

A new warranty law for digital content ante portas¹

Thomas Rainer Schmitt²

Contents

I. Introduction.....	2
II. Form of the instrument	3
III. Scope of the instrument	4
1. The contracts covered.....	4
2. The parties involved.....	6
3. The parties' performances.....	8
IV. "Supply" of the digital content	13
V. Conformity of the digital content	15
1. Characteristics	15
2. Integration and legal properties	16
3. Burden of proof	18
VI. Remedies for the lack of conformity	21
1. "Repair"	21
2. Price reduction	22
3. Termination.....	23
4. Right of redress.....	25
VII. Specific rules for the supply over a period of time	26
1. Characteristics and peculiarities.....	26

¹ For an even more detailed discussion of this subject cf. Thomas Rainer Schmitt, 'Gewährleistung für digitale Inhalte - neuer Vorschlag, alte Probleme', in Elisabeth Staudegger/Clemens Thiele (eds.), *Jahrbuch Geistiges Eigentum 2017* (Vienna/Graz: NWV, 2017) 279-314. Also cf. Thomas Rainer Schmitt, *Gewährleistung bei Verträgen über digitale Inhalte* (Vienna: Verlag Österreich, 2018) on warranty for digital content under Austrian law.

² Juris doctor; Associate at Eisenberger & Herzog Rechtsanwalts GmbH in Vienna and fellow of the Vienna Doctoral Academy "Communicating the law".

2. Conformity	26
3. Modifications.....	28
4. Right to terminate.....	29
Right to damages	30
Conclusion	31
Bibliography.....	32

I. Introduction

Digital content is omnipresent in everyone’s daily routine. Whether you start your PC to work with *Windows* or *MS Office* or to play a game, to listen to music saved in an MP3-file, to look at pictures stored in your external drive – in all these cases one uses digital content. It goes without saying that contracts on the acquisition of such digital content are also of major interest. Not only because of their sheer number, but also because digital content cannot be regulated like conventional goods in every regard. For example, digital content like an MP3-file cannot be supplied by simply handing it over, since the file is digital; instead, the recipient must be given the opportunity to copy it. Optimizing the legal ramifications to take these particularities into account could lead to even stronger growth of the digital market.

Addressing the issue, the European Commission in December 2015 presented a new Proposal for a Directive on certain aspects concerning contracts for the supply of digital content³ (from here on referred to as DCP – digital content proposal). These “certain aspects” are mainly issues of warranty law such as what constitutes a lack of conformity and what remedies are available. However, the Proposal also deals with termination of long-term contracts and damages.

The Proposal is not the first legislative act in European law dealing with digital content. Both the Consumer Rights Directive⁴ and the Proposal for a Common

³ Proposal for a Directive of the European Parliament and of the Council on certain aspects concerning contracts for the supply of digital content, COM(2015) 634 final.

⁴ 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

European Sales Law⁵ (meanwhile withdrawn) contain rules on digital content, and influenced the way rules were constructed here. The withdrawal of the latter instrument was also the reason to go for a more focused approach rather than providing a comprehensive set of rules dealing with all the issues of a digital content contract.⁶ Further, the Proposal also draws inspiration from the Consumer Sales Directive⁷, which had already harmonised warranty law many years ago.

In its introductory notes⁸, the Commission highlights the reasons for and objectives of the proposal:

- a) to allow of faster growth of the Digital Single Market,
- b) to reduce uncertainties and complexity because of different contract laws in the Member States and
- c) to reduce costs resulting from these differences. Any evaluation of the Proposal, such as the one presented in this article, needs to keep these goals in mind.

II. Form of the instrument

As mentioned above, the DCP retains the form of a Directive, which means that the Member States will have to implement it in their respective national law. This choice was made so the Proposal would not become too complicated and to reduce interference with national laws and “to adapt the implementation [...] to a technologically and commercially fast-moving market like the one for digital content”.⁹

The Directive is also one with full harmonisation (Art. 4). This means that Member States may not diverge from the Directive’s rules in its implementation. Minimum harmonisation or a non-binding instrument would not have led to uniform rules throughout the European Union and would therefore not have met the goals of the Directive.¹⁰

97/7/EC of the European Parliament and of the Council, ABl L 2011/304, 64 (Consumer Rights Directive).

⁵ Proposal for a Regulation of the European Parliament and of the Council on a Common European Sales Law, COM(2011) 635 final.

⁶ COM(2015) 634 final, 2.

⁷ 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, ABl L1999/171, 12.

⁸ COM(2015) 634 final, 2.

⁹ COM(2015) 634 final, 6.

¹⁰ COM(2015) 634 final, 6 f.

Full harmonisation always is a double-edged sword.¹¹ Of course, it ensures that there is a uniform set of rules. However, there is also one elemental question: what leeway do Member States have when implementing the Directive? Or in other words: what can still be considered an implementation? In the end, it is all about the scope of the instrument. Rules that are not within the scope of the instrument are not covered by the effects of full harmonisation.¹² Unfortunately, this seemingly simple solution does not provide the answer because the scope remains unclear in many ways.

III. Scope of the instrument

1. The contracts covered

As the name of the instrument suggests, it covers contracts about the supply of digital content. This excludes contracts concerning digital content, but not its supply, such as contracts about internet access or trainings/instruction courses for the proper use of a program. The contracts covered by the DCP are about enabling the other party to use the digital content. Supply is a prerequisite for that but on its own would not suffice – who would ever want something unusable? Using the word “supply”¹³ might create an air of familiarity and reminds one of goods that can actually be “delivered” in a conventional sense. But, – a point which will be taken on later on –¹⁴, the term does not quite fit here.

The DCP covers all types of contracts for the supply of digital content. For cases where the supply is only temporary, the instrument contains specific rules, which unfortunately are scattered. Understandably, contract *types* are not mentioned at all, to give leeway in that regard to the Member States. However, in the end, the DCP mainly covers two scenarios: the temporary and the permanent supply of digital content. Under Austrian and German law, these can often be qualified as a lease or a sale.¹⁵ The instrument also explicitly covers digital content that is tailor made to

¹¹ About this in greater detail and in the context of this proposal, cf. Rafał Mańko, 'Contracts for supply of digital content' ([http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/582048/EPRS_IDA\(2016\)582048_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/582048/EPRS_IDA(2016)582048_EN.pdf)) pp. 6 and 35.

¹² COM(2015) 634 final, 12; Recital 10.

¹³ In Recital 19, instead of 'supply', the word 'providing' is used. This is only a synonym, however.

¹⁴ See below 2. and IV.

¹⁵ Jochen Marly, *Praxishandbuch Softwarerecht*, 6th edn. (München: C.H. Beck, 2014) para. 743-55; Elisabeth Staudegger, 'Rechtsfragen beim Erwerb von IT-Systemen', in Dietmar Jahn/Peter

the requirements of the recipient (Art 3 para. 2).¹⁶ This case will probably not be of great importance, though, since consumers will rarely require digital content to be adjusted or made for their own very specific purposes.

The contract type determined by national law will be of importance when monitoring general contract terms. In fact, the whole issue of the validity of general contract terms, which are often called “end user license agreement”¹⁷ in a digital context, is not part of the instrument’s scope, pursuant to Art. 3 para. 9. The same applies for the rules on the validity or formation of the contract.

Some contracts are excluded altogether from the scope, such as those where healthcare, gambling or financial services are concerned (Art. 3 para. 5 points c to e). Also excluded are contracts in which the final result is delivered in digital form, i.e. in the form of digital content, but where there is also “a predominant element of human intervention by the supplier” (Art. 3 para. 5 point a). This wording refers to service contracts where the person performing it is of central interest because it is only through his/her effort that the desired result can be achieved. The effort made by this very person is what the recipient really wants, i.e. the emphasis with these service contracts lies on the process rather than the result, as opposed to the aforementioned service contracts in which tailor made digital content is created. As an example, Recital 19 mentions translations or professional advice. Moreover, the DCP will not cover electronic communication services (Art. 3 para. 5 point b).¹⁸ These are programs like e.g. *Skype* and *WhatsApp* that mainly convey signals on electronic communication networks but do not provide content or editorial control over it.¹⁹ This might be different where the program

Mader/Elisabeth Staudegger (eds.), *IT-Recht*, 3rd edn. (Vienna: Verlag Österreich, 2012) 135-198, pp. 141, 150).

¹⁶ Also cf. Recital 16. Under Austrian law, these contracts would be qualified as service contracts (Werkverträge); cf. Staudegger, 'Rechtsfragen beim Erwerb von IT-Systemen', p. 144. The same applies to German law, as long as elements of planning and conceptualising dominate the supplier’s performance; if not, sales law applies: cf. Jochen Marly, *Praxishandbuch Softwarerecht*, 6th edn. para. 689.

¹⁷ The following descriptions are also common: terms of use, terms of service, rules of contract. Also cf. Fabian Schuster, '§ 305 BGB', in Gerald Spindler/Fabian Schuster (eds.), *Recht der elektronischen Medien*, 3rd edn. (München: C.H. Beck, 2015) para. 43.

¹⁸ The instrument refers to the Framework Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, ABl L 2002/108, 33. The definition of 'electronic communication services' can be found there in Art 2 point c, relevant explanatory remarks being in Rec 5 and 10.

¹⁹ See Brigitta Lurger, 'Anwendungsbereich und kaufvertragliche Ausrichtung der DIRM- und FWRL-Entwürfe', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016) 19-44, p. 32.

does not only provide a means for communication, but also serves to store data or share them with others, if these elements are relevant enough so that communication is no longer the predominant use.

2. The parties involved

The DCP envisions contracts with “the supplier” on one side and “the consumer” on the other (Art. 3 para. 1). “Consumer” means the same kind of consumer that is addressed in any consumer law act of recent history:²⁰ a natural person who acts outside its “trade, business, craft, or profession” (Art. 2 para. 4). This term is therefore not so much of a problem, especially since Member States will be able to keep its diverging understandings of what a consumer is, as long as they cover the cases the instrument addresses in exactly the same way. The same procedure was used when implementing the Consumer Rights Directive.²¹ It is conceivable that some Member States will consider extending these new rules to digital content contracts concluded amongst traders. This seems reasonable considering the limits of consumer law do not apply (especially the mandatory nature of the rules), but the very object of the contract remains the same.

The term “supplier” is explained along the same lines as “trader” would be, a “natural or legal person [...] who is acting [...] for purposes relating to that person’s trade, business, craft, or profession” (Art. 2 para. 3). In other words, it is the opposite of “consumer”. This definition raises no problems as long as there are only two parties involved. However, this is often not the case in the distribution of digital content. This is because “supply” of digital content requires the consumer to get two things: the relevant data and the right to use it. There are essentially two ways a consumer can acquire these components: a) she/he acquires both from the same person, b) she/he acquires them both from different persons. Variant b) can be further divided into two cases: b) i) the consumer in a first step acquires both the data and the promise to be granted access to it, b) ii) the consumer in a first step acquires just a promise to gain access to digital content. Variant a) applies only where the consumer concludes the contract directly with the copyright holder²².

²⁰ Cf. for example Art 2 para 1 of the Consumer Rights Directive.

²¹ Cf. Wilma Dehn, ‘§ 1 FAGG’, in Michael Schwimann/Georg Kodek (eds.), *ABGB Praxiskommentar*, 4th ed. (Vienna: LexisNexis, 2015) para. 9.

²² Only in cases where digital content is not protected by copyright, any right holder would do. These cases will be very rare though, considering the low threshold for copyright protection; cf. Marcel Bisges, ‘Der europäische Werkbegriff und sein Einfluss auf die deutsche Urheberrechtsentwicklung’ (2015) ZUM 357-361, pp. 358-9; Karl-Nikolaus Peifer, ‘“Individualität” or Originality? Core concepts in German copyright law’ (2014) GRUR Int. 1100-1104, pp. 1102-3; Antoon Quaedylic,

Variant b) i) covers cases where the consumer e.g. purchases a box containing a data carrier and a key code. The latter will enable the consumer to gain access to the data to make use of the digital content. However, this will usually depend on the acceptance of certain terms and conditions imposed by the copyright holder. In variant b) ii), only a key code will be given. The consumer is required to get the data by other means (e.g. via a download link provided by the copyright holder) and also to accept the kind of conditions mentioned before.

Putting aside the validity of such constructions, as this is left to the Member States to regulate,²³ the question still remains: in variants b) i) and b) ii), who is the “supplier”? The person who gives the box/the key, the copyright holder, or both of them? This question is essential because the seller who just hands out boxes and/or keys will never be able to make digital content conform to the contract in case there is a defect of some sort. They will always have to resort to the copyright holder who in turn orders their programmers (where these are not identical) to make “repairs”.

In my opinion, both will have to be regarded as “suppliers”. Even when only a key is given, that performance is still as necessary to gain any access at all²⁴ as much as the data itself is. However, so is the copyright holder’s consent. Even though such consent might not always be required under copyright law,²⁵ the copyright holder is also bound to the consumer as soon as his/her terms and conditions are accepted. Of course, this means in a first step, only the person selling the key/the box is the supplier. But when asking the consumer to accept terms and conditions, in a second step the copyright holder also becomes a supplier as he/she promises to grant access to the digital content.²⁶ In essence, both promise the consumer they will

'The tripod of originality and the concept of work in Dutch and European copyright' (2014) GRUR Int. 1105-1111, pp.1109-10.

²³ See above, 1.

²⁴ This case would also be covered by the wording in Art 3 para 1: “...where the supplier supplies digital content [...] *or undertakes to do so...*”.

²⁵ E.g. where the principle of exhaustion applies, cf. Art 4 para 2, Recitals 28 and 29 Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society, ABl L 2001/167, 10 (Information Society Directive). The applicability of this principle on digital content in general remains under dispute; about this issue cf. for example Caroline Cichon/Matthias Kloth/Andreas Kramer/Jan Bernd Nordemann, 'Exhaustion issues in copyright law (Q240)' (2014) GRUR Int., 920-927; Péter Mezei, 'Digital First Sale Doctrine Ante Portas - Exhaustion in the Online Environment' (2015) *jipitec* Vol. 6, Issue 1, 23-72; Andreas Wiebe, 'The Principle of Exhaustion in European Copyright Law and the Distinction Between Digital Goods and Digital Services' (2009) GRUR Int. 114-117.

²⁶ Wolfgang Faber, 'Bereitstellungspflicht, Mangelbegriff und Beweislast im Richtlinienentwurf zur Bereitstellung digitaler Inhalte', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues*

be granted access to digital content. However, none of them is able to fulfil this promise on their own. While the seller profits from the copyright holder dealing with any problems that might arise, the copyright holder profits from the seller's infrastructure while still keeping control over every use. From this perspective, too, it makes only sense that both can be kept to making the object work which they both profit from.

3. The parties' performances

There are two options as to how an exchange of performances can work under the DCP. Either a) digital content is given against a price, or b) digital content is given against "the consumer actively [providing] counter-performance other than money in the form of personal data or any other data" (Art. 3 para. 1)²⁷.

a. Price

The easiest component to grasp is "price". This simply means "money" (Art. 2 para. 6). Most likely, this does not mean virtual currency bought against money or bitcoin²⁸, unless "price" can be construed to include "functional" money as well. This would, however, be at odds with the introduction of the concept of a "counter-performance other than money". Also, both virtual currency and bitcoin are - with few exceptions²⁹ - no legally acknowledged forms of currency³⁰, but are themselves

Vertragsrecht für den digitalen Binnenmarkt? (Vienna: Manz, 2016), 89-130, p. 101 and Gerald Spindler, *Verträge über digitale Inhalte - Anwendungsbereich und Ansätze* (2016) MMR 147-153, p. 149 regard only the seller as the supplier. Hugh Beale, 'Scope of application and general approach of the new rules for contracts in the digital environment' (http://www.epgencms.europarl.europa.eu/cmsdata/upload/4a1651c4-0db0-4142-9580-89b47010ae9f/pe_536.493_print.pdf) p. 18; Marco Loos, 'European harmonisation of online and distance selling of goods and the supply of digital content' (<http://ssrn.com/abstract=2789398>) p. 17 and Gerald Spindler, *Contracts for the Supply of Digital Content - Scope of application and basic approach - Proposal of the Commission for a Directive on contracts for the supply of digital content* (2016) ERCL 183-217, p. 191 argue, that a license agreement may lead to liability, if the consumer provides personal data to the licensor.

²⁷ Notably, this is different from the UK Consumer Rights Act 2015, which only includes digital content supplied against a price; see there Section 33 subsection 1; also cf. Bénédicte Fauvarque-Cosson, 'The new proposal for harmonised 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) p. 6.

²⁸ The opposite is advocated by Brigitta Lurger, 'Anwendungsbereich und kaufvertragliche Ausrichtung der DIRL- und FWRL-Entwürfe', p. 31.

²⁹ Cf. Emiko Terazono, 'Bitcoin gets official blessing in Japan' (<https://www.ft.com/content/b8360-e86-aceb-11e7-aab9-abaa44b1e130>). Generally speaking, few countries introduced rules specifically dealing with bitcoins; cf. The Law Library of Congress, 'Regulation of Bitcoin on Selected Jurisdictions' (<http://www.loc.gov/law/help/bitcoin-survey/regulation-of-bitcoin.pdf>); Marcin Szczepański, 'Bitcoin. Market, economics and regulation' ([http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2014/140793/LDM_BRI\(2014\)140793_REV1_EN](http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2014/140793/LDM_BRI(2014)140793_REV1_EN)).

digital content. Hence, a consumer acquiring virtual currency will be allowed to claim warranty under this Proposal for any defects that currency might have, such as it not being redeemable. This will not be possible, however, if the acquisition constitutes a financial service as will probably be the case with bitcoin.³¹ The DCP also applies, however, to the supply of any digital content acquired by trading in that virtual currency or bitcoin. The virtual currency given by the consumer then constitutes “other data”, i.e. a “counter performance other than money”. Consequentially, when virtual currency or bitcoin are concerned, one has to differentiate whether they are acquired themselves (and must be treated as digital content) or whether they are used to acquire other digital content (and must be treated as other data used as counter performance).

b. Counter performance other than money

What other than virtual currency can be a “counter performance other than money”? Art. 3 para. 1 mentions “personal data” beside “any other data”. Whether data is “personal” or not depends on data protection law, which remains untouched by the instrument (Art. 3 para. 8, Recital 22). Examples are the consumer’s name, address, birth date, legal status and so on. The value of personal data is undisputed and therefore justifies the application of warranty law.³²

The consumer’s performance in these cases primarily consists of giving their consent to the processing of their data.³³ Therefore, Art. 3 para. 4 excludes cases where the consumer’s personal data must be processed so the contract can be performed³⁴ or legal requirements³⁵ can be met. In these cases, the consumer’s

[pdf](https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf)) p. 7; European Central Bank, 'Virtual Currency Schemes' (<https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf>) pp. 42-5 and European Central Bank, 'Virtual currency schemes – a further analysis' (<https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf>) pp. 34-37.

³⁰ Cf. Matthias Petutschnig, 'Sind Bitcoins ertragsteuerpflichtig?' (2014) *ÖStZ* 353-359, p. 355. Also cf. CJEU 22.10.2015, C-264/14 (Hedqvist) no. 42: “The ‘bitcoin’ virtual currency, being a *contractual means of payment*, cannot be regarded as a current account or a deposit account, a payment or a transfer. Moreover, unlike a debt, cheques and other negotiable instruments [...] the ‘bitcoin’ virtual currency is a *direct means of payment between the operators that accept it*.”

³¹ Spindler, 'Contracts for the Supply of Digital Content', p. 195.

³² Martin Schmidt-Kessel et. al., 'Die Richtlinienvorschläge der Kommission zu Digitalen Inhalten und Online-Handel - Teil 2' (2016) *GPR* 54-71, p. 58.

³³ Carmen Langhanke/Martin Schmidt-Kessel, 'Consumer Data as Consideration' (2015) *EuCML*, 218-223, p. 220 and Schmidt-Kessel et. al., 'Die Richtlinienvorschläge', p. 58 even argue, that this is the consumer’s only performance that matters. However, consent without the relevant data itself is equally worthless as just the data that may not be used or false data.

³⁴ E.g. the disclosure of the consumer’s geographical location for a navigation app; cf. Recital 14.

consent is not required. Presumably, the proposed Directive is also intended to (retroactively) apply where the supplier later on uses the data for purposes other than performance of the contract.³⁶ This should be clarified.

In Art. 3 para. 1, the DCP also requires that the consumer must actively provide his data (be it personal or not). This is the case where the consumer has to enter the data when registering, for example for a user account, to use the digital content. Data is not actively provided where it is collected in the background, e.g. by cookies (even if they were accepted)³⁷ and “where the consumer is exposed to advertisements exclusively in order to gain access to digital content” (Recital 14). At the bottom line, many cases where the consumer spends no money will not be covered by the instrument at all.³⁸ Concerning the (automated) collection of personal data in the background, this can still have legal consequences under data protection law³⁹, when there is no consent of the data subject, i.e. the affected person. The exclusion of ad-based supply of digital content, however, means that any streamer who has to watch extensive commercials before, between, or after watching the video has to resort to national warranty law which may or may not be applicable and may or may not be suitable to regulate such cases.

³⁵ E.g. the disclosure of the consumer’s age and identification to comply with youth protection legislation; cf. Recital 14.

³⁶ Loos, 'supply of digital content', p. 15. Spindler, 'Contracts for the Supply of Digital Content', p. 192 critically mentions, that it will be hard for a consumer to prove, though, when data is used for more than performing the contract at some point.

³⁷ This is widely criticised; cf. e.g. Beale, 'Scope of application and general approach', p. 13; Loos, 'supply of digital content', p. 15; Vanessa Mak, 'The new proposal for harmonised rules on certain aspects concerning contracts for the supply of digital content' (http://www.epgen-cms.europarl.europa.eu/cmsdata/upload/a6bdaf0a-d4cf-4c30-a7e8-31f33c72c0a8-/pe_536.494_en.pdf) p. 9; Spindler, 'Contracts for the Supply of Digital Content', p. 193).

³⁸ The criterion “actively” is seen very sceptically and some even propose that it be struck out altogether; European Law Institute, 'Statement of the European Law Institute on the European Commission's Proposed Directive on the Supply of Digital Content to Consumers COM (2015) 634 final' (http://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Statement_on_DCD.pdf) pp. 3, 15-6; Friedrich Graf von Westphalen/Christiane Wendehorst, 'Hergabe personenbezogener Daten für digitale Inhalte – Gegenleistung, bereitzustellendes Material oder Zwangsbeitrag zum Datenbinnenmarkt' (2016) BB 2179-2187, p. 2181.

³⁹ Cf. Art. 23 Directive 95/46/EC and Art. 82 General Data Protection Regulation 2016/679 which provide that damages can be claimed where data has been processed unlawfully, whereby “processing” also includes the automated collection of personal data (cf. Art. 2 point b Directive 95/46/EC, Art. 4 para .2 Regulation 2016/679).

c. Digital content

The term “Digital content” seems to be self-explanatory at a first glance, at least once some examples - such as those mentioned in the introduction - have been given. Nevertheless, the European Commission still does not seem to commit itself to a description of what digital content really is. Recital 12 gives the impression that this should not matter, anyway: digital content is covered whether on a medium or not, whether sold at a distance or not. Art. 2 para. 1 then enumerates examples: digital content shall mean data like videos, audio files, software (point a), but also services to create, process or store data provided by the consumer (point b) and services which allow data to be shared to other user or which allow them to interact with it (point c). Despite making such complex rules and even bringing in contract types after all (and in the definition for digital content at that⁴⁰), the point could have been made more simply: digital content is data provided by either party, regardless of the way it is provided. There is no need to address its different purposes in its definition.

Not all digital content falls within the DCP’s scope. As mentioned above, some cases are exempt because they are not mainly about the provision of digital content itself, but are about some kind of effort (Art. 3 para. 5 points a to b) or touch sensitive matters (Art. 3 para. 5 points c to e).⁴¹ However, the DCP is also not intended to cover “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” (Recital 11). This is most likely supposed primarily to cover software that operates objects, like that of a wristlet that measures the bearer’s heartbeat or the system that operates items like *Google Glass*.⁴² Closely related to this are cases like smart TVs, smart fridges, smart homes, i.e. everyday objects connected to each other or the internet to fulfil additional roles like those of a media centre (smart TV), a shopping list creator (smart fridge) or a security and resource management system (smart home). In short, these manifestations are nowadays known as the “Internet of Things”, a term which is also mentioned as an exempted field in Recital 17. While there are indeed specific questions related to

⁴⁰ This strange approach to classify a contract type (services) as digital content was also criticised by Schmidt-Kessel et. al., 'Die Richtlinienentwürfe', p. 55; Verena Cap/Johannes Stabentheiner, 'Neues aus Europa zum Vertragsrecht: Die verbrauchervertragsrechtlichen Vorschläge im Rahmen der digitalen Binnenmarktstrategie - Teil 1' (2016) wbl 177-186, p. 180.

⁴¹ See above, 0.1.

⁴² Such devices are also described as “wearables”; cf. <http://www.wearabledevices.com/what-is-a-wearable-device/>.

these products that need in-depth regulation,⁴³ the formulation in Recital 11 is too broad.⁴⁴ Taken literally, no sale of a laptop that comes with a copy of an operating system or other software would be covered by the DCP. This, however, was most probably not intended.⁴⁵ The criteria “integral part of goods” and “subordinate to the goods’ main functionalities” should have been explained in more detail or accompanied by more criteria, such as “tailored to a product series” or “designed to work together with a certain (type of) hardware”.

Where something besides digital content is provided on the basis of the same contract, the instrument will only apply to the digital content (Art. 3 para. 6). This does not necessarily include the medium (CD, DVD, BD ...). This is covered by the DCP if it is used “exclusively as carrier of digital content” (Art. 3 para. 3). This is not the case where the medium also serves as a collectible and therefore does not exclusively function as a carrier. Strangely, though, the provisions on supply and the remedy for the failure to supply (Art. 5 and 11) do not apply even when a medium falls within the DCP’s scope. This would suggest it is of no relevance whether the medium is delivered or not, which was probably not intended. It should be clarified, whether national rules should apply insofar.⁴⁶ Art. 18 and 20 of the Consumer Rights Directive will only apply as far as sales contracts are concerned.⁴⁷

At any rate, this solution is unnecessarily complicated.⁴⁸ A better way would be to include every medium so that there would be no need for a complicated distinction between them, which is especially problematic considering that they almost always serve multiple purposes. Since they constitute conventional goods, some short rules about evaluating whether data carriers conform to the contract will not be much of a problem. Objectively, they always have to fulfil one simple purpose: to provide

⁴³ Such as how long these “smart“ features have to be provided and whether third persons providing them can be held liable. For an extensive analysis of these issues cf. Christiane Wendehorst, 'Hybride Produkte und hybrider Vertrieb', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016), 45-88; Christiane Wendehorst, 'Sale of goods and supply of digital content - two worlds apart?' (http://www.europarl.europa.eu/cmsdata/98774/pe%20556%20928%20EN_final.pdf) pp. 12-20.

⁴⁴ Also cf. Spindler, 'Contracts for the Supply of Digital Content', p. 189.

⁴⁵ Lurger, 'Anwendungsbereich und kaufvertragliche Ausrichtung der DIRM- und FWRL-Entwürfe', p. 28; Schmidt-Kessel et. al., 'Die Richtlinienentwürfe', p. 5.

⁴⁶ See Bernhard Koch, 'Rechtsbehelfe des Verbrauchers bei Verträgen über digitale Inhalte', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016), 131-158, p. 135.

⁴⁷ Cf. Art. 17 para. 1 Consumer Rights Directive.

⁴⁸ Cf. above I., on the instrument’s goal to reduce the complexity of rules.

reliable and repeatable access to data.⁴⁹ Packaging and manuals should be distinguished, however, and remain excluded since they are not immediately connected to the digital content itself (or its properties).

IV. “Supply” of the digital content

Art. 5 para. 1 specifies that the digital content shall be supplied by the supplier to the consumer (point a) or to “a third party which operates a physical or virtual facility making the digital content available to the consumer or allowing the consumer to access it and which has been chosen by the consumer for receiving the digital content” (point b). The second case addresses cloud computing, i.e. storage accessible via internet, in Recital 23 described as an “electronic platform [...] for receiving the digital content”.

It has already been briefly discussed that the word “supply” is not quite fitting for digital content, because what really matters is not just receiving data, but also being able and allowed to use it.⁵⁰ In several cases, such as software as a service⁵¹, there is no or little download and installation required but instead a continuous flow of data enabling access. Anyway, even where a data medium is used as a carrier, solely delivering this medium will not suffice. Art. 2 para. 10 describes what “supply” means in the DCP: “providing access to digital content or making digital content available”. Consequently, the supplier’s duty is fulfilled when access is possible, even though the consumer might not obtain it due to problems with his or her internet provider.⁵² In other words: circumstances in the customer’s sphere of influence hindering the access to digital content do not lead to liability of the supplier.

However, a major question remains unanswered: how long must the supplier grant access to the digital content?⁵³ This is, of course, only an issue where access to the digital content is not linked to a connection to the supplier’s server (e.g. for purposes of digital rights management or to make exchange with other users

⁴⁹ A special design of a data carrier that could lead to non-conformity if it is not supplied will always require a specific subjective agreement or performance specification.

⁵⁰ See above, III.1. and 2.

⁵¹ This can be considered a subcategory of cloud computing and means making software available without requiring the user to install it first; cf. Rajkumar Buyya, Christian Vecchiola, Thmarai Selvi, *Mastering Cloud Computing* (Waltham, MA: Morgan Kaufmann, 2013) pp. 121-124. An example for software as a service is *Google Docs*, cf. <https://www.google.at/intl/de/docs/about/>.

⁵² Also cf. Recital 23 on this.

⁵³ See Faber, 'Bereitstellungspflicht, Mangelbegriff und Beweislast', pp. 94-5; Spindler, 'Contracts for the Supply of Digital Content', p. 196.

possible), i.e. where at least one part of the contract entails a recurring obligation⁵⁴. For cases when, e.g., the transfer of data of an e-book or of music files are concerned, the instrument does not state how long and how often the supplier must allow the consumer to download the relevant data. This will therefore remain open to agreements between the parties. The same applies to the time of the supply, although Art. 5 para. 2 and Recital 23 state that the supply should be “immediately after the conclusion of the contract, unless the parties have agreed otherwise”.

If the criteria of Art. 5 are not met, i.e. if the supplier fails to supply correctly, pursuant to Art. 11 the consumer may terminate the contract.⁵⁵ Unfortunately, the DCP is unclear as to whether the consumer has this right to terminate only when there is no supply at all or also when there was a supply, which however did not conform to the contract.⁵⁶ Recital 35 seems to indicate the latter, since it states that a “failure of the supplier to supply the digital content to the consumer *in accordance with the contract* [...] should allow the consumer to immediately terminate the contract”. However, unlike Recital 35, Art. 11 does not refer to conformity of the digital content, but instead refers to Art. 5, i.e. the criteria for a correct supply, indicating that termination of the contract under this Article is only allowed when there was no supply at all. This approach is preferable because the right to terminate due to a lack of conformity is already regulated under Art. 12 para. 3 and 5, which provide that such right cannot be exercised right away unless certain conditions are met (Art. 12 para. 3 and 5). Construing Art. 11 so to include cases of non-conformity (as indicated by Recital 35) would consequentially lead to conflicts with Art. 12. Thus, the wording in Recital 35 needs to be revised; immediate termination because of a failure to supply should only be possible where there has been no supply at all.

Even then, it remains questionable whether such immediate termination without prior notification⁵⁷ or warning is always appropriate,⁵⁸ especially considering the supply has to take place immediately after the conclusion of the contract, unless otherwise agreed, i.e. extremely quickly. Immediate termination seems justified, however, where the supplier refuses to supply or where something totally different was supplied, e.g. where a text editor should have been made available, but the

⁵⁴ Also cf. under VII.1.

⁵⁵ In addition, where relevant, he is also entitled to claim damages (Art 14); see below VIII.

⁵⁶ Thomas Rainer Schmitt, 'Ein neues Gewährleistungsrecht für Verträge über digitale Inhalte?', in Erich Schweighofer/Franz Kummer (eds.), *Jusletter IT Flash 4. October 2016*, 23:22 - 24:25.

⁵⁷ As Art. 18 para. 2 Consumer Rights Directive and § 918 para. 1 ABGB provide.

⁵⁸ Also cf. European Law Institute, 'Statement', p. 5, pp. 27-8; Loos, 'supply of digital content', p. 18.

consumer only received a download for a graphics editor or for a music file. Of course, it would have to be determined what “totally different” means, i.e. when there is an aliud. So far, the instrument does not address this issue at all. Still, it should not be left to the Member States to decide whether there is a need to regulate the failure to supply, because this would perpetuate the very differences the instrument seeks to eliminate.

V. Conformity of the digital content

1. Characteristics

In Art. 6, the criteria are laid out that must be met for the digital content to be in conformity with the contract. What this means is explained in two steps.

To sum up para. 1, the contract must be complied with. In points a, c and d it is explained that this includes questions of “quantity, quality, duration and version”, “interoperability and other performance features”, “instructions and customer assistance” and updates. Point b seems to be something of a peculiarity in this system as it addresses a “particular purpose for which the consumer” requires the digital content. Digital content has to be fit for such purpose only where this has been made known to the supplier and accepted by him when the contract was concluded. However, even point b does not explain anything different than the very first sentence of para. 1: what has been agreed upon is the measure by which conformity of the digital content has to be primarily judged. The enumerations in points a to d only make the rule more complex and therefore contradict the instrument’s goals.

Only where the contract does not stipulate “in a clear and comprehensive manner” the requirements for conformity, “the digital content shall be fit for the purposes for which digital content of the same description would normally be used” (Art. 6 para. 2). So, in a second step, objective criteria determine conformity. Essentially, this means where the contract is blank or unclear, average usability must be possible and is presumed to have been agreed upon. In points a – c, it is then stated what should be taken into account when determining the average “functionality, interoperability and other performance features such as accessibility, continuity and security”: whether the consumer gave money or data (point a)⁵⁹, whether there are

⁵⁹ Mak, 'The new proposal', p. 17 and Spindler, 'Contracts for the Supply of Digital Content', pp. 198-9 criticise this differentiation with the latter arguing that it prevents a level playing field for all business models. However, expectations are probably always lower with digital content not received against a price as these constellations are often described and perceived as "free".

technical standards or codes of conduct/good practices (point b) and whether there were public statements made by the supplier, made on behalf of him or made by earlier “links of the chain of transactions” (point c). Such statements cannot influence conformity requirements, however, if the supplier could not have been aware of them, corrected them at the time the contract was concluded or if they did not influence the consumer’s decision to acquire the digital content.

It could be argued that there should be a stronger emphasis on objective criteria, e.g. in so far as there should be a minimum performance the supplier always has to provide.⁶⁰ In most cases this would be possible as there are objects of comparison.⁶¹ For example, a text editor can be compared to other text editors; there will be an average quality of music files. The crucial criterion will eventually be the intended purpose. Digital content must be fit for the purpose both parties agreed upon, as the somewhat complicated regulation of Art. 6 para. 1 point b also states. The subsequent question is: can there be an agreement on the purpose that contradicts the consumer’s reasonable expectations⁶²? However, this issue is addressed in other instruments already: there are extensive rules on information and transparency requirements and the control of contract terms. Using warranty law to implement minimum standards would make those rules partially superfluous. Therefore, the general approach of the instrument to first look at the contract and apply objective criteria only secondarily, seems preferable.

2. Integration and legal properties

Pursuant to Art. 6 para. 5, digital content “must also meet the requirements of Art. 7 and 8”. Art. 7 deals with “integration”, or simply put, the installation of the digital content. Art. 8 on the other hand deals with “third party rights”, i.e. legal deficiencies.

“Integration” is not simply equated with installation, however. Art. 2 para. 2 defines this in more detail as “linking together different components of a digital environment to act as a coordinated whole in conformity with its intended

⁶⁰ Cf. European Law Institute, 'Statement', p. 4, pp. 18-21; Faber, 'Bereitstellungspflicht, Mangelbegriff und Beweislast', pp. 104-106; Maňko, 'Contracts for supply of digital content', pp. 21-2; Schmitt, 'Ein neues Gewährleistungsrecht', 9:46 - 11:14; Spindler, 'Verträge über digitale Inhalte', pp. 152-3.

⁶¹ More sceptical: Mak, 'The new proposal', p. 15.

⁶² Spindler, 'Contracts for the Supply of Digital Content', p. 199 argues that reasonable consumer expectations are not explicitly mentioned. However, what the consumer can reasonably expect depends also on how the respective digital content would normally be used, which in my opinion means they are implicitly included in Art 6 para 2.

purpose”. This definition, however, contains another term that must be defined: “digital environment”. This means “hardware, digital content and any network connection to the extent that they are within the control of the user” (Art. 2 para. 8), i.e. anything the consumer already has that the digital content he/she seeks to acquire must interoperate⁶³ with.⁶⁴ Both definitions are not so complicated that they would hinder the understanding of the rules themselves, but they probably would not have been necessary here either. The understanding of “digital environment” plays a more crucial role in the right to damages (Art. 14), as will be explained below⁶⁵.

Art. 7, in short, works very much the same way Art. 2 para. 5 of the Consumer Sales Directive does. Any lack of conformity that is the result of an incorrect integration leads to liability of the supplier if the integration was either carried out by the supplier/under his responsibility (Art. 7 point a) or if it was carried out by the consumer and incorrectly because of faulty instructions (Art. 7 point b). This is nothing new. Since most of the time it is the user who installs patches/updates, it may be a rule more relevant to digital content than to goods. However, not every digital content requires an installation; Art. 7 will therefore not apply to music files e.g. They might have prerequisites to be usable (e.g. an mp3-player), but this is a matter of interoperability and pre-contractual information duties, not warranty. Nevertheless, an installation process will have to be properly guided to conform to Art. 7 and inform the user, for example, about the disk space required and whether installation at the chosen destination might cause the digital content not to work properly.

While the requirements of Art. 8 are also not new, they are formulated rather vaguely and in a way that is misleading. As has already been explained⁶⁶, the consumer of course aims to acquire not only data but foremost the right to access and use the data and thereby the digital content itself. The provision states that “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” (Art. 8 para. 1), which also applies when the digital content is supplied only for a certain period (Art. 8 para. 2). This wording is deliberately vague because

⁶³ Art. 2 para. 9 also contains a definition of “interoperability”: “the ability of digital content to perform all its functionalities in interaction with a concrete digital environment”.

⁶⁴ Loos, 'the supply of digital content', p. 21 points out, that it remains unclear, whether “digital environment” also means e.g. cloud services and other services controlled by third parties and rightly concludes that this question would have to be answered in the affirmative.

⁶⁵ See below VIII.

⁶⁶ See above, III.2.

the DCP aims not to interfere with IP law, especially copyright law.⁶⁷ In fact, Art. 3 para. 7 states that if there is any provision of the instrument that “conflicts with a provision of another Union act governing a specific sector or subject matter, the provision of that other Union act shall take precedence over this Directive.”. Although it might be regrettable that consequently some issues⁶⁸ are not tackled by the instrument, this decision is understandable: IP law and especially copyright law are complex, possess their very own system and must therefore undergo their own development. They should not be regulated rashly in another context that might cause problems rather than solve them. Especially the issues concerning exhaustion and whether all digital content may be resold without the right holder’s consent should, however, be tackled as soon as possible.

Nevertheless, the wording of Art. 8 is also misleading because there can never be digital content that is “free of any right of a third party”. At the very least, there will always⁶⁹ be personality rights as with every copyright protected work.⁷⁰ What the provision really means is that there may be no third party rights that interfere with the guaranteed functions of the digital content.⁷¹ It should be reformulated accordingly.

3. Burden of proof

Generally, the burden of proof for the conformity of the digital content is on the supplier (Art. 9 para. 1). The provision also refers to Art. 10 which explains that there must not be a lack of conformity which exists at the time of the supply (point b) or, where the digital content is supplied only temporarily, during the entire period of time it is supplied (point c). The reason to put this burden on the supplier is explained in Recital 32: “...it is the supplier who is in a better position than the consumer to know the reasons for the digital content not being in conformity...”

In its para. 2 and 3, Art. 9 contains an exception to this rule: the burden of proof shall be on the consumer where the problem lies with his digital environment and where he has not been informed properly before the conclusion of the contract

⁶⁷ Cf. Recital 21.

⁶⁸ Like for example the range of the principle of exhaustion, cf. fn. 25. Also cf. Maňko, 'Contracts for supply of digital content', p. 33 correctly pointing out that “the right to re-sell the (used) digital content is in the essential interest of the consumer”, what also applies to traders as well and remains true independently of this instrument.

⁶⁹ Exceptions where there is no protection by copyright or IP law, are thinkable but rare, cf. fn. 22.

⁷⁰ See also Loos, 'the supply of digital content', p. 20-1.

⁷¹ This meaning is also more clearly expressed in the last sentence of Recital 31: “...for example a copyright claim [...] which precludes the consumer from enjoying the digital content ...”.

(para. 2). Thus, where there has been no or false information e.g. about interoperability requirements, the burden of proof always lies with the supplier.⁷²

Where para. 2 applies, the consumer must cooperate with the supplier so their digital environment can be examined. If the consumer does not cooperate, the burden of proof is on them. This of course raises the question what the consumer must do, i.e. how extensive their cooperation must be. Art. 9 para. 3 clarifies that this obligation “shall be limited to the technically available means which are the least intrusive for the consumer”. Recital 33 further elaborates that this provision should not touch “the fundamental rights to the protection of private life, including confidentiality of communications, and the protection of personal data”. Providing automatically generated incident reports and information about their internet connection can however be expected of consumers. Virtual access, i.e. remote control over the consumer’s PC, is a measure which Recital 33 does not entirely reject. It is allowed where there are “exceptional and duly justified circumstances” and where “there is no other way possible”. Since the same fundamental rights are endangered, virtual access used to “repair” digital content, i.e. bring it into conformity, must at least also fulfil these requirements. Whether these requirements make sense is questionable. The consumer will always have to give their consent first. Virtual access effected without that will be unlawful as it requires intrusive and/or clandestine procedures. Where the consumer consents, the requirements are not necessary to begin with. They could only have relevance to determine whether the supplier may ask for the consumer’s consent. To demand prerequisites to be fulfilled for that seems too strict, however, since the decision about virtual access should always be with the consumer. Consumers may deem the risk acceptable if the supplier makes the digital content work (again), regardless of the circumstances.

All in all, Art. 9 seems somewhat unbalanced. Significant burden is placed on the supplier since they will have to prove that there is/was no lack of conformity for an indefinite time.⁷³ The DCP in general does not include any temporal limitation to the liability of the supplier at all. In Recital 43, this is justified by digital content not being subject to wear and tear. Strangely though, the Recital contradicts itself: it says “Consequently Member States should refrain from maintaining or introducing such a period. Member States should remain free to rely on national prescription rules in order to ensure legal certainty in relation to claims based on the lack of

⁷² In such a case, there will not only be consequences because of warranty law. Claims for damages and avoidance should also be considered.

⁷³ See also Loos, 'the supply of digital content', p. 23.

conformity of digital content”. These sentences are contradictory on their own already,⁷⁴ but they also contradict the argument that there is no wear and tear. There either is a need for a temporal limitation on liability or there is not.

And in fact, there should be. Digital content may be short-lived or quickly outdated, depending on the circumstances, especially on the kind of digital content that is supplied.⁷⁵ But providing no temporal limitation for the suppliers’ liability will create both uncertainties and costs for them, especially since they will often bear the burden of proof. To reverse it requires an examination of every singular case in detail, which most suppliers cannot do. This is all the more true if the term “supplier” is understood in a way that does not include the copyright holder but only sellers like *Amazon* (who essentially act as intermediaries for the right holder or rather as their distribution channel), who do not have the technological/personal infrastructure required.⁷⁶ Of course, digital content is often updated, and with these updates new problems arise. To address this, the temporal limitation could be reset when an update was issued to the consumer and accepted and applied, as far as the changes made are concerned.

Of course, the passages mentioned could also be construed in such a way that while liability may not be limited, Member States are allowed to make it unenforceable, e.g. by introducing a prescription period.⁷⁷ If this wording is not reworked, such an interpretation would certainly be preferable. Still, why not make use of full harmonisation and provide for legal certainty?⁷⁸ To consumers, it makes little difference whether their right is lost or just unenforceable. But it makes a difference for them to know how long they can rely on it – information which the instrument currently does not provide even though it should.⁷⁹

⁷⁴ Cap/Stabentheiner, 'Neues aus Europa', pp. 239-40. Also cf. Schmitt, 'Ein neues Gewährleistungsrecht', 14:09 - 14:43.

⁷⁵ E.g. security software, such as antivirus programs. This will not apply to music files for example, even considering technological advancements that enable better quality, which are there, but slower.

⁷⁶ See also below III.2. about this issue.

⁷⁷ Spindler, 'Contracts for the Supply of Digital Content', p. 213.

⁷⁸ Differences in prescription periods have already been a difficult issue under the Consumer Sales Directive; for an overview cf. European Consumer Centres Network, 'Commercial warranties. Are they worth the money?' (http://europakonsument.at/sites/europakonsument.com/files/Commercial_warranty_ECC-Net.pdf) pp. 19-21; Niko Härting/Patrick Gössling, 'Online-Kauf in der EU - Harmonisierung des Kaufgewährleistungsrechts' (2016) CR 165-170, p. 169.

⁷⁹ Also cf. Georg Kodek, 'Änderung von Leistungsmerkmalen und Vertragsbeendigung', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016), 159-172, p. 163; Lurger, 'Anwendungsbereich und

VI. Remedies for the lack of conformity

The remedies for the lack of conformity have to be distinguished from the remedy for the failure to supply (Art. 11), which is termination of the contract (and a right to damages, Art. 14) and which has already been explained earlier.⁸⁰ The system of these remedies, which are situated in Art. 12, 13 and 17, is basically the same as the one in Art. 3 and 4 of the Consumer Sales Directive. Sticking with this already known and proven system was also suggested by some in the stakeholder consultations preceding the instrument, although there were also “bolder” suggestions like stipulating termination as the first or even as the only remedy available.⁸¹

1. “Repair”

In a first step, the consumer is “entitled to have the digital content brought into conformity with the contract free of charge, unless this is impossible, disproportionate or unlawful.” (Art. 12 para. 1). In other words, the supplier has to “repair” the digital content.

What “disproportionate” means is addressed right away in the same paragraph, albeit only by paraphrasing it as unreasonable costs for the supplier. To determine whether a “repair” would be disproportional, both the value of the digital content if it were in conformity with the contract (point a) as well as the significance of the lack of conformity (point b) shall be taken into account.

An unlawful or impossible “repair” is hard to imagine in the context of digital content. Especially since, according to Recital 36, “the supplier may select a specific way of bringing the digital content to conformity with the contract, for example by issuing updates or requiring the consumer to access a new copy”. This reflects reality since most of the time, digital content is not brought back into conformity for each user individually, but complaints and reports of problems are collected and then mended in a patch/update that is made available for download and installation to every user.

Costs for the development of such a patch/update may not be passed on to the consumer (last sentence of Recital 36), i.e. it will not be possible to masquerade a patch as an upgrade provided against a fee. Costs that result from an internet

kaufvertragliche Ausrichtung der DIRL- und FWRL-Entwürfe', p. 38; Schmitt, 'Ein neues Gewährleistungsrecht', 13:56 - 14:08; European Law Institute, 'Statement', pp. 6 and 33.

⁸⁰ See IV.

⁸¹ COM(2015) 634 final, 8. Also cf. Maňko, 'Contracts for supply of digital content', pp. 26-28; Mak, 'The new proposal', p. 24-5.

connection will regularly have to be borne by the consumer though, unless they result specifically from the “repair”, e.g., because the patch/update is so big that it requires the consumer to exceed his/her download limit and no other way of bringing the digital content into conformity is possible⁸².

The “repair” has to be carried out within reasonable time and without significant inconvenience to the consumer (Art. 12 para. 2). There is no limit to the number of attempts the supplier has, which is a good decision considering that complicated digital content like computer programs or games usually require more time and effort to be brought into conformity. The DCP was deliberately left flexible in that regard so the diversity of digital content can be taken into account (Recital 36).

It is interesting to note that, although the European Commission decided that termination should not be an option right away, some suppliers do just that and allow consumers to rescind their contract demanding only that they did not use the digital content extensively.⁸³ Nevertheless, the decision not to implement such an option in the DCP still seems workable. Most of the time, consumers will prefer the digital content to work instead of getting their money back because of its particular functions or its entertainment value. In addition, it is justified to let the consumer keep the supplier to his promise to perform where this is not impossible.

2. Price reduction

As a second step, the consumer may claim a proportionate reduction in price or terminate the contract if the lack of conformity impairs main performance features⁸⁴. For these secondary remedies to become an option, one of four alternative prerequisites must be met, each indicating a problem that prevents the digital content from being brought into conformity in the way the DCP requires it. First, this is the case when a “repair” is impossible, unlawful or disproportionate (Art. 12 para. 3 point a); second, when a “repair” has not been completed in due time (point b); third, when a “repair” would cause significant inconvenience for the consumer (point c); fourth, when a “repair” was denied by the supplier or when it is clear from the circumstances that it will not be carried out (point d).

⁸² To distinguish between general costs and costs specific to the contract is also suggested by Recital 40, which deals with a different source of costs and context, however. See also below, 3.

⁸³ Such an option is provided for example by *Steam*, cf. https://store.steampowered.com/steam_refunds/?l=english and *Amazon*, cf. https://www.amazon.co.uk/gp/help/customer/display.html/ref=help_search_1-2?ie=UTF8&nodeId=201830120&qid=1528624320&sr=1-2. Both speak of “refunds”.

⁸⁴ This will be explained in greater detail below 3.

The reduction in price must be “proportionate to the decrease in the value of the digital content [...] compared to the value of the digital content that is in conformity with the contract” (Art. 12 para. 4). In other words, the consumer will be refunded the percentage of the sum paid that corresponds to the percentage by which the value of the digital content was decreased because of its lack of conformity. This remedy only applies where the consumer has paid a price for the content, i.e. it is not available where data was actively provided instead.

3. Termination

As has already briefly been mentioned,⁸⁵ the consumer may only terminate the contract where a main performance feature of the digital content is impaired. Although the examples given in Art. 12 para. 5 were probably intended to be a guideline, in this particular context they serve only to make this term more ambiguous rather than clearer. It says there that the lack of conformity must impair “functionality, interoperability and other main performance features of the digital content such as its accessibility, continuity and security”. The following sentence clarifies that the burden of proof for this, too, is on the supplier, adding to the imbalance inherent to the system of Art. 9⁸⁶. Interestingly, Recital 37 only mentions “the main performance features”. Clearly, this, too, was an attempt to recreate the system of the Consumer Sales Directive, which stipulates in Art. 3 para. 6 that the consumer is only entitled to rescind the contract where the lack of conformity is not minor. If one takes the wording of Art. 12 para. 5 DCP literally, however, every impairment of a function or any security issue would entitle the consumer to termination, even if they are minor. The lists of examples mentioned before should therefore be deleted. They do not add to the meaning of the term “main performance feature” which can only be determined individually anyway.

The contract can be terminated “by notice to the supplier given by any means” (Art. 13 para. 1). Presumably, “by any means” only refers to the method the notice is conveyed and enables consumers to terminate the contract e.g. via e-mail.⁸⁷ It will

⁸⁵ Just before, at 2.

⁸⁶ See above V.3. To scatter the rules of the burden of proof in such a way should also be avoided. The sentence should be transferred to Art. 9 with a corresponding reference to Art. 12 para. 5.

⁸⁷ Fauvarque-Cosson, ‘The new proposal’, p. 13 points out, that this rule might still need to be clarified more since many Member States still require the customer to go to court to terminate the contract (judicial termination), such as in Austrian warranty law (§ 933 para 1 ABGB) as well.

not allow them to suddenly use another language or address a different contact person, completely ignoring the supplier's legitimate expectations.⁸⁸

When the contract is terminated, the consumer may no longer use the digital content and has to delete it or render it "otherwise unintelligible" (Art. 13 para. 2 points d and e (ii)). To ensure this, the supplier may make the digital content inaccessible, e.g. by disabling the consumer's user account (Art. 13 para. 3). It is worth noting that the consumer is neither obliged to pay "for any use made of the digital content in the period prior to the termination" (Art. 13 para. 4) nor for the return of the durable medium the digital content was supplied on⁸⁹ (Art. 13 para. 2 point e (i)). The latter is not necessarily the case where there is a right of withdrawal,⁹⁰ so it would have made sense to provide for the supplier not to generally bear the cost here, too.⁹¹ It also seems strange that the supplier has to request the return of the medium; the consumer should always have to return what he/she received to avoid enrichment (however minor). What must be criticised harshly, however, is that the consumer does not have to pay for the use made prior to termination.⁹² Even if main performance features were impaired, it is still possible that there were benefits for the consumer. For example, a video of inferior quality may still be enjoyed, a program can still be used even if a feature agreed upon is missing. Recital 41 justifies this decision with "effective protection". The question remains: protection from what? There is no obligation for the consumer to use the digital content, after all. Only such use necessary to determine the lack of conformity should not lead to claims of the supplier. On the other hand, of course,

⁸⁸ B. Koch, 'Rechtsbehelfe des Verbrauchers', pp. 141-2.

⁸⁹ Art. 13 para. 2 point e (i) provides that return of the medium has to take place "without undue delay, and in any event not later than 14 days from the receipt of the supplier's request" for the return. Whether this means that the medium must arrive by then or have been sent away by then, remains unclear.

⁹⁰ See Art. 14 para. 1 Consumer Rights Directive.

⁹¹ It could be argued that eventually, the medium was of no use to the consumer, where there is a lack of conformity, justifying a different treatment. Still, return of what was given should remain a duty of the consumer.

⁹² For critical remarks about this also cf. B. Koch, 'Rechtsbehelfe des Verbrauchers', p. 148; Kodek, 'Änderung von Leistungsmerkmalen und Vertragsbeendigung', p. 164; Schmitt, 'Ein neues Gewährleistungsrecht', 17:39 - 18:52. Fauvarque-Cosson, 'The new proposal', p. 16 finds this rule appropriate, however.

the supplier should also have to pay interest for the money received.⁹³ Why this is not provided for is not even explained.

Unlike the consumer, the supplier has many duties when the contract is terminated. Firstly, he has to repay the price “without undue delay and in any event not later than 14 days from receipt of the notice” (Art. 13 para. 2 point a). If the consumer did not pay a price, the supplier may instead no longer use the data that was actively provided (Art. 13 para. 2 point b)⁹⁴. The same applies for other data provided by the consumer, unless it was generated jointly with other users⁹⁵. Content provided by the consumer and generated through the use of the digital content must be made available to the consumer “free of charge, without significant inconvenience, in reasonable time and in a commonly used data format” (Art. 13 para. 2 point c). As has already been suggested in the context of costs for a “repair”,⁹⁶ only those expenses must be borne by the supplier that are specific to the contract, i.e. “specifically linked with the retrieval of the data” (Recital 40), which excludes “costs of a network connection”. As also mentioned above, the latter does not include cases where the consumer has no choice but to exceed his/her download limit.

4. Right of redress

Art. 17 provides for a right of redress of the supplier against the person preceding him/her in the chain of transactions, i.e. the person the supplier received the digital content from. It is almost identical to Art. 4 Consumer Sales Directive, leaving it to the Member States to determine against whom the right of redress can be exercised and under which conditions. In essence, Art. 17 only demands that there be some sort of right of redress. Here, too, the goal of creating certainty is not met, since this provision can be implemented very differently in each Member State, as was the case with many provisions of the Consumer Sales Directive (which did, however, not aim for full harmonisation)⁹⁷.

⁹³ Fauvarque-Cosson, 'The new proposal', p. 14; also cf. Loos, 'the supply of digital content', p. 27, who mentions that it also should be addressed whether the consumer may withhold performance when the supplier does not perform.

⁹⁴ Recital 37 explains that the supplier should either delete the data or render it anonymous. The latter, however, would mean he would still factually be able to use it.

⁹⁵ It remains unclear, whether a joint context/genesis would suffice, allowing the supplier to keep forum posts the consumer made, see B. Koch, 'Rechtsbehelfe des Verbrauchers', p. 143.

⁹⁶ See above 1.

⁹⁷ For an overview of the vast differences in the implementation of the Consumer Sales Directive cf. Härting/Gössling, 'Online-Kauf in der EU', pp. 165-170.

VII. Specific rules for the supply over a period of time

1. Characteristics and peculiarities

As mentioned above,⁹⁸ the DCP contains a number of (unfortunately scattered) rules that only apply when digital content is not supplied temporarily rather than permanently. As in national law, this is necessary because unlike the former, the latter consists of recurring obligations between the parties that make continuous interaction between them necessary.

Sometimes, there might also be a mix of both, e.g. when digital content is acquired permanently but only works when temporary access to a server is acquired (separately), too.⁹⁹ The instrument only deals with performances that include “elements in addition to the supply of digital content” in Art. 3 para. 6, pursuant to which the DCP only applies to the supply of digital content. In situations like the one just described, both “elements” serve to supply digital content. Consequently, the DCP applies to both.

Whether a lack of conformity in one element also leads to a lack of conformity in the other is another problem not addressed.¹⁰⁰ This legal consequence would seem justified at least were both elements are tailored to work only with one another and might be interpreted as an objective criterion for conformity under Art. 6 para. 2. This solution might also be appropriate where there are different suppliers that work together closely, e.g. by mutually advertising the other product.

2. Conformity

Because the supplier promises supply over a period of time, conformity with the contract must also be maintained for the entire duration. This is expressed both in Art. 6 para. 3 and Art. 10 point c. Recital 35 further elaborates on interruptions. They do not constitute a failure to supply allowing for termination of the contract (Art. 11), but shall be treated as issues of non-conformity. More remarkably, Art. 11 states that “...the requirement of proper continuity of the digital content should also cover more than negligible short term interruptions of the supply”. This equals a restriction of Art. 6 para. 3 and Art. 10 point c: digital content must conform to the contract for the entire duration of the period it is supplied in except for short term interruptions. While it remains unclear what exactly “negligible” means, this

⁹⁸ At III.1.

⁹⁹ On matters of interdependency also cf. Loos, 'the supply of digital content', pp. 31-34;

¹⁰⁰ This problem can also become relevant where Art. 3 para. 6 applies, e.g. when digital content is supplied (permanently or temporarily) that only works with a certain hardware.

probably covers scheduled downtimes for maintenance as well as unforeseen downtimes the supplier reacts to properly. The consumer will, however, have to be informed about the former since they are part of a main characteristic (i.e. its availability) of the digital content.¹⁰¹

The DCP unfortunately is not clear about whether there is an obligation of the supplier to provide updates, i.e. content that modernises the digital content instead of “just” bringing it into conformity (where the term patch would be more appropriate).¹⁰² Most likely, there shall be no such obligation unless the contract requires it, as Art. 6 para. 1 point d suggests.¹⁰³ Art. 6 para. 4 also requires the supplier to provide only “the most recent version of the digital content which was available at the time of the conclusion of the contract”. One could doubt that when reading through Recitals 27 and 29. There it says that “qualities such as reliability, security and adaptability to evolving needs are also becoming a prime concern” (Recital 27) and that “frequent improvement of digital content, notably by updates” (Recital 29) often occurs. However, the duty to provide the latest version must be regarded as a statement about what can reasonably be expected by the consumer. This does not include updates that are mentioned separately only in Art. 6 para. 1, i.e. as a subjective criterion that must be agreed upon.¹⁰⁴

Still, this issue should be tackled more expressly.¹⁰⁵ Again, it would be preferable to distinguish between digital content supplied permanently and digital content supplied only for a period of time. The obligation to update should be included only when there is a supply for a period of time and only as an objective criterion that can be diverged from. In this form of supply, the suppliers often continue to

¹⁰¹ Cf. Art 5 para 1 point a and Art 6 para 1 point a Consumer Rights Directive.

¹⁰² The term “upgrade” could be used to indicate a major addendum of functions. On the subject of distinguishing these terms also cf. Sandra Manhardt, *Der „Software as a Service“-Vertrag* (Vienna: LexisNexis, 2012) p. 175; Helmut Redeker, *IT-Recht*, 5th edn. (München: C.H. Beck, 2012) para. 635.

¹⁰³ See also Cap/Stabentheiner, 'Neues aus Europa', pp. 184-5; Spindler, 'Verträge über digitale Inhalte', p. 152; Schmitt, 'Ein neues Gewährleistungsrecht', 19:25 - 20:12.

¹⁰⁴ The only exception might be cases where shortly after the supply the digital content no longer works due to circumstances that were foreseeable and which the consumer was not informed about such as impending compatibility issues; cf. Loos, 'the supply of digital content', pp. 21-2.

¹⁰⁵ See also Spindler, 'Contracts for the Supply of Digital Content', p. 202 who advocates that patches should be covered by the instrument's scope regardless of whether the consumer has to provide a price or data. He also correctly points out that patches that are unwanted are not dealt with. However, this issue could still be solved: if a patch must be applied so the consumer can continue to use the digital content, there will be no conformity if such modification was not agreed upon beforehand; also cf. the explanations below 3.

improve the digital content to provide an incentive for the users to keep their subscriptions running.

3. Modifications

Concerning the issue of “updates”, Art. 15 has to be taken into account as well. It deals with modifications of the digital content, i.e. alterations of its main performance features (Art. 15 para. 1). Recital 45 acknowledges that a need to make such modifications can result from “technological or other reasons” and to make them is indeed common practice¹⁰⁶. The wording of the Recital also suggests that there must always be an agreement about modifications in the contract, even if they are purely beneficial to the consumer.¹⁰⁷ It says „...the parties to the contract may include respective clauses in the contract which allow the supplier to undertake modifications”. So, if there is no such clause, the supplier would need the consumer’s prior consent. This makes sense given that suppliers could otherwise unilaterally change the criteria for the conformity of their performance. Even if the result benefits the consumers, they should always be given the option to decline an update, unless they generally accepted modifications.

Where modifications are detrimental to the consumer, i.e. “adversely affect access to or use of the digital content” (Art. 15 para. 1), four conditions must be met. Firstly, the contract must allow such modifications (Art. 15 para. 1 point a). Secondly, the consumer must be notified on a durable medium in advance and explicitly¹⁰⁸ (point b). Thirdly, the consumer is allowed to terminate the contract free of any charges within a minimum of 30 days from the receipt of the notice (point c). Fourthly, the consumer must be given the means to retrieve any content he provided or generated¹⁰⁹ through the use of the digital content (point d). Art. 15 para. 2 also enumerates the obligations of the supplier to reimburse part of the price paid that corresponds to the period of time after the modification, respectively to “refrain from the use of the counter-performance other than money”. The obligations of the consumer in case of a termination, especially not to continue

¹⁰⁶ Cf. Kodek, 'Änderung von Leistungsmerkmalen und Vertragsbeendigung', p. 165.

¹⁰⁷ It says „the parties to the contract may include respective clauses in the contract which allow the supplier to undertake modifications”; Cap/Stabentheiner, 'Neues aus Europa', p. 241.

¹⁰⁸ This excludes, e.g., a notice hidden in a change of contract terms or in an advertisement or in a newsletter that informs about many other issues as well.

¹⁰⁹ Although Art. 15 para. 1 point d just mentions “all content *provided*”, this probably means both types of content as point d refers to Art 13 para 2 point c in general. This should, however, be clarified.

using the digital content, are, however, not mentioned.¹¹⁰ This probably is an editorial error. Simply referring to Art. 13 para. 2 and 3 would have been sufficient anyway; Art. 15 para. 2 could be kept shorter and easier to understand this way.

4. Right to terminate

Termination of a contract about the supply of digital content over a period of time due to a lack of conformity can only be exercised concerning the time during which there was no conformity (Art. 13 para. 5). So, if, for example, digital content that was supplied for six months did not conform to the contract for one month, the consumer¹¹¹ may terminate the contract only with regard to that one month of non-conformity. He/She will also only receive part of the price back; in this example one sixth of it (Art. 13 para. 6). If the consumer actively provided data instead, the supplier may not use it during the month of non-conformity.¹¹² Consequently, data actively provided may only be used when the digital content supplied over a period of time is in conformity with the contract.

The DCP additionally provides an option to terminate¹¹³ the contract regardless of whether the digital content is in conformity with the contract.¹¹⁴ Art. 16 para. 1 requires, however, that the digital content is supplied either for an indeterminate period or for more than twelve months¹¹⁵ (including extensions of the supply period through renewals). Also, this termination is only possible “after the expiration of the first 12 month period” (Art. 16 para. 1). The consumer may “exercise the right to terminate the contract by notice to the supplier given by any means. The

¹¹⁰ Also cf. Spindler, 'Contracts for the Supply of Digital Content', pp. 214-5.

¹¹¹ There is no corresponding right of the supplier; Loos, 'the supply of digital content', 30; Maňko, 'Contracts for supply of digital content', 29.

¹¹² This conclusion can be drawn e contrario from Art 13 para 6. It states that “paragraph 2 shall apply, with the exception of point (b) in regards to the period during which the digital content was in conformity with the contract”. Consequently Art 13 para 2 point b can apply in regards to the period during which the digital content was not in conformity with the contract. Recital 42, which declares partial termination as not feasible were data instead of money was given, is misleading: The use of the data itself cannot be apportioned, but the timeframe it may be used in, can.

¹¹³ Using another term for this might be preferable to avoid confusion; also cf. Matthias Wendland, 'Ein neues europäisches Vertragsrecht für den Online-Handel?' (2016) *EuZW* 126-131, p. 128 fn. 19. “Cancellation” would be an option.

¹¹⁴ Recital 46 mentions “competition” and allowing the consumer “to switch between suppliers” as the reasons for the creation of this rule.

¹¹⁵ Fauvarque-Cosson, 'The new proposal', p. 22 pleads for a more flexible approach. However, Spindler, 'Contracts for the Supply of Digital Content', p. 215 is right in replying that this would be detrimental to legal certainty and reliability.

termination shall become effective 14 days after the receipt of the notice” (Art. 16 para. 2).

The effects of termination of long-term contracts (Art. 16 para. 3 to 5) are basically the same as explained above. Here, too, partly referring to Art. 13 would have sufficed. As it is now, pursuant to Art. 16, the consumer will also have to pay for the period prior to termination (Art. 16 para. 3). Where there has also been a lack of conformity, the consumer could, however, also terminate pursuant to Art. 13, if the requirements of Art. 12 para. 3 and 5 are met.

VIII. Right to damages

Pursuant to Art. 14 para. 1, the supplier is also liable “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”. Since this instrument aims at full harmonisation (Art. 4)¹¹⁶, the first question that comes to mind is whether this is the only right to damages Member States may implement for when digital content does not conform to a contract.

One should note that the current definition of “damages” in Art. 2 para. 5 only refers to economic damage to the digital environment¹¹⁷ of the consumer, such as corrupted data or damaged hardware. In my opinion, this makes it clear that only this specific type of damages falls within the scope of the DCP.¹¹⁸ The legal requirements to claim other types of damages would thus remain completely open for the Member States to regulate. This concerns e.g. damages that consist of lack of conformity, increase of prices after a failure to supply and immaterial damages (e.g. resulting from the “theft” and subsequent distribution of personal data because of a lack of security of the digital content).

Still, it should in some way be clarified how Member States are bound by Art. 2 para. 5 and Art. 14 when transforming the instrument into national law.¹¹⁹ Giving the Member States too much room for manoeuvre regarding important issues such as damages would, however, not comply with the goals of the instrument to reduce

¹¹⁶ See also above, II.

¹¹⁷ Concerning this term see at V.2. and Art 2 para 8.

¹¹⁸ Cf. Thomas Rainer Schmitt, 'Gewährleistung für digitale Inhalte', p. 313.

¹¹⁹ Amendments are also demanded by many others, cf. e.g. Beale, 'Scope of application and general approach', p. 24; European Law Institute, 'Statement', 6, 32; Loos, 'the supply of digital content', 28.

complexity by providing uniform rules, as has already been pointed out in the context of the right of redress in Art. 17¹²⁰.

IX. Conclusion

The DCP constitutes a well-meant effort to deal with civil law aspects of the supply of digital content. Its underlying goals, i.e. faster growth of the Digital Single Market, the reduction of uncertainties and complexity, and the reduction of costs are indeed desirable. Unfortunately, the instrument does not succeed in achieving them. Often, it remains vague despite relying heavily on the system of the Consumer Sales Directive.

Relying on a well-known and proven system is not wrong at all in itself. However, the main purpose, i.e. to solve specific problems in the context of digital content contracts, is not met. Some problems, like those surrounding the “Internet of Things”¹²¹ or the interdependence of separately acquired digital content of which one lacks conformity¹²², are not addressed at all. Others, like the supply of digital content against data¹²³, are solved in a complicated and at least partially questionable way.

The instrument needs to be reworked, especially considering the full harmonisation approach. To keep this level of harmonisation reasonable, the DCP should be more comprehensive and above all else clearer.

There has been little activity concerning the DCP lately. More elaborate procedural documents available for the instrument date back to October 2017. They are proof of ongoing discussion about important matters¹²⁴ (such as whether there should be a stronger emphasis on objective criteria¹²⁵). The next documents were made available half a year later and revealed policy discussions about whether the DCP should include embedded digital content or not.¹²⁶ Although clearly, the DCP has not been forgotten, one cannot not help worrying that the instrument will eventually share the fate of the Proposal for a Common European Sales Law and be withdrawn since fundamental and complicated issues apparently still remain unresolved.

¹²⁰ See above VI.4.

¹²¹ See above III.3.c.

¹²² See above VII.1.

¹²³ See above III.3.b.

¹²⁴ Cf. Thomas Rainer Schmitt, 'Gewährleistung für digitale Inhalte', p. 314.

¹²⁵ See above V.1.

¹²⁶ Cf. ST 9261 2018 INIT; on this issue see also above, III.3.c.

Bibliography

Hugh Beale, 'Scope of application and general approach of the new rules for contracts in the digital environment' (http://www.epgencms.europarl.europa.eu/cms-data/upload/4a1651c4-0db0-4142-9580-89b47010ae9f/pe_536.493_print.pdf)

Marcel Bisges, 'Der europäische Werkbegriff und sein Einfluss auf die deutsche Urheberrechtsentwicklung' (2015) ZUM 357-361

Rajkumar Buyya, Christian Vecchiola, Thmarai Selvi, *Mastering Cloud Computing* (Waltham, MA: Morgan Kaufmann, 2013)

Verena Cap/Johannes Stabentheiner, 'Neues aus Europa zum Vertragsrecht: Die verbrauchervertragrechtlichen Vorschläge im Rahmen der digitalen Binnenmarktstrategie – Teil 1' (2016) wbl 177-186

Caroline Cichon/Matthias Kloth/Andreas Kramer/Jan Bernd Nordemann, 'Exhaustion issues in copyright law (Q240)' (2014) GRUR Int., 920-927

Wilma Dehn, '§ 1 FAGG', in Michael Schwimann/Georg Kodek (eds.), *ABGB Praxiskommentar*, 4th ed. (Vienna: LexisNexis, 2015)

European Central Bank, 'Virtual Currency Schemes' (<https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf>)

European Central Bank, 'Virtual currency schemes – a further analysis' (<https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf>)

European Consumer Centres Network, 'Commercial warranties. Are they worth the money?' (http://europakonsument.at/sites/europakonsument.com/files/Commercial_warranty_ECC-Net.pdf)

European Law Institute, 'Statement of the European Law Institute on the European Commission's Proposed Directive on the Supply of Digital Content to Consumers COM (2015) 634 final' (http://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Statement_on_DCD.pdf)

Wolfgang Faber, 'Bereitstellungspflicht, Mangelbegriff und Beweislast im Richtlinienentwurf zur Bereitstellung digitaler Inhalte', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016), 89-130

Bénédicte Fauvarque-Cosson, 'The new proposal for harmonised 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

Friedrich Graf von Westphalen/Christiane Wendehorst, 'Hergabe personenbezogener Daten für digitale Inhalte - Gegenleistung, bereitzustellendes Material oder Zwangsbeitrag zum Datenbinnenmarkt' (2016) BB 2179-2187

Niko Härting/Patrick Gössling, 'Online-Kauf in der EU - Harmonisierung des Kaufgewährleistungsrechts' (2016) CR 165-170

Dietmar Jähnel/Peter Mader/Elisabeth Staudegger (eds.), *IT-Recht*, 3rd edn. (Vienna: Verlag Österreich, 2012)

Bernhard Koch, 'Rechtsbehelfe des Verbrauchers bei Verträgen über digitale Inhalte', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016), 131-158

Georg Kodek, 'Änderung von Leistungsmerkmalen und Vertragsbeendigung', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016), 159-172

Carmen Langhanke/Martin Schmidt-Kessel, 'Consumer Data as Consideration' (2015) EuCML, 218-223

Marco Loos, 'European harmonisation of online and distance selling of goods and the supply of digital content' (<http://ssrn.com/abstract=2789398>)

Brigitta Lurger, 'Anwendungsbereich und kaufvertragliche Ausrichtung der DURL- und FWRL-Entwürfe', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016) 19-44

Vanessa Mak, 'The new proposal for harmonised rules on certain aspects concerning contracts for the supply of digital content' (http://www.epgencms.europarl.europa.eu/cmsdata/upload/a6bdaf0a-d4cf-4c30-a7e8-31f33c72c0a8/pe_536.494_en.pdf)

Sandra Manhardt, *Der „Software as a Service“-Vertrag* (Vienna: LexisNexis, 2012)

Rafał Mańko, 'Contracts for supply of digital content' ([http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/582048/EPRS_IDA\(2016\)582048_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/582048/EPRS_IDA(2016)582048_EN.pdf))

Jochen Marly, *Praxishandbuch Softwarerecht*, 6th edn. (München: C.H. Beck, 2014)

Péter Mezei, 'Digital First Sale Doctrine Ante Portas - Exhaustion in the Online Environment' (2015) *jipitec* Vol. 6, Issue 1, 23-72

Karl-Nikolaus Peifer, '“Individualität” or Originality? Core concepts in German copyright law' (2014) *GRUR Int.* 1100-1104

Matthias Petutschnig, 'Sind Bitcoins ertragsteuerepflichtig?' (2014) *ÖStZ* 353-359

Antoon Quaedvlieg, 'The tripod of originality and the concept of work in Dutch and European copyright' (2014) *GRUR Int.* 1105-1111

Helmut Redeker, *IT-Recht*, 5th edn. (München: C.H. Beck, 2012)

Martin Schmidt-Kessel et. al., 'Die Richtlinienvorschläge der Kommission zu Digitalen Inhalten und Online-Handel – Teil 2' (2016) *GPR* 54-71

Thomas Rainer Schmitt, *Gewährleistung bei Verträgen über digitale Inhalte* (Vienna: Verlag Österreich, 2018)

Thomas Rainer Schmitt, 'Ein neues Gewährleistungsrecht für Verträge über digitale Inhalte?', in Erich Schweighofer/Franz Kummer (eds.), *Jusletter IT Flash 4. October 2016*

Thomas Rainer Schmitt, 'Gewährleistung für digitale Inhalte – neuer Vorschlag, alte Probleme', in Elisabeth Staudegger/Clemens Thiele (eds.), *Jahrbuch Geistiges Eigentum 2017* (Vienna/Graz: NWV, 2017) 279-314

Fabian Schuster, '§ 305 BGB', in Gerald Spindler/Fabian Schuster (eds.), *Recht der elektronischen Medien*, 3rd edn. (München: C.H. Beck, 2015)

Erich Schweighofer/Franz Kummer (eds.), *Jusletter IT Flash 4. October 2016*

Michael Schwimann/Georg Kodek (eds.), *ABGB Praxiskommentar*, 4th ed. (Vienna: LexisNexis, 2015)

Gerald Spindler, 'Contracts for the Supply of Digital Content – Scope of application and basic approach – Proposal of the Commission for a Directive on contracts for the supply of digital content' (2016) *ERCL* 183-217

Gerald Spindler, 'Verträge über digitale Inhalte – Anwendungsbereich und Ansätze' (2016) *MMR* 147-153

Gerald Spindler/Fabian Schuster (eds.), *Recht der elektronischen Medien*, 3rd edn. (München: C.H. Beck, 2015)

Elisabeth Staudegger, 'Rechtsfragen beim Erwerb von IT-Systemen', in Dietmar Jahn/Peter Mader/Elisabeth Staudegger (eds.), *IT-Recht*, 3rd edn. (Vienna: Verlag Österreich, 2012) 135-198

Elisabeth Staudegger/Clemens Thiele (eds.), *Jahrbuch Geistiges Eigentum 2017* (Vienna/Graz: NWV, 2017)

Marcin Szczepański, 'Bitcoin. Market, economics and regulation' ([http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2014/140793/LDM_BRI\(2014\)140793_REV1_EN.pdf](http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2014/140793/LDM_BRI(2014)140793_REV1_EN.pdf))

Emiko Terazono, 'Bitcoin gets official blessing in Japan' (<https://www.ft.com/content/b8360e86-aceb-11e7-aab9-abaa44b1e130>)

The Law Library of Congress, 'Regulation of Bitcoin on Selected Jurisdictions' (<http://www.loc.gov/law/help/bitcoin-survey/regulation-of-bitcoin.pdf>)

Christiane Wendehorst, 'Hybride Produkte und hybrider Vertrieb', in Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016), 45-88

Christiane Wendehorst, 'Sale of goods and supply of digital content – two worlds apart?' (http://www.europarl.europa.eu/cmsdata/98774/pe%20556%20928%20EN_final.pdf)

Christiane Wendehorst/Brigitta Zöchling-Jud (eds.), *Ein neues Vertragsrecht für den digitalen Binnenmarkt?* (Vienna: Manz, 2016)

Matthias Wendland, 'Ein neues europäisches Vertragsrecht für den Online-Handel?' (2016) *EuZW* 126-131

Andreas Wiebe, 'The Principle of Exhaustion in European Copyright Law and the Distinction Between Digital Goods and Digital Services' (2009) *GRUR Int.* 114-117