Abstract: Directive 2019/770, of 20 May, on certain aspects concerning contracts for the supply of digital content and digital services addresses the possibility for the trader to modify features of the digital content or digital service supplied or made accessible to the consumer over a period of time. Considering the fast-evolving character of digital elements, modifications can be advantageous for the consumer. Such modifications can be divided into two categories: those necessary to maintain the conformity of the digital content or service (the updates referred to in the Directive) and those that are unnecessary or evolutionary, which would deviate from the objective requirements for conformity and which are foreseeable at the time of conclusion of the contract. The modifications that are necessary to keep conformity with the contract are also foreseen in the Sale of Goods Directive (Directive 2019/771), given that the digital content or digital service incorporated in or interconnected with the goods is constantly developing. However, this directive does not make any provision for unnecessary or evolutionary modifications. The main purpose of this article is to examine the category of non-necessary modifications referred to exclusively in the Directive 2019/770. It also analyses the possibility of modifying the digital element that accompanies the good (in categories of good with digital elements). The analysis is approached from the perspective of unfair commercial practices and the need to address the premature wear and tear of the so-called goods with digital elements.

Keywords: digital content, modifications, Directive 2019/770, Directive 2019/771, sustainability
1 Introduction

Directive 2019/770 of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services (hereinafter the DDC), addresses the regulation of contracts for the supply of digital content and services. The European legislator has set out to guarantee consumers have improved access to this digital content. The technological progress that arises from innovation facilitates digital evolution, since it also enables some degree of obsolescence that applies not only to goods, but also to digital content. Likewise, the technology itself provides a means to prevent those materials from rapidly becoming obsolete by means of updates.

This article examines the distinction between corrective or necessary updates to maintain conformity (Section 2.1), and evolutionary or unnecessary updates (the modifications referred to in article 19 of the DDC, Section 2.2). This work also considers whether it is possible to modify digital content that is included in the so-called goods with digital elements depending on the type of contract or the transposition of the two Directives carried out by the Member States (Section 2.3), and then reviews both categories of modifications in the light of the Unfair Commercial Practices Directive (Section 2.4). Finally, it addresses the issue of sustainability as regards modifications of digital content and proposed guarantee periods, making a distinction between single and continuous acts of supply (Section 3). Some suggestions to achieve more sustainable consumption models are included by way of a conclusion (Section 4).

2 The Modification of Digital Content

In the following sections we will examine the modifications made to digital elements (digital content and digital services), making a distinction between those that are necessary to maintain contractual conformity (updates), and those that go beyond...
this and enable the characteristics of the digital content and services to be transformed (although this is included in the contract). We will focus on the latter in more detail.

2.1 Corrective or Necessary Modifications: Updates

As mentioned above, the objective of this study is to examine evolutionary updates or modifications, or those that are not necessary to maintain contractual conformity, as provided for in article 19 of the DDC. However, a brief review of the necessary or corrective updates foreseen in both the DDC and Directive 2019/771 of 20 May, on certain aspects concerning contracts for the sale of goods (hereinafter the DSG)3 is useful.

The twin directives of 2019 are practically identical as regards their regulation of the trader/seller’s obligation to provide updates in order to maintain conformity with the contract (as an objective requirement for conformity).4

Accordingly, in the DDC, in one-off contracts (an individual act of supply or a series of individual acts of supply), updates, including those related to security, must be provided for as long as the consumer can reasonably expect, taking into account the type and purpose of the digital content or service (article 8.2 (b) of the DDC). Recital 47 of the Directive states that the period of time that the consumer can reasonably expect is the same as the liability period for lack of conformity, although it may be longer for security updates, for example (likewise recital 31 of the DSG). However, if the supply of the digital content or service is continuous, the updates must be supplied throughout the liability period (article 8.2 of the DDC). The regulation concerning goods with elements with a single act of supply is exactly the same as in the DDC (see article 7.3 (a) of the DSG). However, in the DSG (article 7.3 (b)), as regards the continuous supply of the digital element that is provided with the good, the seller must provide the necessary updates for a minimum period of two years (or more if the supply period is longer); a situation in which the update obligation period is longer than the supply period may arise (if the latter is less than two years).5

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4 The parties can also agree on the supply of updates in the contract [see articles 6 (d) of the DSG, and 7 (d) of the DDC].

5 On the obligation to update in relation to the sale of goods with digital elements, see the article by Pia Kalamees, “Goods with digital elements and the seller’s updating obligation”, JIPITEC 12(3) (2021), 142. Also, André Janssen, “The Update Obligation for Smart Products – Time Period for the Update Obligation and Failure to Install the Update” in Smart Products. Münster Colloquia on EU Law and the
2.2 Evolutionary or Unnecessary Modifications

One of the most significant new provisions of the DDC appears in article 19 (it is not included in the DSG). Article 19 of the DDC states that when the contract provides that the digital content or digital service is to be supplied or made accessible to the consumer over a period of time, the trader may modify the digital content or digital service beyond what is necessary to maintain the digital content or digital service in conformity in accordance with articles 7 and 8 of the same Directive.

There will obviously be updates (necessary modifications) that may even involve an evolutionary modification, if this is contractually agreed (ex article 7 (d) of the DDC). However, as mentioned above, the trader must on certain occasions be able to modify the characteristics of the digital content or services, provided that the contract establishes valid grounds for this modification. These modifications must be expressly agreed to by the consumer when concluding the contract (recital 74). They are what we have termed evolutionary or unnecessary.

The first point to note about article 19 of the DDC is that the modifications provided for in that article only affect contracts in which the supply of the digital content or service has been supplied over a period of time (long-term contracts). The possibility of modifying digital content or service covered by one-off contracts is therefore not considered (and this does not appear to be possible due to the maximum level of harmonisation set out in article 4 of the DDC).

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6 Although it would be a necessary modification in the sense that it is stipulated as a contractual obligation, for which non-compliance would lead to a lack of conformity.

7 Note that prior to the entry into force of the DDC, the most authoritative doctrine stated that the trader should not be obliged to supply new digital content every time a new model of the same digital content that had previously been supplied was placed on the market. In other words, the mere fact that improved digital content compared to the content previously supplied is placed into circulation does not mean that the digital content purchased is no longer in conformity with the contract at that time. On this subject, see Marco B. M. Loos, “Conformity and Non-Conformity of Digital Content” in Digital consumers and the law. Towards a Cohesive European Framework, eds. L. Guibault, N. Helberger, M. Loos, C. Mak, L Pessers, B. Van Der Sloot, (Alphen aan den Rijn: Kluwer Law International, 2013), 110.

8 Even when the liability period has expired (article 11.2 of the DDC), there is no disadvantage in the trader being able to unilaterally modify digital content subject to one-off contracts. We will return to this later (see §3 below).
According to article 19.1 of the DDC, the trader may modify the digital content or digital service beyond what is necessary to maintain the digital content or digital service in conformity (and therefore beyond the provisions for updates ex article 8.2 of the DDC). This refers to the possibility of modifying characteristics such as the functionality, interoperability, accessibility, continuity, and security of the digital content.\(^9\)

Article 19 of the DDC states that the modification of digital content or digital service must be allowed by the contract, as mentioned above, the modification must be made without additional cost to the consumer, and the consumer must be informed in a clear and comprehensible manner of the modification. Each of these requirements are briefly considered here.

First, article 19.1 (a), requires the contract to allow such a modification, and to provide a valid reason for making it.\(^10\) Note that the Proposal for Directive did not refer to the “valid reason” for the modification of the contract, although it did stipulate that it should foresee the modification \(\textit{ex ante}\). The incorporation of this limit in the form of a “valid reason” is related to article 3 of the Directive on unfair terms (Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts), and specifically refers to the clause that is considered unfair and which is repeated in section 1 (k) of the Annex (“enabling the seller or supplier to alter unilaterally without a valid reason any characteristics of the product or service to be provided”). For this reason, the reference to the validity of the reason would overcome any potential abusiveness of the clause.\(^11\) Cases in which the modification is necessary to adapt the digital content or services to a new technical environment or

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\(^9\) Article 15 of the Proposal for a Directive on certain aspects concerning contracts for the supply of digital content [COM 2015 (634) final] specified examples of characteristics that the trader could modify under the terms of the article. However, article 19 of the DDC omits this description, and merely points out that digital content and services may be modified.

\(^10\) However, as noted, the trader will in many cases not have anticipated the need to permit these changes to the contract. The ability to amend the contract would be an obvious positive step in these cases, as this would otherwise entail an excessive burden on the trader. The requirements of article 19 will therefore be met if the contract provides a valid reason for the modification, see. Matthias Wendland, “Art. 19. Modification of the digital content or digital service”, in EU Digital Law. Article-by-Article Commentary, eds. Reiner Schulze, Dirk Staudenmayer (Baden-Baden: Beck-Hart-Nomos, 2020) 319.

\(^11\) Isabell Conrad and Alin Seegel examine several clauses included in the terms and conditions of some of the leading technology companies that cover the modification of digital content, and which would not meet the requirements of article 19 of the DDC, see Isabel Conrad, Alin Seegel, “Modifications of digital content/services and digital elements in smart products” in Smart Products. Münster Colloquia on EU Law and the Digital Economy VI, eds. Sebastian Lohsse, Reiner Schulze, Dirk Staudenmayer (Baden-Baden: Hart-Nomos 2022), 146–149.
to an increased number of users, or is justified for other important operational reasons, would be valid reasons under the terms of the preamble (recital 75 of the DDC).\(^\text{12,13}\)

Second, section (b) states that the modification must be carried out without additional costs for the consumer\(^\text{14}\) (either in exchange for a price or in exchange for authorisation to use personal data)\(^\text{15}\) and section (c) stipulates that the consumer must be informed in a clear and comprehensible manner of the modification.

Finally, according to (d), if the modification has a negative impact on the consumer’s access to digital content or services, the consumer must be informed\(^\text{16}\) reasonably in advance on a durable medium (which should enable the consumer to store the information for as long as is necessary to protect the interests of the consumer arising from the consumer’s relationship with the trader; these media include paper, DVDs, CDs, USB sticks, memory cards or hard drives, as well as emails – recital 76 of the DDC) of the characteristics and the time of the modification, as well as their right to terminate the contract in accordance with article 19.2 of the DDC, and the possibility of maintaining the digital content without the modification.

\(^{12}\) Valid reasons for the modification also include: compliance with legal requirements, the addition of new features or functionalities to the digital content, the adaptation of the service to provide it with increased interoperability with other services and the digital environment, or the reduction of advertising space, to name a few examples given by Martim Farinha, “Modifications on the digital content or the digital service by the trader in the Directive (UE) 2019/770”, Revista Electrónica de Direito (RED) vol. 25(2) (2021), 99.

\(^{13}\) Loos and Luzak argue that the “as is” clause in contracts for digital services should be considered abusive and void. This clause aims to release the digital service provider from liability for any alteration in service availability, preventing consumers from reasonably expecting an uninterrupted service. As an example, the terms of use for “Suunto” sports watches contain such a clause [https://www.suunto.com/es-es/Condiciones-de-uso] (accessed 26 September 2022). See Marco B.M. Loos, Joasia Luzak, “Update the Unfair Contract Terms directive for digital services”, STUDY Requested by the JURI committee (2021), 22.

\(^{14}\) Likewise, if the modification entailed an increase in the hardware’s RAM memory for the consumer, this would also create a lack of conformity, since it would imply an additional cost for the consumer, see Farinha (n 12), 100–101.

\(^{15}\) However, the doctrine on this point expresses doubts, and calls for clarification as to whether the modification without additional costs also covers contracts in which a price is not paid, but personal data is provided in exchange; see Sebastian Lohsse, Reiner Schulze, Dirk Staudenmayer, “‘Smart Products’ – A Focal Point for legal Developments in the Digital Economy”, in Smart Products. Münster Colloquia on EU Law and the Digital Economy VI, eds. Sebastian Lohsse, Reiner Schulze, Dirk Staudenmayer (Baden-Baden: Hart-Nomos 2022), 23.

\(^{16}\) The consumer must obviously be informed of any modification of the digital content/service [article 19.1 (c) of the DDC]. However, if this modification has a negative impact on access to the digital content, this is when the obligation to inform is reinforced with the requirements of article 19.2 of the DDC.
in accordance with article 19.4 of the DDC. This information overload is therefore only required if the modification affects the consumer’s use of the digital content to a considerable extent.

The trader is therefore in a position of authority, as they decide when and how the digital content is modified, although they are also obliged to duly inform the consumer in that respect.  

2.2.1 Termination of the Contract

As mentioned above, the termination of the contract is only anticipated if the modification negatively impacts the consumer’s access to or use of the digital content or digital service (which would include cases in which the modification entailed an additional cost for the consumer). It would have been interesting to consider the possibility of the consumer terminating the contract after the modification during the 30-day period, with the termination not being conditional on a negative impact on the use or access of the digital content or services for the consumer.  

The obligation to provide the information about the nature and time of the modification on a durable medium only arises in cases in which the consumer’s access to the use of digital content or services is affected (unless this impact is minor). If this is the case, the consumer will be able to terminate the contract free of charge within 30 days of the receipt of the information, or of the time when the digital content has been modified by the trader, whichever is later (article 19.2 of the DDC). A negative impact on access to digital items may mean that it is no longer supported by the hardware. An example would be if a hardware improvement or update (e.g., a

17 Joan Andreu Ferrer Guardiola, “Algunos aspectos no resueltos tras la modificación del TRLGDCU con ocasión de la transposición de las Directivas (UE) 2019/770 y 2019/771”, Revista de Derecho civil vol. 8(4) (2022), 206. The author points out that the power to modify the digital content is not unlimited, but that “their power is immediately limited in the content of the contract and in the subjective and objective requirements contained therein”.
18 For example, if the modification of the digital content blocks access to it. Recital 75 also clarifies the meaning of impact in more than a minor manner: “the extent to which modifications negatively impact the use of or access to the digital content or digital service by the consumer should be objectively ascertained, having regard to the nature and purpose of the digital content or digital service, and to the quality, functionality, compatibility, and other main features which are normal for digital content or digital services of the same type”. It is therefore necessary to consider the impact of the modification on the digital content on a case-by-case basis.
19 This is the proposal made by the 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” (2016), 34, in which the trader has to reimburse the consumer the part of the price paid corresponding to the period of time between the modification and the termination of the contract.
new iPad) is required, or if a defective update prevents the digital content or service from being used correctly as a result of the improvements in terms of functionality in the application (software). The need to objectively assess the extent to which modifications affect the use of the digital content or their access by the consumer, taking into account their nature and purpose, and the quality, functionality, compatibility, and other characteristics that are normal for digital content of the same type is mentioned.

Once the contract has been terminated, articles 15 to 18 will be applied accordingly (the trader’s obligations in the event of termination are set out in article 16 of the DDC, those of the consumer in article 17, and the time limits and means of reimbursement by the trader in article 18). We are interested here in highlighting the trader’s obligation to provide the consumer with the digital content created by the consumer (ex article 16.4 of the DDC). This article sets out the consumer’s right to retrieve the digital content they have created using the digital content. Digital content that is not personal data (cf. article 4 of Regulation 2019/679 of 27 April 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, hereinafter the GDPR). This article therefore permits retrieval of user-generated content (hereinafter, UGC). As an example, let us consider the design of parts for 3D modelling used by the Autocad software for subsequent printing on a 3D printer. This digital content created by the consumer using the digital content or service may be retrieved by the consumer after the contract has been terminated. This power provided by the DDC is not included in the DSG, and would therefore not apply to contracts for the sale of goods with digital elements, as we will see below.

In fact, the provision that permits the termination of the contract in the event of modification of the digital content is only contained in the DDC, meaning that it would only be possible to exercise this right with regard to the digital content that falls under the scope of application of the DDC.

If the modification has a negative impact on the consumer’s access to the digital content, is the consumer entitled to request a continuation of the service that has

20 Wendland (n 10) 320, points out that a negative impact would also occur if the consumer had to provide additional personal information as a requirement for future use of the digital content or service.
21 The recovery of personal data would be allowed by article 20 of the GDPR (cf. 16.2 of the DDC).
23 However, the consumer will not be able to terminate the contract if the trader has enabled the consumer to maintain, without additional cost, the digital content or digital service without the modification, and the digital content or digital service remains in conformity (article 19.4 of the DDC).
become obsolete? This is not included in the regulation. The possibility of maintaining digital content without the modification has only been considered if the trader offered this possibility *ex ante*. There is therefore no right to restore the old version if the new one has a negative impact on access to or use of the digital content or service (termination is permitted in these cases). The only stipulation of article 19.4 of the DDC is that the consumer will not be able to terminate the contract if the trader has enabled the consumer to maintain, without additional cost, the digital content or digital service without the modification, and the digital content or digital service remains in conformity. We will consider this issue below.

2.2.2 On the Possibility of Maintaining the Digital Content or Services Without the Modification (Article 19.4 of the DDC)

As mentioned above, the regulation does not cover the right to *roll back*, to adopt the expression used by the European Law Institute. Maintenance of the former version without incorporating the modification is only anticipated as one of the rights of the trader prior to the consumer’s installation of the modification. Digital content can be modified for a valid reason established by the contract. If it is possible to modify the digital content, the trader can inform the consumer of the possibility of maintaining the digital content without the modification at no additional cost. In other words, the consumer will not be able to terminate the contract if they decide to maintain the unmodified version of the digital content (and if the trader has given them the opportunity to do so). The contract will always be terminated after the installation of the modification (and whenever it negatively impacts the use or access of the digital content). If the trader allows the consumer to

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24 Note with regard to this issue, that the European Law Institute suggested that there should be a debate as to whether the consumer should have a right to ‘roll-back’, i.e., a right to restore the version that has become obsolete. See European Law Institute (n 19), 23.


26 However, recital 77 states that if the digital content or digital service that the trader enabled the consumer to maintain is no longer in conformity with the subjective and the objective requirements for conformity, the consumer should be able to rely on the remedies for a lack of conformity as provided for under the Directive. Likewise, where the requirements for such a modification as laid down in the Directive are not satisfied and the modification results in a lack of conformity, the consumer’s right to bring the digital content or digital service into conformity, have the price reduced, or the contract terminated should remain unaffected. Similarly, where subsequent to a modification, a lack of conformity of the digital content or digital service that has not been caused by the modification arises, the consumer should continue to be entitled to rely on remedies as provided for under the Directive.
retain the content without the modification and the consumer chooses not to install it after being duly informed, they will lose the right to terminate the contract (articles 19.2 and 19.4 of the DDC).

2.3 Evolutionary Modifications and the Sale of Goods with Digital Elements

The possibility of modifying digital content other than in the maintenance of conformity is only foreseen in the DDC. Accordingly, given the maximum level of harmonisation of the two Directives (ex article 4 of the DDC and DSG), the provision regarding unnecessary (or evolutionary) modifications (article 19 of the DDC) will not apply to the sale of goods with digital content [article 2.5 (b) of the DSG]. However, there is doctrine that states that this depends on the option chosen by the Member States and their transposition of the directives into their legal systems. Consequently, for example, neither the Spanish nor the Catalan legislator has foreseen this possibility in the regulation for the sale of goods with digital elements, and therefore this provision must be understood as not being applicable to the contractual type of sale.

In the category of goods with digital content, as stated in the preamble of the DSG, technological evolution has led to a growing market for goods that incorporate or are inter-connected with digital content or digital services. The need for the DSG and the DDC to complement each other is highlighted in the preambles of both directives (recital 13 of the DSG and recital 20 of the DDC). According to the definition given by both directives, goods with digital elements (such as smart goods like a smart TV or a sports watch), would be subject to the DSG (recitals 14, 15, and 16, and articles 3.3 of the DSG, and recitals 21 and 22, and article 3.4 of the DDC), if they fulfil the definition set out in those directives.

Both Directives contain a definition of goods with digital elements [article 2.5 (b) of the DSG and article 2.3 of the DDC]. According to the regulations in the current text of the Directives, the DSG applies to goods with digital elements (any tangible movable object that incorporates or is inter-connected with digital content or a digital service in such a way that the absence of that digital content or digital service would prevent the goods from performing their function), (recital 21 of the DDC, article 2.3 of the DDC, recital 15 of the DSG, and article 3.3 of the DSG). On the contrary, if the digital

28 Recital 5 of the DSG.
component does not prevent the good from performing its functions, or it has been supplied to the consumer through a separate contract, the DDC will be the regulation applicable to the digital element, even if it is interconnected with the good.29

This is not a trivial matter; an example is the smartwatch, which the DSG describes as a ‘good with digital elements’ (recital 14). A restrictive interpretation of article 19 of the DDC and according to the approach involving maximum harmonisation of the Directive (article 4 of the DDC) would only permit – in relation to goods with digital elements – the modifications necessary to maintain conformity, i.e., the updates or corrective modifications in article 7.3 of the DSG. As stated above, evolutionary (or unnecessary) modifications are only anticipated for continuous supply contracts and not for one-off contracts; in many of the examples of goods with digital elements, the digital element is supplied in a single act, and therefore in one-off contracts.30 However, bearing in mind the example of the car and the built-in navigation system offered with the car on a subscription basis, it is worth considering whether the trader is able to modify the digital content since it is supplied continuously (navigation data).

This point may be problematic. The same application, supplied independently of the contract of sale of the good, would allow it to be modified under the terms of article 19 of the DDC. In other words, if the application (the software) is contracted independently, this would permit the modification of the digital content, but the joint contracting (of the software and hardware) would not, in view of the full protection provided by article 4 of the DDC.31 The sports watch, which can only perform its functions with an application that is supplied by virtue of the sales contract, as stipulated in recital 21 of the DDC, would not be affected by the provisions of article 19 of the DDC. Neither would the car or the built-in smart navigation system (e.g., TomTom). From our point of view, this is one of the inconsistencies in the DDC and the DSG, and is a consequence of linking digital content/services with the regime covering the good of which they are a component.32 The provisions regarding


30 Sein (n 27) 128.

31 Moreover, recital 30 of the DSG states that “(…) the seller should not be obliged to provide upgraded versions of the digital content or digital service of the goods, or to improve or extend the functionalities of goods beyond the conformity requirements.”

32 On this subject, see Barceló Compte, Rubio Gimeno, Supply of Goods with Digital Elements (n 29) 88–90. The same could be said of the obligation of cooperation imposed on the consumer by article 12. 3 of the DDC, which states that the consumer must cooperate with the trader, to the extent reasonably possible and necessary, to ascertain whether the cause of the lack of conformity of the digital content or digital service at the time of supply lay in the consumer’s digital environment. The obligation to
necessary or corrective modifications (updates) are common to both regulations with practically the same results (see Section 2.1 above), but evolutionary or unnecessary modifications would not be covered in the cases of goods being jointly contracted with digital content, although this is possible if they are contracted independently of each other. 33 This (express?) omission is questionable in a regulation like the DSG, which regulates smart goods with digital elements. 34 However, the seller can agree to the modification by contract (article 7.5 of the DSG) provided that the clause respects the requirements set out in the Unfair Clauses Directive (and section (K) of Annex I in particular).

We have also seen above that apart from the impossibility set out in the DSG of modifying the digital content in the sense of article 19 of the DDC (and therefore the inability to terminate it in that case), the DSG also makes no provision for the consumer being able to recover the UGC that may have been created while using the digital content that accompanies the good upon termination of the contract due to lack of conformity. 35

Despite this, and given the most authoritative doctrine, 36 we believe that these provisions (article 19 of the DDC and article 16.4 of the DDC) would apply to any type of contract other than a sale contract, e.g. to a rental contract for goods with digital elements (since the scope of application of the DSG is limited to sales contracts between a consumer and a seller, according to article 3.1 of the DSG) and as such, this subjection of the digital component to the good and its legal regime, which is only
stipulated for contractual sales, will create situations in which the same category (goods with digital elements) will be subject as a whole to one or the other regime, with the consequence that it will be possible to make a distinction between the good and the digital content depending on the type of contract, thereby enabling the DDC to be applied to the latter (such as in the case of a rental contract for a sports watch, or a car with a built-in navigation system, in which the digital element would be covered by the DDC regime, since it is not a case of a sale of goods with digital elements).

Let us consider the rental of a car with a smart navigation system, for example. Would the provision of article 19 of the DDC be applied to the digital element (the navigation system)? If the navigation system is considered together with the car as a good (with digital elements) as set out in recital 14 of the DSG, the provisions of the DDC could be applicable (to the digital element) if the contract was not a sale contract. In this case, the consumer could retrieve the content that they have created using it (e.g., the places bookmarked in the navigation system, or lists of the best pizzerias in Barcelona, to name a couple of examples).

An example of a rental contract of goods with digital elements is provided by the Sharenow carsharing platform, a car sharing service that offers its users a fleet of vehicles for short periods of time. All the vehicles include a navigation system created by the company TomTom. Many users of these vehicles use them when they are visiting cities (e.g., an American tourist who is on holiday in Amsterdam for a few days and decides to rent a Sharenow car to go to the airport). In this case, it is essential that the navigation system works properly because most of its users are not familiar with the city's road layout, meaning that the car they have rented is of little use to them if the navigation system does not work correctly.

The DDC would also apply to the digital content of an atypical contract. An example would be a smart good supplied by the trader in exchange for the consumer enabling the former to make use of the latter's personal data. The scope of application of the DSG is limited to sales contracts between a consumer and the seller (article 3.2 of the DSG), i.e., contract under which the seller transfers or undertakes to transfer ownership of goods to a consumer, and the consumer pays or undertakes to pay the price thereof (article 2.1 of the DSG), which means that the regulations of the DSG cannot be applied to the contract described above.

2.4 Corrective (Necessary) and Evolutionary (Unnecessary) Modifications: Problematic Issues in the Light of the UCPD

Given the specific nature and great complexity of digital content and services, and the trader's greater knowledge and access to technical information and high
technology assistance, the consumer is at a disadvantage when distinguishing between necessary or corrective modifications (updates) and evolutionary or unnecessary modifications.\textsuperscript{37} However, as seen above, the purposes of each one are different, and the consequences of failing to install them are also different. Accordingly, in the case of the former, failure to install the update within a reasonable time means the seller or trader will not be liable for any lack of conformity resulting from the lack of the update (article 7.4 of the DSG and 8.3 of the DDC).

As a result, situations may arise in which the trader provides updates to the consumer together with modifications to the features of the digital content (modifications that affect the functionality or compatibility of the digital material purchased that are not necessary to maintain conformity with the contract) without allowing them to choose between installing one or the other.\textsuperscript{38} As seen above, if updates required to maintain conformity are not installed, the seller or trader will not be liable for any lack of conformity resulting from the absence of the update. In this situation, the question is whether the conduct by the trader or seller described above can be considered an unfair commercial practice. In addition, the reason for the update is in many cases unclear (e.g. in the case of a smartphone, it can be difficult to determine whether the update is necessary to improve the security of the telephone, if it overcomes a bug in the software or if it merely installs new features). This question will be considered below.

As is well known, the scope of application of Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market (hereinafter the UCPD) is business-to-consumer commercial practices before, during, and after a commercial transaction in relation to a product (article 3.1 of the UCPD). Both pre-contractual and contractual situations are therefore affected. These practices are subject to a general prohibition (article 5 of the UCPD) that is implemented through regulations on two types of commercial practices that are by far the most common: misleading commercial practices (articles 6 and 7 of the UCPD), and aggressive commercial practices (article 8 of the UCPD). In addition, the Directive also identifies commercial practices which are in all circumstances considered unfair, and provides an exhaustive list of them in Annex I. These are exclusively commercial practices which can be deemed to be unfair without a case-by-case assessment considering the provisions of Articles 5 to 9 (recital 17).

\textsuperscript{37} On the difficulty of distinguishing between evolutionary (unnecessary) and necessary modifications, see also Sein (n 27) 115 and Wendehorst (n 5) 69.

The practice described here can be examined in the light of the general clause of article 5 of the UCPD and, in turn, the provisions of article 7 of the UCPD (misleading omissions).

The general clause in article 5 is the core of the Directive: it prohibits unfair commercial practices and establishes the criteria to be used to examine the fairness of the practice, which are as follows: (i) it is contrary to the requirements of professional diligence and (ii) it materially distorts the economic behaviour of the consumer whom it reaches or to whom it is addressed (article 5.2 of the UCPD). This article is complemented by the misleading commercial practices in articles 6 to 8 and by aggressive commercial practices (articles 8 and 9), as well as by the list in Annex I that contains commercial practices which are in all circumstances considered unfair, as mentioned above.

As regards the joint supply of necessary or corrective and evolutionary (or unnecessary) modifications, and given the consumer’s inability to decide whether or not to install some of them (since if the digital content or service ceases to be in conformity with the contract as a consequence of failing to install the corrective update, the seller or trader would avoid liability ex article 8.3 of the DDC), this situation must be considered in the light of article 5 of the UCPD. Accordingly, in order to determine whether this practice is unfair, it is necessary to ascertain whether it is contrary to the requirements of professional diligence, and whether it has distorted the consumer’s economic behaviour.

Professional diligence is defined in article 2 (h) of the UCPD as the standard of special skill and care which a trader may reasonably be expected to exercise towards consumers, commensurate with honest market practice and/or the general principle of good faith in the trader’s field of activity. It is therefore first necessary to ascertain whether the trader’s behaviour has involved a possible violation of this principle.

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39 Some authors describe this article as a “safety net for commercial practices that are not caught by Arts-6–8 nor by the list of prohibited practices in Annex I”, Geraint Howells, Christian Twigg-Flesner, Thomas Wilhelmsson, Rethinking EU Consumer Law, (New York: Routledge 2018) 58.

40 The general clause of article 5 is a self-standing criterion – it is not an additional cumulative test that needs to be met for a practice to be found in breach of any of the specific categories of unfair practices in Articles 6 to 9 or Annex I to the UCPD, see the Judgement of the CJEU of 19 September 2013, case 435/11, CHS Tour Services GmbH v Team4 Travel GmbH [2013], ECLI:EU:C:2013:574 and Judgement of the CJEU of 27 March 2014, case 314/12, UPC Telekabel Wien GmbH v Constantin Film Verleih GmbH, Wega Filmproduktionsgesellschaft mbH [2014], ECLI:EU:C:2014:192.

41 Before determining whether a consumer has been subjected to possibly unfair practices related to pre-installed software on computers, it must be established if they were informed and agreed to both updates and modifications. See the Judgement of the CJEU of 7 September 2016, case C-310/15, Vincent Deroo-Blanquart v Sony Europe Limited [2016] ECLI:EU:C:2016:633, para 33–35 where the CJEU examined the fairness of pre-installed software when a consumer refused to sign the end-user license agreement and demanded a refund for the cost of the software. The CJEU concluded that the sale of
Here, the doctrine states that the potential violation of honest market practices must be compared with common practice of traders in the same sector, i.e., it is necessary to determine whether the trader’s behaviour constitutes a possible violation of honest market practices or the general principle of good faith in the trader’s field of activity. The emphasis is therefore placed on honesty and good faith.

The concept of professional diligence\textsuperscript{42} comprises principles that were already rooted in the legal frameworks of the Member States before adoption of the UCPD, such as “honest market practice”, “good faith” and “good market practice”, highlighting regulatory values that apply specifically to business activity. Furthermore, it can include principles derived from national and international standards and codes of conduct.\textsuperscript{43}

If we analyse art. 5.2 letter a) of the UCPD from a digital standpoint, we observe that the asymmetrical relationship (which exists per se in any consumer relationship, where the consumer is clearly the weaker party in the contract) is even greater in this environment. Let’s consider, then, the consumers’ (digital) dependence and HBO Max, a platform that provides a digital service (on-demand video streaming).\textsuperscript{44} This allows us to affirm that the professional diligence in art. 5.2. a) must necessarily incorporate new obligations as applies to this new digitalised environment.\textsuperscript{45} The general clause of article 5 refers to vulnerable consumers in a definition that opts for computers with pre-installed software did not violate honest market practices, as consumers were aware of the software before purchase. The CJEU also found that the consumer’s ability to make an informed decision was not impaired, as they were aware that the computer was not sold without software and could choose another model or brand with similar specifications sold without software or used with different software.


\textsuperscript{43} In fact, a trader’s non-compliance with commitments contained in codes of conduct must also be considered a misleading commercial practice under UCPD art. 6.2, letter b.


\textsuperscript{45} It must also be noted that, for now, the CJEU has not provided much guidance regarding the specifics of the concept of professional diligence, see Natalie Helberger, Orla Lynskey, Hans-W. Micklitz, Peter Rott, Marijn Sax and Joanna Strycharz: “EU Consumer protection 2.0. Structural asymmetries in digital consumer markets”, BEUC (The European Consumer Organization) (2021), 71.
static protection [“...because of their mental or physical infirmity, age or credulity...”], meaning it is a traditional understanding characterised by a perspective based exclusively on individual characteristics (“class-based” protection), which does not take into consideration external factors related to the contractual context or situation that are also part of this multidimensional vulnerability. The definition in UCPD art. 5.3 needs a breath of fresh air and should also contemplate digital vulnerability, which would be part of an option incorporating a dynamic concept of a vulnerable consumer (“state-based” protection).

We understand the duty of professional diligence must incorporate the need to warn consumers of the type of modification offered: required or necessary (update) or not (evolutionary or unnecessary). In the CJEU sentence of 16 April 2015 (Nemzeti Fogyasztóvédelmi Hatóság v UPC Magyarország kft)\(^{47}\) the Court established that determination of whether the trader’s practice is non-compliant with professional diligence is objective, meaning that it does not bear the burden of proof of any subjective element identifying the trader’s intention of acting unfairly with the practice in question.\(^{48}\)

The reference to professional diligence or honest market practices leads us directly to the concept of good faith laid out in the Principles of European Contract Law [art. 1:102 (1) PECL].\(^{49}\) Recognition of the principle of good faith in contracts is related to honourable dealings and diligent actions. This, therefore, opens it up to social norms: those that establish the rules or standards that define the limits of acceptable behaviour. From this perspective, then, art. 5.2, letter a, can be observed from the need to implement social standards of honesty and reasonable behaviour in relationships with consumers.\(^{50}\)


\(^{47}\) Judgement of the CJEU of 16 April 2015, case 388/13, Nemzeti Fogyasztóvédelmi Hatóság v UPC Magyarország kft [2015], ECLI:EU:C:2015:225.

\(^{48}\) Thus, paragraph 19 of said sentence reads: “That court held that the question of the infringement of the requirement of professional diligence had to be examined also in the case where erroneous information had been provided and that such an infringement could not be established, since that examination showed that the professional concerned had not intended to mislead the consumer.”

\(^{49}\) The concept of professional diligence resembles the private law concept of culpa in contrahendo in its attempt to combine the private law ideas of a duty to bargain with care and a duty to bargain in good faith into a single formulation, see Hugh Collins, “Harmonisation by Example: European Laws against Unfair Commercial Practices”, The Modern Law Review, vol. 73 (1)(2010), 98.

\(^{50}\) However, the relationship between the UCPD and contract law is observed in UCPD art. 3.2, which provides that it applies without prejudice to contract law and, in particular, to the rules on the validity, formation or effect of a contract. In this regard, see the judgement of the CJEU of 15 March 2012, case 453/10, Jana Pereničova, Vladislav Perenić v SOS financ, spol.s.r.o, [2012] ECLI:EU:C:2012:144.
What is more, appeals for professional diligence—and consequently good faith—must encompass commercial practices that are not related to aggressive or misleading commercial practices but are nevertheless unfair. The reference to professional diligence allows us to think that certain practices (such as the one described) are contrary to good faith because they are the result of behaviour that the consumer can’t reasonably expect. Therefore, said practices (supplying updates and modifications without warning which type they are: necessary or not to maintain contract compliance) could also fall under the duty of professional diligence in the sense of art. 5.1, letter a). We can say they cross the line of acceptable behaviour. This would connect the UCPD to the duties of diligence and even the legal neighbourhood rule proposed by the most authorised doctrine: the parties to any negotiation must consider or take into account the interests of the other party.

Second, it is necessary to consider whether a commercial practice consisting of providing necessary or corrective (updates) and unnecessary modifications to the digital content/service, without the consumer being able to separately choose to install or otherwise the “unnecessary” modification to maintain the conformity of the digital content, distorts or may substantially distort the economic behaviour of the average consumer with respect to the digital element in question, i.e. the consumer’s ability to make an informed decision is appreciably impaired, thereby causing the consumer to take a transactional decision that they would not have taken otherwise in accordance with article 2 (e), of the UCPD. In this case, it would be necessary to determine whether the practice described affects the consumer’s consent, which despite being free and exact, is not fully informed. The Proposal for a Directive on certain aspects concerning contracts for the supply of digital content [COM 2015 (634) final], highlighted the risk involved in “modifications [that]

provides in paragraph 46 that “Consequently, a finding that a commercial practice is unfair has no direct effect on whether the contract is valid from the point of view of Article 6(1) of Directive 93/13”. Comment on this sentence can be found in: Bert Keirsbilck, “The interaction between consumer protection rules on unfair contract terms and unfair commercial practices: Pereničova and Perenič”, Common Market Law Review, vol. 50 (1)(2013) 247–263.

51 Helberger, Lynskey, Micklitz, Rott, Sax and Strycharz (n 45)72.
52 In fact, the practices that fall under art. 5.1, letter a) could also be tied to situations that infringe on what Bigwood has called the “legal neighbourhood” rules, meaning that the parties to any negotiation must consider or take into account the interests of the other party. See Rick Bigwood, “Contracts by Unfair Advantage: From Exploitation to Transactional Neglect”, Oxford Journal of Legal Studies, vol. 25(1) (2005) 85–86. This duty of diligence is comparable to the duty to not exploit the weakness of the other party described in rules like unfair advantage (for example, art. II.-7:207 DCFR) or economic violence in the French Civil Code (art. 1143). See Howells, Twigg-Flesner, Wilhelmsson (n 39) 58.
53 In relation to the “transactional decision” concept, see CJEU 27 March 2014, C-281/12, case Trento Sviluppo srl, Centrale Adriatica Soc. coop. Arl v Autorità Garante della Concorrenza e del Mercato, [2013], ECLI:EU:C:2013:859.
negatively affect the way the consumer benefits from main performance features of the digital content … they may disturb the balance of the contract or the nature of the performance due under the contract to an extent that the consumer may not have concluded such a contract” (recital 45). Note that the reading of this recital enables a parallel to be drawn with that of article 2 (b) of the UCPD, i.e., the distortion that the unfair practice causes in the consumer’s economic behaviour, diminishing their ability to make a decision with full knowledge of the facts. This informed consent is precisely what is described in article 5.2 (b) of the UCPD.54 It defines a transactional decision in article 2 (k) as the decision by which the consumer “concerning whether, how and on what terms to purchase (...) or to exercise a contractual right in relation to the product, whether the consumer decides to act or to refrain from acting.” This is directly related to what concerns us here: if the trader’s practice distorts the behaviour of the consumer in such a way that they decide on a trans-
action (and on the installation of all the modifications supplied, without any distinction).

Consequently, in view of all the above, what determines whether the commercial practice substantially distorts consumer behaviour is that whether it leads them to make a decision about a transaction that they would not otherwise have made, and that assessment also applies to article 7, which we will examine below.

Since the practice described prevents the consumer from choosing and distinguishing between necessary or corrective modifications and evolutionary or unnecessary modifications, it could be classified as an unfair commercial practice under the terms of the general clause in article 5.

If we examine the practice in the light of article 7 of the UCPD, it could also be regarded as misleading, either because material information has not been provided or has been omitted (the consumer has not been notified that in addition to the necessary modifications they are being supplied with evolutionary or unnecessary modifications – which are therefore not necessary to maintain conformity with the contract), or because that information has been provided, but in an unclear, unintelligible, ambiguous, or untimely manner.55 The Directive does not establish a definition of necessary information in the terms of article 7, but we believe that it refers to the material information that the consumer needs to make an informed

54 As pointed out above, article 5 of the UCPD is a kind of catch-all safety net – a general clause that enables a practice to be examined based on two parameters (that of good faith and that of the distortion caused by the practice) when it does not comply with the provisions of articles 6 to 9, and it is not listed in Annex I, Howells, Twigg-Flesner, Wilhelmsson (n 39) 59. In addition, this provision is also “future-proof” as it allows new unfair practices to be addressed [see European Commission Staff Working Document: Guidance on the implementation/application of directive 2005/29/EC on unfair commercial practices, SWD (2016) 163 final, 59].

55 SWD (2016) 163 final, p. 89.
decision. In other words, if the consumer had had access to that information, they would have made a different decision about the transaction. The provisions of section 2 of the article are also relevant. This section stipulates that cases in which the trader provides material information that the average consumer needs, (i.e. information that the consumer needs to make an informed transactional decision) in an untimely manner, that is not adequate, or which fails to identify the commercial intent of the commercial practice if it is not already apparent from the context (and where this causes or is likely to cause the average consumer to take a transactional decision that they would not have taken otherwise) will also be considered misleading omissions. This may apply in our example: the trader does not specify the purpose of the updates provided and neither can the context be guessed, since because it is technical, it will undoubtedly be better known to the trader who supplies them than by the consumer who receives them.

With regard to article 7, note also that substantial information (relating to invitations to purchase) is considered in section 4: “(e) for products and transactions involving a right of withdrawal or cancellation, the existence of such a right.” The power to terminate the contract set out in article 19.2 of the DDC (if the modification negatively impacts the consumer’s access to, or use of, the digital content or digital service) entails a kind of legally configured entitlement that empowers the consumer to terminate the contract. According to article 19.1 (d) of the DDC, this information must be provided, and although it is true that the regulation in the UCPD is limited to the assumption of invitation to buy, the practice described can also be said to invite installation of these modifications.

Likewise, the unfair nature of the practice, according to Directive 2019/2161 of the European Parliament and of the Council of 27 November 2019, amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules, which has harmonised private protection against unfair commercial practices at the European level, can obviously be combated by means of individual remedies such as price reductions or termination of the contract. To this can be added article 11 (b) of the UCPD, according to which consumers whose interests are harmed by unfair commercial practices have remedies including compensation for damages and price reductions, or termination

56 Howells, Twigg-Flesner, Wilhelmsson (n 39) 63.
57 For example, see Judgement of the CJEU of 15 March 2012, case 453/10, Jana Pereničová, Vladislav Perenič v SOS finanč, spol.s.r.o, [2012] ECLI:EU:C:2012:144.) The CJEU had to decide whether indicating in a consumer credit contract a lower APR than the actual one could be considered an unfair commercial practice. The CJEU answered affirmatively because the indication of such APR can make or cause the average consumer to make a decision about a transaction that they would not have otherwise made (para. 41).
of the contract, where appropriate. However, the transposition that has taken place in the Spanish legal system is defective insofar as it omits the incorporation of the remedies of the price reduction and the termination of the contract.\(^{58}\) It has been said that the lack of a specific transposition would lead to referral to remedies of general contract law.\(^{59}\) The connection between unfair competition law and contracts law has been highlighted by the doctrine, according to which free consent is not only a prerequisite of contractual law, but also of unfair competition law, which classifies certain aggressive sales techniques that restrict the consumer’s free choice as unfair behaviour.\(^{60}\) In order to prevent these abuses, the legislator has always chosen to protect the consumer either by considering undue interference in their decision as an unfair practice, or by considering that there is an absence of consent (due to error, fraud, violence, or intimidation, which can invalidate the contract according to article 1265 of the Spanish Civil Code). The European legislator’s decision to link the two areas of law is evident in article 11 (b) of the UCPD, but it has been ignored by the Spanish legislator. This omission would lead the Spanish consumer to seek the remedies provided by the Spanish Civil Code, provided for in the system governing the absence of consent in contracts.

In this case, the applicability of the UCPD in the later stages of the contract is a point in the consumer’s favour as the supply of necessary (updates) and unnecessary modifications takes place after the transaction, i.e., after the contract has been concluded, thereby covering the contractual ex post phase. The specific characteristics of unfair commercial practices – and above all, the possibility of affecting situations that arise in the contractual future – mean that individual remedies must be considered, which in many cases (such as the one examined here) cannot be covered by a referral to the remedies for the absence of consent.

In this situation (the simultaneous supply of necessary-updates- and unnecessary modifications), the consumer should be able to avail themselves of the remedies established for a lack of conformity (and thus bringing into conformity,  

\(^{58}\) Article 20 (b) of the Royal Decree-Transposition Law (Royal Decree-Law 24/2021 of 2 November, merely incorporates the remedy relating to damages. On the Directive and its (defective) transposition in the Spanish legal system, see the article by Francisco Elizalde Ibaria, “La Directiva 2019/2161 de modernización del derecho de consumo, por al que se conceden remedios individuales contra las prácticas comerciales desleales, ¿un paso más hacia la estandarización del Derecho privado de la Unión Europea?”, Revista de Derecho Civil vol. 8(4) (2021), 79 ff.

\(^{59}\) Ibid, p. 81. The author also points out the possible consequence of the incorrect transposition of the directive: a penalty for a failure to carry out the transposition within the stipulated period, which becomes a penalty for defective transposition. And this would give rise to numerous deliveries of preliminary rulings by the CJEU (article 267 of the TFEU), within proceedings between individuals.

\(^{60}\) Elisabet González Pons, Prácticas agresivas y tutela del consumidor (Madrid: Agencia Estatal Boletín Oficial del Estado 2019) 160.
although this would not be viable because it would require the unnecessary modification to be uninstalled, or the contract to be terminated, although this would require a serious lack of conformity – see article 13 of the DDC) or a reduction in the price, which of all the alternatives would be the most sustainable remedy (articles 13.4 and 15 of the DSG).

Beyond this, however, the need to provide necessary modifications (updates) separately from evolutionary or unnecessary ones must be insisted upon.  

3 Modifications and Obsolescence of Digital Content: A More Sustainable Digital Single Market?

A consideration of the question of the obsolescence of digital content requires an analysis from two points of view: (i) in relation to digital material contracted separately, and (ii) in relation to when it is contracted simultaneously with the good (goods with digital elements).

Regarding the first, it must be said that obsolescence usually applies to physical products. For example, the European Parliament Resolution of 25 November 2020, entitled “Towards a more sustainable single market for business and consumers”,  

refers to the lifetime of a product (recital G), product durability (recital H), and the planned obsolescence of goods (recital I). However, the same resolution also mentions the planned obsolescence of computer programs (which are digital content according to the definition provided by article 2 of the DDC). We will therefore begin by addressing this issue.

First of all, as mentioned above, the DDC will be applicable regardless of the medium used to transfer digital content or to give access to them (recital 20 DDC applies the DDC to the tangible medium itself, provided that the tangible medium serves exclusively as a carrier of the digital content).

As for updates (necessary modifications) that must be provided when the contract provides for a single supply act or a series of separate supply acts, the obligation extends to what the consumer may reasonably expect, given the type and purpose of the digital content or digital service (article 8.2 (b) of the DDC).  


63 The reference to reasonableness is characterised by its flexibility, but it is not entirely related to the principle of legal certainty. The doctrine proposes establishing a series of “case groups” that
believe that a more sustainable solution would be to establish a lifetime for the
digital content or service, in line with the European Parliament resolution’s proposal
for products after the review of the DSG scheduled for 2024 (which we will refer to
below) and extend the obligation to update to cover that period.\textsuperscript{64} The key to the
question is to determine the consumer’s reasonable expectations in terms of the
lifetime of the digital content/service – an issue that we raise here, although it
warrants a section of its own.\textsuperscript{65}

However, after the liability period established in article 11.2 of the DDC (which is
two years in cases of supply in a single act or in several individual acts), there is nothing
to prevent the trader from providing updates that go beyond what is necessary
(evolutionary or unnecessary modifications: only those that affect digital content
with a continuous supply as required by article 19 of the DDC are allowed during the
liability period) and for example, those making the digital item no longer compatible
with the good with which they were used (such as a case of independent contracting
of a drawing application for an iPad), in detriment to the consumer’s interests since
they will be forced to purchase a new good in order to continue using the digital item
(e.g. a hand drawing application for the iPad which are from a modification two years
after it has been purchased, requires a version of the iPad that is not the same as the
one the consumer owns, and the iPad will not support any more updates). In these
cases, the digital element was in conformity at the time of supply (article 11.2 of the
DDC), and the lack of conformity did not arise until two years later. However, if the
digital content/service was in conformity at the time of supply and after a given
period of time – less than two years, and therefore less than the liability period – the
trader modified (unnecessarily) the digital element (in cases of supply in a single act),
this modification would not be covered by the regulation, since article 19 of the DDC
only permits modification of cases with a continuous supply (an interpretation of
article 19 of the DDC in the opposite sense). And this would mean a lack of conformity
in response to the objective requirement of compatibility in article 8.1(b) of the DDC.

\footnotesize{
\begin{itemize}
\item would specify for how long the consumer can reasonably expect updates to be provided, depending on
the category of product, Lohsse, Schulze, Staudenmayer (n 15) 19–20.
\item European Parliament Resolution of 25 November (n 62).
\item On this point, in relation to the legitimate expectations of consumers who are supplied with a
digital element, the doctrine states that on the one hand consumers are more vulnerable when they
do not understand the complexity of the technology that constitutes the digital material, and on the
other, they are also necessarily able to understand the reasonable expectations that can be in relation
to the material, see Agustin Reyna, What Place for Fairness in Digital Content Contracts? An
Assessment of the Interplay between EU Copyright and Consumer Law (Baden-Baden: Nomos 2020)
191–202. See also Esther Arroyo Amayuelas, “Las nuevas directivas sobre digitalización del Derecho
de contratos”, in La digitalización del derecho de contratos en Europa ed. Lídia Arnau Raventós
(Barcelona: Atelier 2022), 30.
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}
Although in this respect, a strict interpretation of article 11.2 of the DDC could suggest that only the lack of conformity that exists at the time of supply (and that becomes apparent within two years) will render the trader liable; in other words, the cumulative requirement requires the lack of conformity to be original. The problem will arise when the lack of conformity does not exist at the time of supply, but does exist afterwards. It would be logical for article 11.2 of the DDC to be interpreted in a manner consistent with article 11.3, i.e., all the cases of lack of conformity that either occur at the time of supply or become apparent within a period of two years will render the trader liable.

However, is it possible to modify the digital element (evolutionary or unnecessary modifications) in cases in which the digital element is subject to supply in a single act, if the modification takes place after the trader’s period of liability has expired? We believe so, since the period of liability will have expired.

This unforeseen incompatibility (caused by the modification which took place after the trader’s liability period expired) between the independently contracted digital element and the good within which it is integrated clashes with the European Parliament’s strategy to stop planned obsolescence (the obsolescence in this case not only of the product – the iPad – but also of the digital element – the application). During the liability period, this could lead to a lack of conformity (only if the lack of conformity existed at the time of supply?) – considering article 8.1 (b) of the DDC – due to the reference to compatibility as an objective requirement for conformity (since evolutionary or unnecessary modifications are only anticipated in cases of continuous supply) which would give rise to the termination of the contract (if the fault were serious), but the unforeseen obsolescence would be permitted after that period.

66 The burden of proof for lack of conformity in digital content and services is reversed for the first year, but after that, consumers may need an expert opinion to prove liability. The reversal of the burden of proof is a subject of debate, and in the current text of the DDC, the reversal of the burden of proof shall not apply where the trader demonstrates that the digital environment of the consumer is not compatible with the technical requirements of the digital element, and where the trader informed the consumer of such requirements in a clear and comprehensible manner before the conclusion of the contract (article 12.4). The trader must also inform the consumer of the obligation to cooperate in order to ascertain the cause of the lack of conformity (12.5). However, the extent to which this information should be specified is not specified in the Directive. To determine the cause of the lack of conformity, the technically available means that are least intrusive for the consumer must be used, and the obligation to cooperate may not be enforceable in the context of goods with digital content. Finally, it is open to question whether this obligation to cooperate is enforceable in the context of goods with digital content (the provision is absent in the DSG). Sein, Spindler (n 22) 388.

67 Article 2 (10) of the DDC: the ability of the digital content or digital service to function with hardware or software with which digital content or digital services of the same type are normally used, without the need to convert the digital content or digital service.
Regarding the second category, of digital element contracted at the same time as the good (goods with digital elements), if it is approached based on the DSG, the updates (necessary modifications) allowed by the text and examined above are related to the idea of upgradability and are therefore part of the efforts to improve the lifetime of products and delay technological obsolescence. In fact, the DSG establishes requirements for conformity that seek to prevent technological obsolescence; thus, as an objective and subjective requirement for conformity, when they refer to compatibility and interoperability articles 6 (a) and 7 (d) allow smart goods to operate with other hardware and software, thereby avoiding their premature replacement. The DSG is also a pioneering regulation with its inclusion of durability as an objective requirement for assessing the conformity of goods, including goods with digital elements [article 7.1 (d) of the DSG]. This idea is also set out in recital 32 of the DSG, which relates this objective to the circular economy and states that durability should refer to the ability of the goods to maintain their required functions and performance through normal use.

The DSG temporarily limits the updates (or modifications) necessary to maintain conformity to the period of time that the consumer can reasonably expect them (which is usually the same as the period during which the trader is liable for a lack of conformity), although recital 31 states that in some cases the consumer’s reasonable expectation could extend beyond that period. This is open to question, since the

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68 The European Parliament states that the lifespan must be expressed in years and/or use cycles and be determined before the placement on the market of the product through an objective and standardised methodology based on real-use conditions, differences in terms of intensity of use and natural factors, among other metrics [European Parliament Resolution of 25 November, (n 62)].

69 See articles 2.8 and 2.10 of the DSG.

70 Under the transposition made by the German legislator, the requirement of durability as a criterion of conformity has not been limited to consumer relations but has been extended to any contractual relationship, see Reiner Schulze, “The German Civil Code on its Way into the Digital Age”, EuCML vol.11(5) 2022, 195.

71 However, no obligation to provide information regarding the durability of the product is established either. What recital 32 states is that insofar as specific durability information is indicated in any pre-contractual statement which forms part of the sales contract, the consumer should be able to rely on them as a part of the subjective requirements for conformity. The failure to include an obligation to provide this information on durability to enable the consumer to choose a more sustainable option is therefore questionable; on this subject, see Evelyne Terryn, “A right to repair? Towards sustainable remedies in Consumer Law”, ERPL vol. 27(4) (2019) 858. With regard to the right to reparation, the European Commission has recently launched a “Right to Repair Proposal”, amending Directive 2019/771. See COM(2023) 155 final, Proposal for a Directive of the European Parliament and of the Council on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394, Directives (EU) 2019/771 and (EU) 2020/1828.

72 In addition to the obligation to provide updates or modifications, the issue must be addressed based on the possible unfairness of the practices that can lead consumers to install updates of
most reasonable assumption would be that corrective or necessary updates/modify-
cations (conformity and security updates) should continue throughout the prod-
uct’s estimated lifespan. In this regard, and together with the opinion expressed by
the European Parliament in the resolution mentioned above, we believe that the
duration of the legal guarantees should instead be adapted to the estimated lifetime
of a category of products (is a smart fridge expected to work for only two years?). In
addition, the close relationship between the digital element and the good, which
arises in goods with digital elements, is apparent in the relationship between the
lifetime of the digital element and the good; for example, the lifetime of computer
programs is a crucial factor in the lifetime of electronic devices, since electronic
devices need to be adaptable to remain competitive, as computer programs become
obsolete increasingly quickly. Furthermore, and to continue with a strategy that
promotes the sustainability and durability of goods, there is the need to inform
the consumer about the lifespan of the smart good that they are purchasing (could this
omission be considered an unfair commercial practice according to article 7 of the
UCPD?). In fact, we believe that the current prohibition on misleading omissions
firmware that significantly impair the device’s performance and lifespan without having any clear
2019/771 and Sustainable Consumption: a Critical Analysis”, EuCML vol. 10(4) (2021), 139.
Likewise, the Parliament also points out in relation to smart goods, and with a view to the review
of the DSG, “consumers must be informed by the seller at the moment of purchase of the period
during which updates to the software supplied on purchase of the goods can be expected to be
provided, in a way that is compatible with innovation and possible future market developments, as
well as of their specificities and impacts on device performance, to ensure that the goods maintain
their conformity and security”. [European Parliament resolution of 25 November 2020 (n 63)]. We
believe that the period in which compliance updates must be provided must be the same as the legal
guarantee for the product, and we therefore believe that it is preferable for it to be lengthened to
cover the lifetime of the device.
Recital H of the aforementioned resolution of the European Parliament questioned whether the
two-year legal guarantee period might not be appropriate for all product categories with a longer
estimated lifetime.
European Parliament resolution of 25 November 2020 (n 63).]
The image of a consumer who is committed to sustainable consumption is essential for the
development of future European consumer law, and this is clearly set out in Vanessa Mak, “A
Primavera for European Consumer Law: Re-birth of the Consumer Image in the Light of Digitalisation
and Sustainability”, EuCML, vol. 11 (3), 70.
An issue that is ignored by the UCPD. On this subject, see Hans-W. Micklitz, “Squaring the Circle?
Reconciling Consumer Law and the Circular Economy”, EuCML vol. 8(6) (2019), 236. The European
Parliament resolution states that the strategy for achieving a more sustainable single market in-
volves specifying the pre-contractual information to be provided not only on the estimated lifespan
of the product, but also on its repairability. This information must be provided in a clear and
comprehensible manner, making this information one of the main characteristics of a product
(article 7 of the UCPD) requires the seller to provide the consumer with information about the sustainability of the smart good if this information is considered material for the consumer to make an informed decision about the purchase of the smart good.\textsuperscript{78,79}

If we maintain a strict interpretation of the level of harmonisation foreseen in the two directives and consistent with what has been discussed above, the seller’s inability according to the DSG to modify the digital element that is connected with the good during the liability period apart from for reasons of conformity, means that it is possible to avoid the risk of incompatibility between the digital element and the physical product after the evolutionary or unnecessary update (modification), for at least for two years. However, article 10.1 of the DSG refers to a lack of conformity having to exist at the time when the goods were delivered and becoming apparent within two years of that time. What happens if the lack of conformity arises not at the time of delivery, but afterwards (due to an unnecessary modification of the digital element, which moreover is not foreseen by the DSG)? According to the literal wording of article 10.1, the lack of conformity must exist at the time of delivery. Recital 39 of the DSG states that goods with digital elements should be deemed to have been delivered to the consumer when both the physical component of the goods has been delivered and the single act of supply of the digital content or digital service has been performed, or the continuous supply of the digital content or digital service over a period of time has begun. In the case of a smartphone, the digital content – the operating system and the software – is usually supplied at the same time as the good (the hardware), and as such recital 39 is not very helpful. It is questionable whether in cases of supply in a single act, the lack of conformity has to exist at the time of delivery and become apparent within a period of two years (article 10.1 of the DSG, cumulative condition), while in cases of continuous supply the seller is not only liable pursuant to Directives 2011/83 and the UCPD. Likewise, in order to prevent the premature obsolescence of products, practices that reduce the lifespan of the product and unduly limit its repairability, including computer programs, must be included in the list in Annex I of the UCPD.

\textsuperscript{78} On this subject, see also Alberto De Franceschi, “Consumer’s Remedies For Defective Goods With Digital Elements”, JIPITEC vol. 12(3) (2021), 152–155. The author examines two decisions by the Italian Competition Authority as a result of which Apple and Samsung were penalised for engaging in unfair commercial practices due to forcing consumers to download updates to their mobile phones that led to serious malfunctions and significantly impaired their performance, thereby leading them to replace them with newer products quickly.

\textsuperscript{79} The Danish legislator, in relation to the durability of the acquired good, allows the issue of planned obsolescence to be analysed in the light of the UCPD, and, specifically, as established by Art. 5. 2, letter a, i.e., as a practice contrary to the requirements of professional diligence, see Marie Jull Sørensen, “The Implementation of EU Directives 2019/770 and 2019/771 in Denmark”, EuCML Vol. 11(3), p. 200.
for any lack of conformity that occurs at the time of delivery, but also those that become apparent within two years (the alternative condition “where … ”, in article 10.2 of the DSG).80 This is the same in the DDC, as seen above (compare articles 11.2 of the DDC and 11.3 of the DDC).81 The interpretation of article 10.1 of the DSG should therefore be consistent with article 10.2 of the DSG, as otherwise somewhat paradoxical situations may arise: would a smartphone which is in conformity at the time of delivery and subsequently undergoes a modification of the operating system that leads to a lack of conformity lead to the trader not being liable according to the interpretation of article 10.1 of the DSG since there was no lack of conformity at the time of delivery? Obviously the reversal of the burden of proof82 in article 11.1 of the DSG during the first year would make it more difficult for the trader to avoid liability, but according to a literal interpretation of article 10.1 of the DSG, it is difficult to maintain that the trader is liable for a lack of conformity (caused by an unnecessary modification of the digital element, which is not provided for in the DSG, for example) after this one-year period that occurs after the delivery of the good (and therefore with the good being in conformity at the time of delivery), even if it is within the two-year liability period, since the premise of the regulation is not met.

81 Sein (n 27) 129, proposes treating smartphone operating systems (single supply) as a case of continuous supply, since article 10.2 of the DSG states that the seller shall be liable for any lack of conformity of the digital content or digital service that occurs or becomes apparent for a period of two years (or longer if the supply is longer). This author is also in favour of going beyond the interpretation of article 10.1 of the DSG – in the sense that the lack of conformity must exist at the time of supply – through the provisions of recital 30 of the DSG, i.e., if the lack of conformity is caused by the installation, the trader must be liable for restoring the conformity. In other words, applying the same reasoning as in recital 30 (which states that if a necessary/corrective update/modification causes a lack of conformity, the seller should be liable for bringing the good into conformity again, and as such it does not require the lack of conformity to be at origin), it could be argued that a lack of conformity caused by an unnecessary modification must lead to an obligation for the trader to restore conformity with the contract.
82 As regards the burden of proof, both Catalan and Spanish legislators did make use of the option granted by art. 11.2 DDC according to which instead of one-year period laid down in art. 11.1 DDC, Member States may maintain or introduce a period of two years from the time of the supply. On the other hand, the Italian legislator’s choice was to maintain the time limit set by the directive, see Alberto de Franceschi, “Italian Consumer Law after the Transposition of Directives (EU) 2019/770 and 2019/771, EuCML Issue 2/2022, vol. 11 (2), 75. In relation to the sale of goods, both Catalan and Spanish legislator has also extended the period of the liability of the trader to three years (instead of the previous two years). Portuguese legislator has took the same path, see Jorge Morais Carvalho, “The Implementation of the EU Directives 2019/770 and 2019/771 in Portugal”, Vol. 11 (1) 32.
And after two years, the trader’s liability would no longer be covered by the regulation.83

Finally, we believe that it is possible for the seller to modify unnecessarily the digital element attached to the good – in cases of supply in a single act or in several individual acts, a situation not foreseen in article 19 of the DDC – after the seller’s liability period has elapsed (which will be two years or more depending on the Member State, according to articles 10.1 and 3 of the DSG), opening up the possibility to potential non-compatibility (or a decline in the performance of the good or its responsiveness) between the hardware and the software due to updating (modifying) the latter.

A possible solution to the problem of planned obsolescence would be to opt for the “Danish approach,” which involves analysing the premature wear and tear of goods from the perspective of the Unfair Commercial Practices Directive and resorting to the general clause of Article 5. A practice that reduces the useful life of a good (a practice such as supplying both necessary and unnecessary modifications at the same time) would be an unfair commercial practice, as it goes against professional diligence and is likely to distort the economic behaviour of the consumer. Furthermore, the Unfair Commercial Practices Directive should review the issue of vulnerable consumers by adopting a more dynamic definition that takes into account the multidimensionality of vulnerability and also incorporates a reference to digital vulnerability.

4 Conclusions

The modification of the digital element, expressly provided for in the DDC, creates an uncertain scenario in the DSG. Given the maximum harmonisation foreseen by the two directives, the seller could not modify the digital material that accompanies the good (in categories of good with digital elements), at least during the liability period.

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83 The European Commission proposes extending the lifetime of products and establishing a new right to repair to prevent premature disposal of goods when the liability period has expired. However, the right to repair may not be effective in cases such as faulty photographic software where the photos cannot be recovered. New remedies may be necessary to address such situations. (See the ‘call for evidence for an impact assessment’ of the EU Comission titled ‘Sustainable consumption of goods-promoting repair and reuse’, (DG JUST. A2), Ref. Ares (2022)175084 – 11/01/2022.’, and also see Daniëlle Op Heij, “The Digital Content Contract in a B2C Legal Relationship from a European Consumer Protection Perspective. Recommendations for the Pre-Contractual and (Post-) Contractual Phase”, EuCML vol. 11(2) (2022), 59.)
After this period, the modification of the digital element – despite not being foreseen in the text – would probably lead to incompatibility between the digital element and the physical product, accelerating the premature wear and tear of the good.

The supply periods set out by both regulations are insufficient with regard to the updates foreseen in both Directives aimed at preventing unwanted planned obsolescence, and making them the same as the lifetime of good or the digital element would be a positive step. This has been pointed out in relation to the guarantees established for the two categories. Perhaps the revision of the Directives – scheduled for no later than 12 June 2024 (article 25 of the DDC and article 25 of the DSG) – will move in the same direction.

Finally, given the difficulty in distinguishing between them (corrective vs evolutionary modifications), the supply of both together may lead to an unfair commercial practice by the trader, and this practice should allow the consumer to place their trust in the individual remedies of price reduction or termination of the contract stipulated by the Modernisation Directive. The Spanish legislator’s incorrect transposition of the modification of the UCPD [article 20 (b) of the Spanish General Law for the Protection of Consumers and Users], would prevent recourse to these remedies given the lack of a direct horizontal effect of the Directives, and redirecting the claim based on a lack of conformity arising from a modification not foreseen by the DSG (in the case of sales of goods with digital elements), or a modification not foreseen in the contract (in the case of a supply of a digital element contracted separately), permitting a reduction of the price if the most sustainable remedy were chosen would be a last resort.

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