided for in article 13.2.(b) of the DCD, which means that consumer terminates a contract in terms of article 16, paragraph 1 of the DCD, the supplier is not entitled to continue using the digital content jointly generated by consumers and other users.[248] For this difference, the European Commission did not explain the reasons in the DCD, which shows that the logic of the DCD on this issue has not been consistent.[249]

3. The Obligation to Return Data

In the general consequences of contract termination, the parties are obliged to return the payment they have received. When the payment received by the parties in the digital content contract is data, due to the fact that the data is different from the characteristics of the physical object, the general contract cancellation and return rules cannot be directly applied at this time. In this regard, the first sentence of article 13.2. (c) of the DCD stipulates that "in the context of the data retained by the provider, the provider is obliged to provide consumers with technical means to enable the consumer to retrieve it. Content provided, as well as other data produced or generated by consumers using digital content".[250] Because this is an essential and portability provision for the consumers right, motivating positive competition between varying providers of similar services. The DCD is not same as the GDPR, which no precisely mentions whether any other data can be regarded as the individual data.[251] When the consumers data of the GDPR can be explained in liberally interpreted, the same understanding can apply to article 13 of the DCD. In this way, other data would include individual data, the content jointly generated by all kinds of users and suppliers and use data. Moreover, it is should be pointed out that "'the supplier should take all measures in order to comply with data protection rules by deleting it or rendering it anonymous in such a way that the consumer cannot be identified by any means likely reasonably to be used either by the

[247] See Digital Content Directive, Recital (38).
[248] See article 16.1.(a) of the DCD
[249] FAUVARQUE-COSSON. The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, Http: // www.epgencms. europarl. Europa. Eu/cmsdata/upload/bb43b895-f66a-4c00-9994-80253aaf17c4/pe_536.495_en_all__for_print. Pdf
[250] See Digital Content Directive, art.13.2.(c)
[251] W.K. Hon, E. Kosta, C. Millard and D. Stefanatou, Cloud Accountability: The Likely Impact of the Proposed EU Data Protection Regulation, p.44

supplier or by any other person".[252] The DCD does not ask the suppliers to remove all consumer data provided by suppliers to the third parties, which is not a mandatory rule for the suppliers.[253]

At the same time, Article 13.2.(c) also stipulates that Consumers have the right to recover for a reasonable period of time without compensation, in a manner that does not cause significant inconvenience to themselves and in the form of data that is normally used and fetch the content.[254] As can be seen from the above provisions, the DCD amends the rules for the cancellation of the normal contract. In a common situation, the party who obtained the subject is the one who return the subject after the contract is. According to the provisions of the DCD, suppliers does not directly return the data they have obtained. Instead, it provides consumers with appropriate technical means to enable consumers to retrieve the data on their own. Moreover, the DCD makes it clear that consumers have the right to retrieve data and the method of retrieving data which explicitly described in the directive is also beneficial for consumers. This kind of design about rules meets the characteristics of digital content contracts. On the one hand, the suppliers of digital content contract usually possess corresponding technologies and have the ability to provide consumers with the appropriate technical to retrieve data, and the consumers can use the technology provided by the suppliers to decide how to retrieve the data freely. The design of this rule better fits the requirements for data return and the characteristics of digital content contracts.

This is the aspects of differentiating with the article 17.3 of the GDPR that the DCD achieves a positive balance between the interests of suppliers and third parties, legally containing and utilizing the data when have terminated the incompatible interests of the consumers. Consequently, there is no one would asset that their own data is going to incompatible since the remove of consumer data. This is the situation that even though the data is not jointly created in cooperation with consumers. A case can explain this situation, removing of dialogue data or online message data, if there is no consumer problems or responses, the discussions itself cannot be appropriately accepted.

Comparing with article 13.2. (c), Article 16.4. (b) of the DCD stipulates a similar rule of data return. The only difference is the gratis nature of consumer data retrieval without stipulated by the Article 16.4. (b). The difference is due to the EU Commission's negligence or intentional unclearness. [255]

4. Conclusion

The traditional remedies for the sales contracts are mainly based on tangible things and

[252] Compare with art. 17 of the General Data Protection Regulation.
[253] This approach is consistent with the protection of sublicenses granted by copyright laws in many countries.
[254] See Digital Content Directive, art.13.2. (c)
[255] See FAUVARQUE-COSSON, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, p.23

do not completely fit the intangible digital content. Therefore, the remedial means of breaches of contract for the supply of digital content must be adjusted, which is based on the intangible nature of digital content. In the case of the cancellation of the contract, the principal rights and obligations of the parties are the data recall right and obligations of data deletion. When it is impossible to make the corrections of digital content and the actual situation uncomforted with the contract injurious to the main performance of digital content, consumers have right to terminate the contract. When information provided by the consumer rather than money is regarded as consideration of digital content, the supplier should stop using after the contract has been terminated and stop transmitting the information to third parties. When the contractual consideration contains personal information, the obligation to stop using the data means that the supplier should take all measures to delete the data or hide the name in order to prevent them or other subjects from determining the identity of the consumer by any means. When the contract is canceled, the supplier shall allow the consumer to recall the data generated during the process of uploading and using the digital content. This obligation should extend to data that the supplier is obliged to keep based on contract for the supply of digital content, and data that the supplier has saved in fact because of the contract. If the supplier provides the consumer with the technical means of retrieving data, consumers have right to recall the data for free, such as the cost of using formats of common data.

II) The obligations of consumers

First of all, Article 13.1 of the DCD stipulates that "The consumer shall exercise the right to terminate the contract by notice to the supplier given by any means".[256] Therefore, the suppliers shall not impose the consumers using a specific approach under the requirements of the suppliers. But this not makes it impossible for requiring the consumers perform some specific approach of verification.

If digital content is provided on a permanent digital content carrier, according to article 13.2.(e) of the DCD, consumers have two obligations: The first one should be based on the cancellation of the digital content contract. The consumer shall "upon the request of the supplier, return, at the supplier's expense, the durable medium to the supplier without undue delay, and in any event not later than 14 days from the receipt of the supplier's request".[257] Such obligations will only be borne by the consumer when the supplier makes a requirement. Second, the consumer should "delete any usable copy of the digital content, render it unintelligible or otherwise refrain from using it or making it available to third parties".[258] If digital content is not provided on a permanent digital content carrier, the consumers are only obliged to discontinue the use of digital content, in particular, including used by their own and not providing to the third parties. In particular, digital content should be deleted or otherwise made unreadable in terms of

[256] See Digital Content Directive, art.13.1
[257] See Digital Content Directive, art.13.2.(e).(i).
[258] See Digital Content Directive, art.13.2.(e).(i).

article 13.2. (d) of the DCD. In other words, the suppliers shall return the expenses back to the consumer within 14 days at last when receiving the notice of termination. Surely, the consumers must abstain from making use of the digital content provided by the supplier, and the suppliers can put a stop to any future utilization like block the social media account of the users. What's more, the consumers are not be required two types of expenses, including the fees paid for previous utilizing of the digital content and the fees of surrendering on a durable medium.

However, for the supplier of digital content, it is generally difficult to confirm whether consumers really no longer use the digital content.[259] There is the similar debate with respect to the switch of software as a suitable case. It is extremely hard to check the consumers have already deleted. Therefore, Article 13.3 stipulates that the suppliers can prevent consumers from continuing to use digital content after the contract is already terminated, especially if they do not affect the consumer's retrieving of digital content, or disconnect the portal of digital content or close the consumer account.[260] However, the DRM system can give hands here.[261] And some narrators think that the consumers shall liable for paying to the undeleted digital content after the termination of contract.[262] If agreeing with this view, it may go against the intellectual property rights. Because this approach makes the consumer for continuing to use the digital content, then the consumer is still concluded the contract in fact.

Regarding to the obligations of consumers as above, Article 16.4. (c) of the DCD only stipulates that the obligation of consumers to stop using data. However, it is not stipulated whether consumers have the obligation to return the data carrier and whether the supplier has the right to prevent consumers from continuing to use digital content by closing the account or disconnecting the entrance. The inconsistency between these rules shows in the certain extent that the Digital Content Directive has yet to be improved in the system of rules design.

Chapter 6

The systematic position of the supply of the digital content with contracts

[259] See Fauvarque-Cosson, The new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content, p.15-16 ; Mak, p.25-26.
[260] See Digital Content Directive, art.13.3
[261] What is DRM: "Short for ***d**igital **r**ights **m**anagement*, a system for protecting the copyrights of data circulated via the Internet or other digital media by enabling secure distribution and/or disabling illegal distribution of the data. Typically, a DRM system protects intellectual property by either encrypting the data so that it can only be accessed by authorized users or marking the content with a digital watermark or similar method so that the content cannot be freely distributed". https://www.defectivebydesign.org/what_is_drm_digital_restrictions_management
[262] See C.Mak, p.26.

When data is used as transaction content, the subject matter of the contract is different from the tangible property (movable property or real estate) in the traditional sales contract. The intangible nature of the subject matter makes the matching of the contract rules as a top issue for the digital transactions. The common form of the transactions of the digital content includes the membership of consumers who subscribe to online audio and video websites and listen to online music for a certain period of time, or the consumers purchase a set of office software installed on CDs, install software on computers through CDs, and enjoy free upgrade service of the software at fixed period.

As the core draft of the digital contract rules in the European Union, "the Proposal for a Directive on Certain Aspects Concerning Contracts for the Supply of the Digital Content"[263] and "the Proposal for a Directive on Certain Aspects Concerning Contracts for the Online and other Distance Sales of Goods"[264] follow the existing regulatory approach of the European Consumer Contracts, with the remedy of defects as the core, based on the defects warranty and many other developments of legislation specification. Among them, "the Proposal for a Directive on Certain Aspects Concerning the Supply of the Digital Content"[265] is a major legislative innovation in the digital contract rules of the European Union.[266] However, there are many problems with the two proposed directives in terms of conceptual innovation and system connection.

6.1 The Conceptual Innovation of the Supply of the Digital Content Contract

6.1.1 The Conceptual Construction of "Supply" + "Digital Content"

The innovation of the legal concept surely follows risks in the certain extent. The European Union is the first region to attempt to establish a system of the digital contract rules in the world. Based on the neutrality and forward-looking nature of technology, in defining the concept of the supply of the digital content, the European Union adopted a three-level definition of the "abstract definition" + "the incomplete listing" + "the exceptions" to maintain a proper openness of legal conceptions.

The concepts of the digital content were first seen in the Draft Common European Sales Law in 2011[267] (CESL) and later in the European Consumer Rights Law published in the same year and the Proposal for A Directive Concerning the Supply of the Digital Content in 2005. Since the concept of the digital content was put forward for the first

[263] See the DCD.
[264] See the OSD.
[265] See the DCD.
[266] The Representative examples of legislation or drafts of the digital content contracts in the member states of the EU can be found in Chapter 3 of the UK Consumer Rights Act 2015 (digital content).
[267] European Commission，Proposal for a Regulation of the European Parliament and of the Council on a Common European Sales Law，COM (2011) 635 final，11 October 2011;

time, and then the concept of the supply of the digital content has gradually been shaped, the European Union has experienced the transformation from decentralized regulation of the CESL to targeted legislation of the two proposed directives.

Through the three bills, the provisions of digital transactions in the contract law are gradually improved. The Common European Law Sales Law and the European Consumer Rights Directive both regulate "the digital content". "Digital Content Directive"[268] is based on the concept of "the supply of the digital content" and integrates "supply" into the concept of "digital content".

Article 2.10 of the Draft CESL defines that " 'digital content' means data which are produced and supplied in digital form, whether or not according to the buyer's specifications, including video, audio, picture or written digital content, digital games, software and digital content which makes it possible to personalize existing hardware or software."[269] The "digital content" of the Proposal does not covers that "financial services, including online banking services; legal or financial advice provided in electronic form; electronic healthcare services; electronic communications services and networks, and associated facilities and services; gambling; the creation of new digital content and the amendment of existing digital content by consumers or any other interaction with the creations of other users".[270]

Article 2.11 of the European Consumer Rights Directive defines "'digital content' data means data which are produced and supplied in digital form".[271] In the recital (19) of the Directive states that "irrespective of whether they are accessed through downloading or streaming, from a tangible medium or through any other means", [272] which is all covered in the concept of "digital content". The Digital Content Directive divides the concept of "the supply of digital content" into two parts: "digital content" (in terms of article 2.1) and "supply" (as per article 2.10). "Digital content" is precisely divided into digital form data, digital services, and data interaction services (as per article 2.1. (a)(b)(c)), and "supply" refers to creation of a route or use route for digital content creation (as per article 2.10). Among them, the digital form of data includes "video, audio, applications, digital games, and other software";[273] digital services refer to services that "creation, processing, or storage of data in digital form, where such data

[268] See the DCD
[269] the proposal for a regulation on a Common European Sales Law.
[270] the proposal for a regulation on a Common European Sales Law.
[271] Directive 2011 /83 /EU of the European Parliament and of the Council of 25 October 2011 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，OJ L30422．11．2011，p, 64-88
[272] Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 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 Text with EEA relevance, recital (19).
[273] See art.2.1. (a) of the DCD.

is provided by the consumer";[274] interactive services refer to consumers and third-party data exchange services in digital form (as per article 2.1.(c)).

The European Union innovatively adopts the concept of "supply" and rejects the concept of "delivery" represented by the traditional German civil law. The main basis for the innovation of this concept lies in the characteristics of the subject matter itself: delivery mainly refers to tangible goods, but the digital content includes both tangible carriers, such as software sold as a CD and also includes intangible digital content such as games and cloud services. As an abstract description of the tender performance, the word "provided" can cover the specific form of digital content. In other words, digital content includes data and services, including not only digitally produced and provided data, such as video audio, but also covers digital forms of production, processing, or storage based on the consumers supplied data. Consequently, the concept of "supply" can better incorporate the forms as above.

From the evolution of "digital content" to "the supply of digital content", the detailed adjustment of concepts has influenced the design of the contract law system. The nature of the obligation is an example in this situation. In contrast to the "CESL"[275] and the British of "Consumer Rights Act 2015",[276] "Digital Content Directive defines that clarification of the digital content not only as a trading model similar to the sale but also as a digital service contract, namely, both the sales contract and the service contract are contained at the same time. The British of Consumer Rights Act 2015 defines that the digital form of service as a general service contract. It only requires the suppliers to satisfy the "reasonable attention and skill obligations" as a means' obligation. However, the requirement of the Proposal for the conformity with contract is an objective obligation, that is, an obligation of result. Comparing with the Digital Content Directive, the use of digital services as a means or result obligation will also affect the burden of proof and conformity with the contract of the digital content.

6.1.2 Difficulties in the Regulation of Smart Products and the Internet of Things

Do smart products belong to the concept of digital content? The meaning of digital content is broadly defined in article 2.1 of "the Proposal for A Directive on Certain Aspects Concerning for the Supply of the Digital Content"[277] and seems to cover all types of data in digital form. However, preamble (11) of the Digital Content Directive states that "the directive should not apply to digital content which is embedded in goods in such a way that it operates as an integral part of the goods and its functions are subordinate to the main functionalities of the goods".[278] It can be seen that there is a certain amount of gaps for interpretation between article 2 and article 11 of the Digital Content Directive on whether the DCD applies to smart products. The Digital Content

[274] See art.2.1. (b) of the DCD.
[275] European Commission, Proposal for a regulation on a common European Sale Law.
[276] Parliament of the UK, Consumer Rights Act 2015.
[277] See art.2.1 of the DCD.
[278] See recital (11) of the DCD.

Directive itself does not explicitly exclude the use of Smart Products, but excludes it only through the recital. In this situation, this gaps for interpretation between article 2 and article 11 leads to lack of legal certainty in the scope of implementation, and it is easy to create loopholes in the practice, which is a matter of legislation. In the future, it should be regarded as an important criterion for judging whether or not digital contents can be separated after being embedded in commodities.[279] Typically, digital content-embedded products are called smart products because they incorporate tangible goods and digital content. Such products are intelligent because they embed sensors, electronics, software, and network access devices. It should be the typical feature of embedded digital content as "can be separated after embedding" (similar to "attachment" or "mixed"). For example, mobile applications (apps) that can be unloaded or deleted should not be considered embedded digital content.[280]

The Internet of Things and smart products should be regulated together or differentiated from the legislation? The Internet of Things is closely related to digital content. The Internet of Things (IoT) is a network based on the extension and expansion of the Internet. In the Internet of Things, interconnected objects may cover digital content, such as simple objects with embedded sensors, home appliances, smart bracelets, and other wearable devices. In fact, the boundaries between the concept of smart products and the Internet of Things are unclear in certain sense. On the one hand, the Internet of Things is premised on smart products that are connected in the form of clouds or other forms; on the other hand, smart products can operate independently without having to communicate or connect with other products. "The Proposal for A Directive on Certain Aspects Concerning the Supply of the Digital Content"[281] opts for solutions that exclude smart products and IoT, classified smart products as commodities, and left the Internet of Things for member states to regulate. However, in fact, smart products do not have typical features of products on sales. The application of rules for the sales of goods is not properly handled. For the Internet of Things with cross-border features, leaving the member states to regulate themselves, it is easier to cause disagreement because of differences in the legislation of the member states.[282] In other words, evasive stance of the European Commission on the development of smart products and IoT rules will not help solve the problem and may even exacerbate fragmentation of legislation among the Member States in the European Union. The European Union should adopt a positive legislative attitude, introduce some general rules on such issues and improve legal stability.

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[279] See R.Mańko Contracts for Supply of Digital Content: A Legal Analysis of the Commission's Proposal for a New Directive，EPRS In－depth Analysis"，PE 582．048，European Parliament 2016, p. 8—9.

[280] See R. Mańko, Contracts for Supply of Digital Content: A Legal Analysis of the Commission's Proposal for a
New Directive, EP R S In－depth Analysis", p.8—9

[281] See the DCD.

[282] See R. Mańko, Contracts for Supply of Digital Content: A Legal Analysis of the Commission's Proposal for a New Directive, EP R S In－depth Analysis", p.8—9

6.1.3 Reasons to abandon the concept of "digital products"

The Digital Content Directive adopts the concept of "digital content" instead of adopting the familiar "digital goods" designation in practice, which is more scientific in legislation. First of all, the type of software is a special example of the concept for distinguishing between digital products and digital content. In principle, the software can be delivered on a tangible carrier, for example, delivered on a CD. However, software sales and software leasing are often linked to other digital forms of payment by the operators. For example, sellers are also responsible for anti-virus software upgrades in addition to selling software. Therefore, simply judging types of software based on the "delivery of tangible digital carriers" standard is uncertain in fact. What's more, from the perspectives of the organization of digital content management, if a supplier signs up for a digital content contract and provides the users with a corresponding facility of digital support, such as a social networking platform, then the contract will have a characteristic service contract payment. At this point, if still limited to the concept of digital products, range of contracts is easy self-limited to the type of sales contract. Last but not least, the time limit and frequency of performance of payments may limit the concept of digital content. In particular, content that is immediately available on a one-time basis may be interpreted as digital content, which sequentially precludes debt relationships, thereby creating differentiation issues of legislation. For example, digital streams can often access related links within a certain period of time and allow multiple visits within that limitation of time. Failure to treat such payments as digital content contracts may result in articles 9 and 10 of the European Consumer Rights Directive and similar provisions of article 3, Section 5 of the German Civil Code relating to the "elimination of the right of withdrawal" The purpose of specification failed.[283] Therefore, in terms of legislative technology, the concept of digital content can cover digital services. However, if the concept of digital products is adopted, it will be difficult to further digitize and concretize digital products due to multiple mixed forms of products. Therefore, compared with the concept of "digital products", the concept of "digital content" is more abstract and general, and the design of the relevant rules for digital contracts in Civil Code Contracts of China and "E-Commerce Draft" also has significant inspiration.[284]

6.2 The nature analysis of the supply of Digital Content with Contracts

6.2.1 Definition of Contract nature: A true statement or false statement?

How to classify contracts is an important proposition for the supply of digital content with contracts. The application of rules of a named contract is based on affirming the characteristics of the subject of the contract performance, and then confirming the type of contracts as preconditions. Since the payment for the supply of digital content with contracts is often mixed, how to decide type of characteristic of performance has

[283] See the DCD. More complete reference
[284] See the DCD. More complete reference

become an issue that needs to be solved. The argument for adding a contract for the supply of digital content as a new type of famous contract is also discussed.

The contracts for the supply of digital content breaks two classic contract categories—sales contracts and service contracts. The European Union law differentiates connecting the sale of goods contracts and service contracts, and the sales of goods involve only movable property. Because the European Union law on the sale contracts is relatively advanced, but the legislations on service contracts lags behind, how to define the performance characteristics of the digital content has become a core issue. At the level of the Member States of the EU, the characteristics of digital content contracts present four types, including service contracts, sales contracts, licensing contracts, and independent contracts. Comparing to these four types, only the application of consumer contract rules has limited similarity with them. First of all, France, Germany, Italy, Netherlands, Spain, and the United Kingdom apply the rules of consumer law directly or analogously. For example, implementation of article 453.1 of the German Civil Code (the provisions governing sales of goods for use in sales of rights and other subject matter purchases) opens up an applicable approach for the subject matter of the intangible goods. Finland clearly stipulates that providing software based on tangible carriers is regarded as services, that is, providing online services of software. For many countries such as Norway, France or Poland that require a tangible form of goods, it is difficult to define the online supply of the software as goods. For Italy, which does not strictly differentiate between goods and services, whether the software is tangible or intangible, it is regarded as movable property. When there is a problem with the software, consumers can apply the consumer protection law. What's more, the Netherlands and Norway also apply consumer sales laws by analogy. Spain and Hungary treat online digital content as a licensing contract. Once again, the United Kingdom adopts the classification approach of independent contract types in order to reserve discretionary space for future technological development so that judges can apply general principles. However, this approach may affect the nature of traditional legal concepts as a whole and is not conducive to the stability of the law.[285] Finally, France also has the opinion that software is treated as an independent right, but some domestic courts regard the purchase of digital content as a sales contract, but a part of courts treat it as a lease contract at the same time, and even a part of courts treat it as an independent type of contracts.[286]

Is the classification of digital content contracts a crucial breakthrough in the traditional contract theory, or is it just a fake proposition? In fact, the supply of digital content is just a form of "product service". The difference between digital content and physical goods and services is that understanding of traditional theory for services stays incapable of storage or all payments. Although, digital content often does not have

[285] N. Helberger, M, B. M Loos, Lucie Guibault, Chantal Mak and Lodewijk Pessers, Digital Content Contracts for Consumer, Journal of Consumer Policy, 2013, p.43.
[286] N. Helberger, M, B. M Loos, Lucie Guibault, Chantal Mak and Lodewijk Pessers, Digital Content Contracts for Consumer, Journal of Consumer Policy, 2013, p.42.

physical entities, it can be downloaded and stored.[287] However, this does not constitute a substantial obstacle that does not apply the rules of traditional famous contract for contracts for the supply of digital content. In fact, the types of contract should be determined on the subject of characteristic payment, rather than formally based on the name of contracts. For contracts for the supply of digital content, the types of contracts can be determined through contents of specific payment. For example, the two kinds of payment content of "one-time instant transfer of data content" and "continuous use of data network" can be distinguished. The former is similar to article 453 of the "German Civil Code" and the right to deal is then based on whether or not the obligation of *quid pro quo*[288] is "only for providing personal data" or "indicating consent for the protection of personal data", and then separates it into a reciprocal contract and a mixed contract. It should be specially noted that contracts for the supply digital content is unregularly represented by a reciprocal contract, because most of the digital content contracts are not real-time transactions, and cannot be transferred and delivered at once-time. Such non-subjective transfer of subject matter is similar to the sales of rights. When dealing with payments has continuity, such a continuous debt relationship is more similar to a lease contract. When *quid pro quo* has continuity, such a continuous debt relationship is more similar to a lease contract.[289] Therefore, it is feasible to *quid pro quo* of digital content contracts as a typical in the theory, which are classified as purchase contract, sale contract, contract service contract, lease contract, license contract. In the classification process of contracts, there are still some difficulties. For example, while contracts for the supply digital content resembles an contract of right to use or license contract for intangible goods, legislations of the European Union still currently lack typical rules for the contract of right to use or license contract. Furthermore, contracts for the supply digital content may also break through the classic types of contracts for sale, grants, leases, services, contracts or licenses, and then present a new mixed state of similarity for contracts type. At this time, it is more appropriate to apply the mixed contract rules.

For the European Union law, the real risk of the types of contract is that, in the absence of uniform rules at the European Union level, it is possible to apply the law of different Member States. Because based on the principle of the closest connection of article 4.1 of the Rome Regulations， this approach causes that the same contract will be defined different types of contract in the different Member States. In addition, regarding to the control of validity of the standard terms, as different countries have different legislation on effectiveness control, the confirmation of different types of contract may directly affect the evaluation of the validity of the contract clauses.

The discussion of the types of contract for the supply of digital content at the level of the Member States and the level of the European Union is quite different. For the view

[287] Janja Hojnik, Technology Neutral EU Law: Digital Goods within the Traditional Goods /Services Distinction, International Journal of Law and Information Technology, Vol. 25, No. 1, 2017, p.64.
[288] The explanation is something that is given to a person in return for something they have done in Cambridge Dictionary.
[289] See Janja Hojnik, p.64.

of the Member States, the rules of the famous contract（namely classic contracts） can be applied according to the characteristics of the contracts' performance, so it does not constitute a theoretical proposition. However, at the level of the European Union law, since the European Union must determine the applicable law through the conflict rules (in terms of The Treaty of Rome), it may result in the disparity of the same product form in different Member States due to differences in the classification rules of the Member States. What's more, this situation may even result in some enterprises or businessman opting for the legislation of the Member States which is the lowest standard in practice. The effect of selecting the laws of the lowest-level will adversely affect the long-term development of the digital economy. The new fragmentation of digital contract rules of the European Union is also caused by differences in rules among member states.[290] Therefore, it is necessary for the European Union level to harmonize and integrate the nature of contracts for the supply of digital content on cross-border, or it may require Member States to introduce mixed contract rules for contracts for the supply of digital content.

6.2.2 Data as *quid pro quo*: Is Onerous Contract Really Free?

"Free" for the supply of digital content is a common model for digital content transaction. For example, the consumers download mobile applications (app) for "free", or online enjoy audio or video services for "free". However, this model of commercial transaction may have legal risks in the certain sense. The reason is that in the digital economy, personal information itself appears to be "free", which actually has a high monetary value. Compared with the onerous contract, the rights of the buyer in the onerous contract are often less protected. When a performance excepted for money regards contracts for the supply of digital content as payments, that is, when the use of personal information or other information is regarded as *quid pro quo*, such a contract is referred to as "contracts for the supply of digital content other than monetary consideration". Such contracts seem to be unpaid, but when their digital content exists defects, it may also lead to economic losses for consumers. Therefore, the nature of the contract must be clearly distinguished from onerous contracts.

Defining data as *quid pro quo*, and then incorporating "non-monetary *quid pro quo* for contracts for the supply of digital content" into "bilateral contract" and discussing their compensated characteristics are justified. This type of contract is included in the scope of the bilateral contract, and determines the types of contract based on the content of *quid pro quo* (the right to use the one-time or continuous transfer of personal data), which can provide a more complete and logical system for the remedies of contract.

The scope of implementation of "the Proposal for A Directive on Certain Aspects Concerning the Supply of the Digital Content"[291] does not differentiate the specific

[290] V.Mak, the new proposal for harmonized Rules on Certain Aspects Concerning Contracts for the Supply of Digital Content，In－depth Analysis，Directorate General for Internal Policies，Policy Department C: Citizens' Rights and Constitutional Affairs，Legal Affairs, PE 536 494, 2016, p.4

[291] See the DCD.

content of *quid pro quo*, and does not regard whether the digital content pays monetary consideration as the criterion of distinction. However, the non-monetary considerations referred to in the directive draft are merely limit data "positively" provided by consumers, and do not include "negative" data. Specifically, if contracts for the supply of digital content is based on non-monetary considerations, the Digital Content Directive only applies to the situation where the supplier requires, and the consumer positively offers information, such as title, email, and photo. However, the Digital Content Directive have not relevance with the situation where the supplier saves information of data to make the digital content conform to the contract. For example, an application of mobile phone collects information of geographic location for normal work. The Digital Content Directive also has not relevance to situations where the supplier saves but the consumer does not provide information on its initiative, such as IP address or other information automatically generated by the network tracker during the collection of information.

The "positive" or "negative" supply of digital content regarded as a criterion for differentiation by the European Union is debatable. First of all, consumers are in a weak position, and operators can develop new product models that allow consumers to provide information passively, thereby the Digital Content Directive is being circumvented. The scope of application of the Digital Content Directive is only rigidly limited to "positive" information and does not fully accommodate the development of digital technology [292] what's more, the European Union does not distinguish considerations between non-money and money for the supply digital content contract. In fact, the remedy rules for these two types of contract should be different. In particular, it is necessary to clarify the differences that consumers reasonably expect. In addition, whether traditional rules for the termination of contracts can be met by this boundary, this issue also needs to be discussed.[293] Last but not least, even if the European Union defines that contract for the supply of digital content that does not use the money for consideration within the substructure of the contract law, the crossover of the system is still unable to be avoided. Since *quid pro quo* of such contracts is often personal data, and these data should be in accordance with the "General Data Protection Regulations", they must be combined with contract rules and rules of personal information protection.

Conclusion

Since the establishment of the European Union, the EU has been striving for the integration of internal market. However, it faces many obstacles in practice. The two proposed directives are more practical and targeted than the CESL, focusing on the field of B2C contract. Regarding to the application model, the two proposed directives adopt the standard of full harmonization, which fully demonstrates the determination to promote the single market further. Although, the scope of application is limited in the

[292] Madalena Narciso，Gratuitous'Digital Content Contracts in EU Consumer Law, EuCML, 2017, p.206.
[293] Madalena Narciso，Gratuitous' Digital Content Contracts in EU Consumer Law, EuCML, 2017, p.206.

field of B2C by the two proposed directives, which is a little conservative in a certain extent. But this approach is advantageous for reducing the difficulty of transferring into domestic law in practice, avoiding the resistance of Member States for directives. On the other hand, it is a vital embodiment of legislative modernization that goods, data and related services involved in network transactions are distinguished by the two proposed directives and adjusts them separately.
From the entity content of the Online Sales Directive, its core content is warranty against defective systems. The warranty against defective systems of the directive is optimized for developing and improving on the basis of “Directive 1999/44/EC/ on certain aspects of the sale of consumer goods and associated guarantees”, which is a newly clear standard for warranty against defects. Moreover, the warranty against defective systems falls for the first time into the scope of the European Union law, and is also an adjustment of the original basis for the warranty against defective systems. On the whole, the directive provides a relatively high level of legal guarantee for B2C transactions, with certain progress and particularity of times.

In addition, the main purpose of the Online Sales Directive is to promote B2C purchasing on cross-border and reduce disputes and legal costs. This objective is based on the implementation of the ODR dispute settlement mechanism which the European Union has been working on for a long time. The ODR is also the main disputes resolution mechanism when the Member States transfer directive to national law and the link with ODR is one of the important factors considered by OSD in the legislative process. Although the Online Sales Directive is still in the draft stage, to make a comprehensive comparative analysis from the way of adjustment to the defect guarantee system to the dispute settlement mechanism, which will be a great value and significance to the development of Chinese civil code's legislation. It is of great value and significance to the development of my legislation to make a comprehensive comparative analysis from the way of adjustment to the defect guarantee system to the dispute settlement mechanism.

The digital revolution is not a monster, and it is hard to overturn the theory of classical contract law. In the Digital Single Market, digital contract rules of the EU show unprecedented innovation and courage. However, in the face of various challenges in the digital age, the contract theory is still quite flexible. The digital content does not break through the classical classification theory about the contract. As the transaction content, the object of contract is intangible things. Compared with the concept of digital products, the concept of “the supply of digital content" is scientific in creation aspects. However, this new form of contract does not break through the classification theory of traditional contract. In fact, use a specific payment of the characteristics of digital content, distinguish between "a contract of disposable and instant transfer data" and “contract of data network of sustained use”, brought into the relevant sales, services, leasing, licensing, or under the contract type of hired work, even mixed contract rules applied. When data is treated as the payment, the "the contract for the supply of digital content without consideration of money" should be included in the bilateral contract.

In other words, the basis of the theory of classification rules still is applied under “the contract for the supply of digital content”. The challenge is in theory of contract classification, specification configuration of the mixed contract, and research necessary of applicable and mutatis mutandis rules is gradually highlighted, designs for applicable rules of atypical contract theory is an enduring topic for the theory of contract law, bilateral contract theory has the richer room of type because "the contract for the supply of the digital content without consideration of payments”.

The traditional theory for the remedy for breach of contract is not overturned by digital transactions. The systematic rules for remedy for breach of contract provided by the Digital Content Directive are still based on the classical theory of contract remedy and defect guarantee system. In the contract for the supply of the digital content, the subjective and objective defects standards are still applied, interoperability and functionality has become crucial factors of subjective. The importance of the objective defects is further emphasized by Industry standard, technical standard and timeliness. In the remedy for breach of contract, in addition to the rules of classical termination, the scope of the remedy of breach of contract is further enriched by the obligation of data deletion and the right of data recovery. When digital content as an object, the default relief theory faced the major challenge is, the right of defects has become a significant type of the contract for the supply of the digital content, and closely linked with license contract. This kind of relief system for breach of contract should take into account the coordination between the contract law and the intellectual property law, and clarify the boundary between copyright protection and the right to use of the contract.

China faces a similar wave of the digital economy. In digital products represented by growing popularity of Software, which even become a necessary consumer goods in daily life. With the Internet of things, big data, cloud computing industry as representations, digital industry has increasingly become significant and emerging industrial power； the traditional manufacturing industry is faced opportunity and challenge from the transformation of intelligent manufacturing, these will be put forward many new legal issues.[294] The Chinese academic discussion about problems of private law brought by digitization currently focuses on for protection of personal information,[295] discusses the contract of the digital content is still rare. In the current compiling of the civil code, and should focus on the challenges of the digital economy brought to the traditional contract law, according to the characteristics of digital content, in particular, to adjust the traditional rules of contract law, to strengthen perceptiveness and adaptability of the civil code. In this regard, the legislative technology embodied in the Digital Content Directive is undoubtedly instructive for China.

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[294] Long Weiqiu, Lin Zinmin. Legal challenges and basic countermeasures of Intelligent Manufacturing in China. Law review, 2016 (6): 1-13.

[295]Zhang Xinbao. From privacy to personal information: Theory and institutional arrangement of interest reassessment [J]. Chinese law, 2015 (3): 38 - 59; Zhang Lin’an, Han Xuzhi, The nature of private law of personal information right under the era of big data [J]. Law forum, 2016 (3): 119 - 129; Fan Wei. Approach reconstruction of personal information protection under the era of big data. Global law review, 2016 (5): 92 - 115.

BIBLIOGRAPHY

1.Books

C.Twigg-Flesner, The Europeanisation of Contract Law: Current Controversies in Law, Cavendish Pub Ltd, (2008)

Fernando gomez, juan josè ganuza, economic underpinnings of european private law harmonization, p. 53, in reiner schulze, hans schulte-nolke, european private law – current status and perspective, sellier. European law publishers, (2011)

J. Smits, The Need for a European Contract Law: Empirical and Legal Perspectives, Groningen, Europa Law Publishing, (2005)

J.Smits, Contract Law – A Comparative Introduction, Edward Elgar, (2014)

I.Niglia, Pluralism and European Private Law, hart publishing, (2013)

K.Hein,A.Flessner, european contract law – volume one: formation, validity, and content of contracts; contract and third parties, clarendon press - oxford, (1997)

L.Antoniolli, F.Firentini, a factual assessment of the draft common frame of reference, sellier, European law publishers, (2011)

M.Dent, the European Economy – the global context, london and new york, routledge, (1997)

M.W.Hesselink & G.J.P.Devries, principles of european contract law , (2001)

O.Lando & H.Beale, (Eds), principles of european contract law, parts i and ii, prepared by the commission on european contract law, the hague, kluwer law international, (1999)

P.Larouche, F.Chrico,(Eds), economic analysis of the dcfr - the work of the economic impact group within copecl, sellier. European law publishers, (2010)

R.Schulze (Eds), New Features in Contract Law, Sellier. European Law Publishers, (2007)

R.Schulze &J. stuyck , towards a european contract law, monaco, sellier. European law publishers, (2011)

R.Schulzer & J.Stuyck, European Private Law – Current Status and Perspective, Sellier. European Law Publishers, (2011)

S.Grudmann, J.Stuyck, (Eds), an academic green paper on European Contract Law, kluwer law international, (2002)

2. Articles and contributions

Aurelia Colombi Ciacchi and Esther van Schagen, Conformity under the Draft Digital Content Directive: Regulatory Challenges and Gaps, (2017)

Christian Wendehorst, Die Digitalisierung und das BGB, NJW, (2016)

David G.Post, How the Internet Is Making Jurisdiction Sexy (again) , International Journal of Law and Information Technology, Vol. 25, (2017)

Fan Wei. Approach reconstruction of personal information protection under the era of big data. Global law review, 2016

G.Ballarani, The transition from the Proposal of a Common European Sales Law towards the new Online Sales Act, (2015)

H.W. Micklitz and N. Reich, The Commission Proposal for a Regulation on a Common European Sales Law (CESL) – Too Broad or Not Broad Enough, Ssrn Electronic Journal, (2012)

H.Beale, Scope of application and general approach of the new rules for contracts in the digital environment, Workshop of JURI-Committee of the European Parliament, Harvard Business Review, Internet of Things: science fiction or business fact?

J.Smits, The New EU Proposal for Harmonized Rules for the Online Sales of Tangible Goods (COM (2015) 635): Conformity, Lack of Conformity and Remedies, Workshop Juri Committee of the European Parliament, (2016)

Janja Hojnik，Technology Neutral EU Law: Digital Goods within the Traditional Goods /Services Distinction, International Journal of Law and Information Technology，Vol. 25, No. 1, (2017)

Long Wei Qiu & Lin Zin Min. Legal challenges and basic countermeasures of Intelligent Manufacturing in China, Law review, (2016)

Louisa Specht, Daten als Gegenleistung－Verlangt die Digitalisierung nach einem neuen Vertragstypus?, JZ, (2017)

Madalena Narciso， Gratuitous'Digital Content Contracts in EU Consumer Law, EuCML, (2017)

M.Loos, the regulation of digital content B2C contracts in CESL, Centre for the Study of European Contract Law – Working Paper Series No. 2013-10, (2013)

N. Helberger, M.B.M Loos, Lucie Guibault, Chantal Mak and LodewijkPessers, Digital Content Contracts for Consumers, Journal of Consumer Policy, (2013)

R.Mańko, Contract Law and the Digital Single Market: Towards a New EU Online Consumer Sales Law?, Social Science Electronic Publishing, (2015)

Reiner Schulze, Dirk Staudenmayer and Sebastian Lohsse, Contracts for the Supply of Digital Content: Regulatory Challenges and Gaps－An Introduction, Contracts for the Supply of Digital Content: Regulatory Challenges and Gaps, (2017)

Reiner Schulze，Supply of Digital Content: A New Challenge for European Contract Law, Sellier European Law Publishers, (2007)

Staudenmayer. Über ägeordnete Inhalt - Der Richtlinien-vorschlag der Europäischen Kommission. NJW, (2016)

Stojan Arnerstl, Licensing Digital Content in a Sale of Goods Context, GRUR Int, (2015)

V.Mak, the new proposal for harmonized rules on certain aspects concerning contracts for the supply of digital content, workshop for the Juri Committee on Legal Affairs of the European Parliament, New rules for contracts in the digital environment, (2016)

V.Mak, The Regulation of Digital Content Contracts in the Optional Instrument of Contract Law, European Review of Private Law 6-2011, (2011)

W.K. Hon, E. Kosta, C. Millard and D. Stefanatou, Cloud Accountability: The Likely Impact of the Proposed EU Data Protection Regulation, Social Science Electronic Publishing, (2014)

X.Fauvarque-Cosson, the new proposal for harmonized rules for certain aspects concerning contracts for the supply of digital content (termination, modification of the digital content and right to terminate long term contracts), Workshop of JURI-Committee of the European Parliament, (2016)

Zhang Lin'an, Han Xuzhi, The nature of private law of personal information right under the era of big data. Law forum, (2016)

Zhang Xinbao. From privacy to personal information: Theory and institutional arrangement of interest reassessment, Chinese law, (2015)

3.International and regional instruments

Commission Staff Working Document, A Digital Single Market Strategy for Europe: Analysis and Evidence – Accompanying the document, Brussels, 6.5.2015, COM (2015) 192 final

Communication from the Commission to the Council and the European parliament, A More Coherent European Contract Law, An Action Plan, Brussels,12.02.2003, COM (2003) 68 final

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Unleashing the Potential of Cloud Computing in Europe, SWD (2012) 0271 final
Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Digital Single Market Strategy for Europe, Brussels, 6.5.2015, COM (2015) 192 final

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Digital
Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union (2007)

Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union (2007)

Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts
Directive 1999/44/EC of the European Parliament and of the Council of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees

Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market

Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 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 Text with EEA relevance, COM (2011) 635 final

European Commission, A Digital Single Market for Europe: Commission sets out 16 initiatives to make it happen, Brussels, 6 May 2015

European Commission, IoT Privacy, Data Protection, Information Security, 25.01.2012

European Commission, Questions and answers - Digital Single Market Strategy

European Parliament legislative resolution of 26 February 2014 on the proposal for a regulation of the European Parliament and of the Council on a Common European Sales Law, 26 February 2014

F.Lazzeri, the EU's Right to Be Forgotten as Applied to Cloud Computing in the Context of Online Privacy Issues, Op. J. Vol. I, n. I, (2015)

Harvard Business Review, Internet of Things: science fiction or business fact?
ITU-T Rec. Y.2060 (06/2012), Overview of the Internet of things
Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on certain aspects concerning contracts for the supply of digital content, Brussels, 9.12.2015, COM/2015/0634 final

Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on certain aspects concerning contracts for the online and other distance sales of goods, Brussels, 9.12.2015, COM/2015/0635 final

Proposal for a Directive of the European Parliament and the Council on certain aspects concerning contracts for the online and other distance sales of goods, 9 December 2015

Proposal for a Regulation of the European Parliament and of the Council on ensuring the cross-border portability of online content services in the internal market COM (2015) 627 final, (2015)

Proposal for a Regulation of the European Parliament and the Council Common European Sales Law, COM/2011/0635 final

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)

Single Market Strategy for Europe, Brussels, 6.5.2015, COM (2015) 192 final

4.Domestic laws

the UK Consumer Rights Act 2015

the German Civil Code

5.Cases

Court of Justice of the European Union – European Parliament v Council of the European Union. Case C-436/03 (2 May 2006)

Court of Justice of the European Union – Polished tiles, case65/09&case87/09, EU:C: 2011:396.

6.Websites

Jacob Morgan, A Simple Explanation of the 'Internet of Things', 13 May 2014: http:// www.forbes.com/sites/jacobmorgan/2014/05/13/simple-explanation-internet-things-that-a-nyone-can-understand/#4c297aff682848

Loek Essers, EU data protection authorities get serious about Facebook's privacy policy, 4 February 2015: http://www.pcworld.com/article/2879872/eu-data-protection-authorities-get-serious-about-facebooks-privacy-policy.html

London Datastore, The Trouble with the Internet of Things, 10 August 2015: http:// data.london.gov.uk/blog/the-trouble-with-the-internet-of-things/

McKinsey&Company, The Internet of Things: Five critical questions, August 2015: http: //www.mckinsey.com/industries/high-tech/our-insights/the-internet-of-things-five-critical -questions

Search Engine Land, Right To Be Forgotten: http:// searchengineland.com/library /legal/ legal-right-to-be-forgotten

The Guardian, Terms and conditions: not reading small print can mean big problems, 11 May 2011: http://www.theguardian.com/money/2011/may/11/terms-conditions-small-print-big-problems

Tim Turner, Cloud Computing and Data Protection: http://www.actnow.org.uk/ media /articles/CloudCompJan12.pdf

workshop for the Juri Committee on Legal Affairs of the European Parliament, New rules for contracts in the digital environment, http://web.ep.streamovations.be/ index.php/event /stream/160217-1600-committee-juri-poldepc.