

The role of European consumer regulation in shaping the environmental impact of e-commerce

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B2C e-commerce has grown considerably since the start of the century and the COVID-19 crisis will likely intensify this trend. In Europe, it is subject to a complex framework of EU regulation, which includes consumer contract law, in particular the rules on information obligations, passing of risk and the right of withdrawal in the Consumer Rights Directive. We argue that these rules currently exacerbate the environmental impact of the B2C e-commerce distribution process for physical goods. They tend to increase the number of failed deliveries and product returns and they subsidize the most unsustainable consumer behaviour at the expense of others. While raising awareness on this impact is crucial, this paper also contemplates alternatives. Emerging technical and economic solutions can be accommodated rather than ignored by consumer contract law. And consumers can potentially receive more relevant information on the environmental impact of the e-commerce distribution process, which would fit with the European Commission's sustainable consumption agenda. We propose to consider the use of so-called 'green defaults' as regulatory instruments and also discuss the possibility of more intrusive 'green' amendments to the rules on deliveries and the right of withdrawal.

I. Introduction

This paper focuses on B2C e-commerce, which is subject to EU consumer law. Like e-commerce in general, B2C e-commerce has grown exponentially over the last few decades, aided by the development of the internet and electronic payments. According to Eurostat data, 68% of individual internet users had ordered goods and services online in 2017, with even higher representations of younger generations of consumers.¹ The COVID-19 crisis has further accelerated this growth and these gains will probably remain at least partially after the pandemic.² However, the same crisis is also regarded by some observers as a unique opportunity to make current European economic and private law and existing consumption patterns more sustainable.³

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¹ Eurostat, *Digital economy and society in the EU* (EU Publications Office 2018) ch 2.1 <ec.europa.eu/eurostat/cache/infographs/ict/bloc-2a.html> accessed 23 August 2020.

² See Commission, 'New Consumer Agenda: Strengthening consumer resilience for sustainable recovery' (Communication) COM(2020) 696, 3; OECD, 'E-commerce in the times of COVID-19' (2020) OECD Policy Responses to Coronavirus, 2-6 <read.oecd-ilibrary.org/view/?ref=137_137212-tofjgnerdb&title=E-commerce-in-the-time-of-COVID-19> accessed 3/11/2020; Paul Skeldon, 'Surge in ecommerce will outlive corona across Europe, consumer research suggest' (2020) <internetretailing.net/covid-19/covid-19/surge-in-ecommerce-will-outlive-corona-across-europe-consumer-research-suggest-21231> accessed 2/11/2020.

³ See Hans-Wolfgang Micklitz, 'The COVID-19 Threat: An Opportunity to Rethink the European Economic Constitution and European Private Law' (2020) 11 EJRR 249, 252-254; Frank Boons and others, 'Covid-19, changing social practices and the transition to sustainable production and consumption' (2020) SCI Report v1.0 <documents.manchester.ac.uk/display.aspx?DocID=49196> accessed 2/11/2020; Joseph Sarkis and others, 'A brave

This paper focuses on the environmental impact resulting from the Union consumer protection rules that are specific to the B2C e-commerce distribution process for physical goods. Non-environmental sustainable development aspects of the e-commerce distribution system, such as labour conditions, are thus not taken into account.⁴ Furthermore, e-commerce of services and of digital goods are not discussed, because they do not require the physical delivery which creates e-commerce distribution's most significant environmental impact. Finally, it needs to be emphasized that this paper does not focus on environmental externalities caused by the production of the physical consumer goods that happen to be sold to e-commerce consumers. Such production process externalities are equally present when those goods are sold in traditional 'brick and mortar' retail.⁵ Likewise, this paper does not focus on contractual aspects, such as the consumer sales legal guarantee and hierarchy of remedies, which have an environmental impact but which are again equally applicable to goods sold in traditional retail.⁶

The overall environmental impact of the e-commerce distribution process is determined by multiple factors, such as potential resource and land use efficiency, possible increases in electricity use and the production and waste externalities associated with IT infrastructure.⁷ Specific to B2C e-commerce distribution of physical goods are the externalities of possible excess packaging and the greenhouse gas emissions, air pollution and traffic congestion resulting from the physical delivery and return process. Studies demonstrate that the environmental impact of e-commerce distribution can be lower than the overall impact of traditional retail, but this depends on a number of factors such as the transportation means used by consumers and e-commerce companies, the efficiency of logistics, planning and combining trips, the number of failed delivery attempts and the return rate.⁸ Precisely the delivery process and the possibility of failed deliveries and product returns are partially determined by applicable consumer law. As this paper will argue, current EU rules, in particular those specific to distance contracts included in the Directive

new world: Lessons from the COVID-19 pandemic for transitioning to sustainable supply and production' (2020) 159 Res.Cons.&Recycl. 104894.

⁴ In terms of the UN 2030 Agenda for Sustainable Development (UNGA Res 70/1 (2015) UN doc A/RES/70/1), the paper focuses on goal 12 and to a lesser extent on goals 11 and 13-15.

⁵ Notwithstanding this focus, it can be noted that the digital platform model used in e-commerce can be effective in enabling the circular economy strategies of B2C or C2C reselling (*recommerce*) and sharing of used, repaired and remanufactured goods (see e.g. <vinted.com> accessed 2/11/2020; <peerby.com/> accessed 2/11/2020; <backmarket.com/> accessed 2/11/2020).

⁶ See on this aspect i.a. Elias Van Gool and Anaïs Michel, 'The New Consumer Sales Directive 2019/771 and Sustainable Consumption: a Critical Analysis' EuCML forthcoming, <papers.ssrn.com/sol3/papers.cfm?abstract_id=3732976> (preprint) accessed 19/01/2020.

⁷ See i.a. Klaus Fichter, 'E-Commerce: Sorting Out the Environmental Consequences' (2002) 6 J.Ind.Ecol. 25; Florian Dost and Erik Maier, 'E-Commerce Effects on Energy Consumption: A Multi-Year Ecosystem-Level Assessment' (2018) 22 J.Ind.Ecol. 799; OECD, *Unpacking E-Commerce: Business Models, Trends and Policies* (OECD Publishing 2019) 23-24 <doi.org/10.1787/23561431-en> accessed 2/11/2020.

⁸ See i.a. Julia Edwards, Alan McKinnon and Sharon Cullinane, 'Comparative analysis of the carbon footprints of conventional and online retailing' (2010) 40 Int.J.Phys.Distr.Log.Mgmt. 103, 107-108 and 112-114; Henrik Pålsson, Fredrik Pettersson and Lena Hiselius, 'Energy consumption in e-commerce versus conventional trade channels: Insights into packaging, the last mile, unsold products and product returns' (2017) 164 J.Clean.Prod. 765, 766, 773 and 776; Orit Rotem-Mindali and Jesse Weltevreden, 'Transport effects of e-commerce: What can be learned after years of research?' (2013) 40 Transportation 867, 869-872 and 876-877; Patricia van Loon and others, 'A comparative analysis of carbon emissions from online retailing of fast moving consumer goods' (2015) 106 J.Clean.Prod. 478, 482-484; Riccardo Mangiaracina and others, 'A review of the environmental implications of B2C e-commerce' (2015) 45 Int.J.Phys.Distr.Log.Mgmt. 565, 575-589.

2011/83/EU on consumer rights ('CRD')⁹, contribute to unsustainable 'last mile' delivery methods and an unnecessarily high number of failed deliveries and returns.¹⁰

It is true that consumer contract law is far from the only factor governing the B2C e-commerce distribution process that can shape its environmental impact. If we limit ourselves to a legal perspective at EU-level, reference can be made among others to the Packaging Directive,¹¹ the Cross-border parcel delivery Regulation,¹² the Postal services Directive,¹³ applicable VAT tax regulation,¹⁴ the P2B-Regulation¹⁵ and the E-commerce Directive,¹⁶ which are expected to be updated by future Digital Services and Digital Markets Acts. All these and other regulations outside the narrow focus of consumer contract law can theoretically be amended in ways that could 'green' B2C e-commerce distribution and potentially offset or mitigate adverse environmental consequences of certain consumer protection rules. Furthermore, although this should be assessed critically,¹⁷ there is currently a trend among e-commerce actors to position themselves on the market by focusing on sustainability.¹⁸ However, the more complex regulatory framework and existing market trends should in our opinion not shield applicable European consumer contract law from being questioned on its environmental merits, as mandated by articles 7 and 11 TFEU. This paper can therefore be regarded as a sector-specific contribution to the wider debate on the extent to which sustainable development can and should be considered in European consumer law.¹⁹

This paper focuses on the provisions of the CRD that specifically apply to distance sales contracts and that are relevant for the environmental sustainability of e-commerce distribution of physical

⁹ Directive of the European Parliament and Council 2011/83/EU of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and Council [2011] OJ L304/64 ('CRD').

¹⁰ See also Bert Keirsbilck and others, 'Sustainable Consumption and Consumer Protection Legislation' (2020) European Parliament IMCO Committee, 20 <europarl.europa.eu/RegData/etudes/IDAN/2020/648769/IPOL_IDA(2020)648769_EN.pdf> accessed 2/11/2020.

¹¹ Directive of the European Parliament and Council 94/62/EC of 20 December 1994 on packaging and packaging waste (amended) [1994] OJ L365/10.

¹² Regulation of the European Parliament and Council 2018/644/EU of 18 April 2018 on cross-border parcel delivery services [2018] OJ L112/19.

¹³ Directive of the European Parliament and Council 97/67/EC of 15 December 1997 on common rules for the development of the internal market of Community postal services and the improvement of quality of service (amended) [1998] OJ L15/14.

¹⁴ See in particular Directive of the Council 2019/1995/EU of 21 November 2019 amending Directive 2006/112/EC as regards provisions relating to distance sales of goods and certain domestic supplies of goods [2019] OJ L310/1.

¹⁵ Regulation of the European Parliament and Council 2019/1150/EU of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services [2019] OJ L186/57.

¹⁶ Directive of the European Parliament and Council 2000/31/EC of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market [2000] OJ L178/1 ('E-Commerce Directive').

¹⁷ See Peter Jones and others, 'The World's Leading E-Retailers and Environmental Sustainability' in Thomas Foscht and others (eds), *European Retail Research 28(1)* (Springer 2014), finding at that time that most commitments coincide with cost-savings and that independent external assurances and far-reaching transparency remain rare.

¹⁸ See i.a. UPS, '2019 Sustainability Progress Report' (2019) <sustainability.ups.com/media/2019-progress-report.pdf> accessed 1/11/2020; Amazon, 'All In: Staying the Course on Our Commitments to Sustainability' (2020) 16-34 <sustainability.aboutamazon.com/pdfBuilderDownload?name=sustainability-all-in-june-2020> accessed 1/11/2020; European Social Dialogue for the Postal Sector Working Group on CSR, 'Joint Conclusions on Environment' (2013) <postsocialdialog.eu/NeoDownload?docId=459358> accessed 1/11/2020. See also Hans Schulte-Nölke and others, 'The legal framework for e-commerce in the Internal Market' (2020) European Parliament IMCO Committee, 38 <europarl.europa.eu/RegData/etudes/STUD/2020/652707/IPOL_STU(2020)652707_EN.pdf> accessed 1/11/2020.

¹⁹ See i.a. Hans-Wolfgang Micklitz, 'Squaring the Circle? Reconciling Consumer Law and the Circular Economy' (2019) 8 EuCML 229, 230-231; Vanessa Mak and Evelyne Terryn, 'Circular Economy and Consumer Protection: The Consumer as a Citizen and the Limits of Empowerment Through Consumer Law' (2020) 43 JCP 227. This debate now coincides with the Commission adopting ambitious 'green' policy programmes which partially focus on consumption: Commission, 'The European Green Deal' (Communication) COM (2019) 640 final, 8; Commission, 'A new Circular Economy Action Plan: For a cleaner and more competitive Europe' (Communication) COM (2020) 98 final, 5-6.

goods. First, the possibilities of information requirements and ‘green default options’ are considered (section II). Subsequently, the rules on the method of delivery and on the passing of risk are examined (section III). In the next part, the environmental consequences of the current right of withdrawal and possible improvements are discussed (section IV). Finally, geo-discrimination and ‘freight absorption’ are taken into account (section V). The main findings are summarized in conclusion. Throughout our paper, particular attention is also given to the possibilities offered by new technologies and new functional approaches to e-commerce distribution.

II. Information requirements and default options from an environmental sustainability perspective

Mandatory information requirements form a major element of the consumer protection framework for distance contracts and they shape the current B2C e-commerce ordering process.²⁰ The CRD obliges traders to provide extensive information on numerous aspects of the contract both before the consumer is bound by a contract,²¹ and to confirm the information after the conclusion.²² The Modernisation Directive has imposed extra information requirements on providers of online marketplaces.²³ In addition, the E-Commerce Directive requires the provision of general information i.a. regarding the trader²⁴ and the contractual process.²⁵ The current information obligations are extensive,²⁶ but they neither enable nor stimulate consumers to make more sustainable choices among the different e-commerce distribution options (see section III).

Mere changes to these information requirements will in themselves have a limited impact, because sustainability information has been observed to affect predominantly the behaviour of the minority of consumers who are already motivated and seeking such information.²⁷ The limitations of (mandatory) information as an instrument to protect consumers or to steer their behaviour are well known and have been extensively discussed.²⁸ There are various behavioural biases at play

²⁰ See in general on the CRD and the used instruments of protection, Stephen Weatherhill, ‘The Consumer Rights Directive: How and Why a Quest for “coherence” has (largely) failed’ (2012) 49 CML.Rev. 1279; Peter Rott, ‘More coherence? A higher level of consumer protection? – A review of the new Consumer Rights Directive’ [2012] REDC 371; Elizabeth Hall, Geraint Howells and Jonathon Watson, ‘The Consumer Rights Directive: An Assessment of its Contribution to the Development of European Consumer Contract Law’ (2012) 8 ERCL 139.

²¹ Arts 6 and 8(1)-(4) CRD.

²² Art 8(7) CRD.

²³ Art 6a CRD, as inserted by art 4(5) Directive of the European Parliament and Council 2019/2161/EU 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 [2019] OJ L328/7 (‘Modernisation Directive’).

²⁴ To be precise, the ‘service provider’ in the terms of art 2, b) E-Commerce Directive.

²⁵ Arts 5-6 and 10-11 E-Commerce Directive.

²⁶ See for criticism on the extensive and overlapping character of the various information obligations in EU consumer law i.a. Civic, *Study for the Fitness Check of EU consumer and marketing law: Main report* (European Commission 2017) 225 and 296 <ec.europa.eu/newsroom/document.cfm?doc_id=44840> accessed 2/11/2020. See also on the difficulties to comply with the current information obligations Aashish Srivastava, ‘The new EU Consumer Rights Directive: and empirical study on compliance issues by e-tailers’ [2017] J.Bus.L. 282.

²⁷ See Dara O’Rourke and Abraham Ringer, ‘The Impact of Sustainability Information on Consumer Decision Making’ (2015) 20 J.Ind.Ecol. 882. See e.g. also the modest increase of 24,3% to 35,8% reported in Ipsos, ‘Consumer testing of alternatives for communicating the Environmental Footprint profile of products’ (European Commission 2019) 88 <ec.europa.eu/environment/eussd/smgp/pdf/2019_EF_commtest_report.pdf> accessed 2/11/2020.

²⁸ See i.a. Omri Ben-Shahar and Carl Schneider, *More than you wanted to know* (Princeton UP 2014); Omri Ben-Shahar and Carl Schneider, ‘The Failure of Mandated Disclosure’ (2011) 159 U.Penn.L.Rev. 647; George Loewenstein, Cass Sunstein and Russell Golman, ‘Disclosure: Psychology Changes Everything’ (2014) 6 Ann.Rev.Eco. 391.

that significantly limit the effectiveness of information.²⁹ There are i.a. the difficulties of information overload, overoptimism, inertia and the inclination of consumers to ignore information when they expect that it will give them negative feelings.³⁰

At the same time, it cannot be ignored that consumers base their decision (at least partially) on precontractually disclosed information. And especially in an online environment can interface and information design become effective in steering consumer purchase decisions.³¹ The Commission explicitly recognizes this potential in its New Consumer Agenda.³² The abovementioned behavioural insights also reveal possibilities to subtly steer consumers towards more sustainable behaviour (so-called ‘green nudges’).³³ For example, rather than merely adding additional disclosures on the environmental impact of various options, it is possible that e-commerce traders design their order process for sustainability by setting the option with the lowest environmental impact as the default.³⁴

There are several reasons why such ‘green defaults’ can have a larger effect on environmental outcomes than the mere provision of information.³⁵ Firstly, there is the power of inertia and the tendency to procrastinate as departing from the default requires an active choice (the ‘status quo effect’).³⁶ Secondly, according to the ‘loss aversion bias’ people dislike losses more than corresponding gains. As the default determines the reference point, departing from it is conceived as a loss. Thirdly, there is the ‘endorsement effect’. People tend to think that the default was chosen for a good reason and deviation requires reliable private information.³⁷ The latter effect, however, requires that the default is not considered as chosen for perceived elitist or preachy reasons, in which case opt-out rates likely increase.³⁸

A green default option should be combined with the provision of transparent information on the environmental impact of different e-commerce delivery and return options, for both ethical reasons and the policy reasons mentioned below.³⁹ For certain options, a complementary mandatory price differentiation could be envisaged as well (see section IV.B.4.c).

²⁹ See i.a. Geraint Howells, ‘The Potential and Limits of Consumer Empowerment by Information’ (2005) 32 *J.Law&Society* 349, 356-362; Loewenstein, Sunstein and Golman (n 28) 398-403; OECD, *Use of behavioural insights in consumer policy* (OECD Publishing 2017) 9 <doi.org/10.1787/c2203c35-en> accessed 2/11/2020.

³⁰ See on the last aspect, Tali Sharot and Cass Sunstein, ‘How people decide what they want to know’ (2020) 4 *Nature Hum Beh* 14.

³¹ See e.g. Jamie Luguri and Lior Strahilevitz, ‘Shining a light on dark patterns’ (2019) University of Chicago Working Paper <papers.ssrn.com/sol3/papers.cfm?abstract_id=3431205> accessed 2/11/2020.

³² See regarding the possibility to communicate the environmental sustainability of products that are sold through e-commerce and the possibilities for consumers to verify information and to compare products online, Commission, ‘New Consumer Agenda: Strengthening consumer resilience for sustainable recovery’ (Communication) COM(2020) 696, 8-9.

³³ See in general on nudging Richard Thaler and Cass Sunstein, *Nudge: Improving Decisions about Health, Wealth and Happiness* (Yale UP 2008); Alberto Alemanno and Anne-Lise Sibony (eds), *Nudge and the Law: A European Perspective* (Hart 2015). See specifically on green nudging OECD, *Tackling Environmental Problems with the Help of Behavioural Insights* (OECD Publishing 2017) <dx.doi.org/10.1787/9789264273887-en> accessed 2/11/2020; Christophe Demarque and others, ‘Nudging sustainable consumption: The use of descriptive norms to promote a minority behavior in a realistic online shopping environment’ (2015) 43 *J.Envir.Psych.* 166; Cass Sunstein and Lucia Reisch, ‘Automatically green: Behavioral Economics and environmental protection’ (2014) 38 *Harv.Env.L.Rev.* 127.

³⁴ Whereby standards could be partially determined by the e-commerce sector.

³⁵ See extensively Sunstein and Reisch (n 33) 131 et seq. There are various illustrations that setting the green option as the default increases its uptake, see e.g. Felix Ebeling and Sebastian Lotz ‘Domestic Uptake of Green Energy Promoted by Opt-out Tariffs’ (2015) 5 *Nature Clim.Ch.* 868; Madeleine Toft, Geertje Schuitema and John Thøgersen, ‘The importance of framing for consumer acceptance of the Smart Grid’ (2014) 3 *En.Res.&Soc.Sc.* 113.

³⁶ Sunstein and Reisch (n 33) 141.

³⁷ *Ibid* 140-144.

³⁸ *Ibid* 141.

³⁹ See regarding ethical considerations i.a. Christian Schubert, ‘Green nudges: Do they work? Are they ethical?’ (2017) 132 *Ecol.Econ.* 329, 339. Information can, however, over time reduce the effectiveness of the ‘green default’ and make

Finally, regardless of the merits of green defaults, the idea of ‘greening’ B2C e-commerce distribution through traditional information requirements should not be entirely rejected out of hand. Reference has already been made to the fact that sustainability disclosures can steer the behaviour of consumers with prior motivation.⁴⁰ And it is possible that clearly visible information, while not immediately determining an individual purchase decision, slowly contributes to increased awareness about the environmental impact of different e-commerce delivery and return options. Moreover, both research⁴¹ and prior EU regulatory experience⁴² reveal that increased effectiveness can be obtained through focussing on formatting, simplification, standardization and comparative information. Labels, certifications or comparative scoring can indeed also be envisaged regarding the sustainability of e-commerce delivery and return options discussed below. Such ‘soft law’ instruments can have both a public and private origin. In case of the latter, it is important that they are sufficiently accessible for all market players. Additionally, an important behavioural effect of new disclosures may consist of its impact on the e-commerce traders who make the disclosures and indirectly their B2B e-commerce distribution partners, rather than the impact on the e-commerce consumers actually addressed by the disclosures (the ‘telltale heart effect’).⁴³ Finally, a strategy of increased transparency on environmental aspects of B2C e-commerce distribution, would align with the ‘green consumer information’ plans currently envisaged by the Commission.⁴⁴

Given that information and formal requirements for distance contracts are fully harmonized, all initiatives to alter them would require EU legislation.⁴⁵

III. E-commerce delivery from an environmental sustainability perspective

A. The method of delivery

Delivery in B2C (distance) sales contracts is regulated by article 18(1) CRD.⁴⁶ Unless parties have agreed otherwise on the time of delivery, the e-commerce trader has to deliver the goods by transferring physical possession or control to the consumer without undue delay but not later than 30 days after conclusion of the contract. The actual method and more precise timing of delivery is however not regulated by EU law,⁴⁷ nor by national contract laws.⁴⁸ Consequently, to the extent

parties decide more actively based on their personal motivations, see Oren Bar-Gill and Omri Ben-Shahar, ‘Rethinking Nudge: An Information-costs Theory of Default Rules’ (2020) Harvard John M. Olin Discussion Paper, 38 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3582129> accessed 3/11/2020.

⁴⁰ See footnote 27.

⁴¹ See i.a. Áine Ní Choisdealbha and Pete Lunn, ‘Green and Simple: Disclosures on Eco-labels Interact with Situational Constraints in Consumer Choice’ (2020) 43 JCP 699; Loewenstein, Sunstein and Golman (n 28) 405-408.

⁴² E.g. the mandatory EU energy efficiency and car emission labelling or the voluntary EU Ecolabel.

⁴³ See Loewenstein, Sunstein and Golman (n 28) 396 and 403-404.

⁴⁴ See i.a. Commission, ‘A new Circular Economy Action Plan: For a cleaner and more competitive Europe’ (Communication) COM(2020) 98, 5; Commission, ‘New Consumer Agenda: Strengthening consumer resilience for sustainable recovery’ (Communication) COM(2020) 696, 7.

⁴⁵ Arts 4 and 6(8) CRD. The full harmonisation precludes Member State intervention in case of identified gaps (see i.a. Hall, Howells and Watson (n 20) 147-148).

⁴⁶ This rule also applies to non-distance sales (art 17(1) CRD).

⁴⁷ The place and modalities of delivery thus remain subject to national law and fall outside the CRD’s maximum harmonization (recital 51 CRD).

⁴⁸ Most national contract laws provide some default rules on the place and modalities of the change of control required to complete delivery, but do not further regulate the preceding delivery process. See i.a. the notes under arts IV.A-2:201-

that parties have not agreed on specific terms, all remaining aspects, including the timing and method of delivery, are determined by the e-commerce trader during performance. On the one hand, this appears entirely logical, given that the trader has to actually perform the delivery obligation and is generally best positioned to determine an efficient performance.⁴⁹ On the other hand, the method of 'last mile' delivery defines to a major extent the environmental impact of the consumer's choice for an e-commerce supply option (see section I). As discussed below, there are good reasons to offer to the consumer, before a contract is concluded, information and/or a 'green default option' regarding these aspects.

The reality of 'last mile' B2C e-commerce delivery methods is varied and depends i.a. on the type and number of purchased products and whether postal or courier services are used. Observers see a general trend among traders to deliver goods as fast as possible,⁵⁰ although research indicates that delivery speed is not a main priority for most consumers.⁵¹ Faster deliveries result in vans that are less full or make more stops,⁵² which increases emissions and traffic pressure.⁵³ Related is the practice where a single order of multiple goods is split and each good is delivered separately as soon as it is available, without the consumer being offered a corresponding choice. Such 'basket splitting' may be inconvenient for certain consumers who prefer one single delivery over receiving every single item separately. But it also increases the negative environmental impact of the overall delivery.⁵⁴ And it makes failed deliveries (see section III.B) more likely. Additionally, alternative transport means such as cargo bikes⁵⁵ or drones and robots⁵⁶ can reduce emissions and traffic pressure caused by 'last mile' deliveries. Likewise, the environmental impact of packaging, which is particularly problematic in e-commerce,⁵⁷ can be diminished by using less, alternative or reusable packaging. And new technologies and business models make sustainable transport or packaging solutions also available to smaller traders.⁵⁸ Finally, the use of proximity stations (see section III.B), transport management optimization and collaborative logistics offer other possibilities to reduce the environmental externalities of deliveries.⁵⁹

204, IV.A-3:104-105 and IV.A-5:101-202 DCFR (Christian von Bar and others (eds), *Principles, Definitions and Model Rules of European Private Law: Draft Common Frame of Reference* (full pre-published edition, 2009), 1283-1297, 1353-1360 and 1392-1414 <law.kuleuven.be/personal/mstorme/european-private-law_en.pdf> accessed 2/11/2020). The EU and Member States of course impose transport, packaging or other regulations outside contract law.

⁴⁹ See Charles Goetz and Robert Scott, 'Principles of Relational Contracts' (1981) 67 *Virg.L.Rev.* 1089, 1092 and 1118.

⁵⁰ E.g. 'same day delivery', see Autoriteit Consument & Markt, 'Eindrapport Marktscan Pakketten' (2016) 46 <acm.nl/sites/default/files/old_publication/publicaties/16412_eindrapport-marktscan-pakketten-new.pdf> accessed 2/11/2020; Conseil Central de l'Économie, 'Un marché durable pour la livraison de colis' (2019) 9 <ccecrb.fgov.be/dpics/fichiers/2020-02-11-09-52-48_doc192661.pdf> accessed 2/11/2020.

⁵¹ KPMG, 'Étude relative au marché Belge de la livraison de colis dans le cadre d'activités d'e-commerce' (2017) 142 <docplayer.fr/54366145-Mai-2017-kpmg-advisory-kpmg-be.html> accessed 2/11/2020; UPS (n 18) 25-26 and 29.

⁵² Conseil Central de l'Économie (n 50) 9; PAAZL, 'Delivering Sustainability' (2019) 12 <retailinsiders.nl/docs/826a7f1d-11c0-4bd7-9d8f-beacbboc4092.pdf> accessed 2/11/2020.

⁵³ Conseil Central de l'Économie (n 50) 9; PAAZL (n 52) 12. The environmental externalities of fast deliveries would be greater in less densely populated areas with fewer e-commerce consumption volume (KPMG (n 51) 82).

⁵⁴ See Edwards, McKinnon and Cullinane (n 8) 112; van Loon and others (n 8) 482-483.

⁵⁵ F. Arnold and others, 'Simulation of B2C e-commerce distribution in Antwerp using cargo bikes and delivery points' (2018) 10(2) *Eur.Transp.Res.Rev.* 1, 8-10.

⁵⁶ E.g. <dpd.com/group/en/2019/11/07/2nd-line-for-parcel-delivery-by-drone-in-france/> accessed 2/11/2020 <starship.xyz/> accessed 2/11/2020; <teleretail.com/> accessed 2/11/2020; <wing.com/finland/helsinki/> accessed 2/11/2020; <amazon.com/Amazon-Prime-Air/b?ie=UTF8&node=8037720011> accessed 2/11/2020.

⁵⁷ See Eric Williams and Takashi Tagami, 'Energy Use in Sales and Distribution via E-Commerce and Conventional Retail: A Case Study of the Japanese Book Sector' (2004) 6 *J.Ind.Ecol.* 99, 107-108 and 112; van Loon and others (n 8) 484; Pålsson, Pettersson and Hiselius (n 8) 774-776.

⁵⁸ E.g. regarding packaging <slimbox.eu/en> accessed 2/11/2020; <loopstore.com/how-it-works> accessed 2/11/2020. E.g. regarding transport means <defietskoerierutrecht.nl> accessed 2/11/2020; <stuart.com/> accessed 2/11/2020.

⁵⁹ See for an overview Ranieri and others, 'A Review of Last Mile Logistics Innovations in an Externalities Cost Reduction Vision' (2018) 10 *Sustainability* 782.

In light of the extensive existing information requirements for distance contracts (see section II), it is remarkable that most consumers currently lack any precontractual information on the aforementioned factual elements that determine the environmental impact of an offer for an e-commerce delivery. The sustainability of the crucial delivery process included in contemplated e-commerce purchase decisions now remains a complete 'black box' for consumers. Article 6(1), g) CRD requires the trader to inform the consumer on the arrangements for and planned timing of delivery.⁶⁰ But this contract performance information is unconcerned with the actual method and level of sustainability of the proposed delivery. And in contrast to information requirements on delivery and payment restrictions,⁶¹ this information only has to be given before the consumer is bound by the contract.⁶² In practice, this means that it is only given at the very end of the ordering process, after the consumer has compared different e-commerce offers and made a transactional choice. If any information regarding the environmental impact of proposed e-commerce deliveries would be given in the future, this should happen as early as possible in the e-commerce shopping process in order to have a meaningful effect.

Admittedly, the overall environmental sustainability of e-commerce delivery processes is complex and challenging to compare. Clear overall comparisons are nevertheless required for 'green default' options or labels, which have been identified as effective instruments in section II. Consequently, it seems worthwhile to apply the Commission's 'Organisation Environmental Footprint'⁶³ methodology or environmental accounting alternatives on the e-commerce delivery process. Such instruments, possibly supported by private standards and certifications, might support an effective 'green' revision of the current information requirements for e-commerce sales contracts. In the absence of such common rules and guidance for default options or labels, it remains possible to require less holistic but still comparative information on the method of e-commerce delivery. This can be limited to short descriptions structured in a few sub-categories, such as 'last mile' transport means, type and quantity of packaging and sustainable logistics, again possibly supported by private standards and/or certifications. The benefit of the aforementioned measures is that they aim to facilitate the choice for a green delivery option while they do not stifle and rather encourage environmental sustainability initiatives by e-commerce traders and carriers.

B. The passing of risk

Article 20 CRD⁶⁴ stipulates that the risk of loss of or damage to dispatched goods only passes to the consumer when he or a third party indicated by the consumer and other than the carrier has acquired physical possession. The risk already passes to the consumer upon delivery to the carrier if the latter was commissioned by the consumer and that choice was not offered by the trader. Unlike article 18(1) CRD concerning delivery, consumers cannot contractually waive this protection.⁶⁵

The protection against loss of or damage to goods offered by article 20 CRD is regarded as a valuable consumer protection rule in distance sales contracts.⁶⁶ But it also has a downside. If the change of physical possession fails, carriers can theoretically try to leave goods at the consumer's

⁶⁰ The same information is afterwards also provided to the consumer on a durable medium (art 8(7) CRD).

⁶¹ Art 8(3) CRD.

⁶² Arts 6(1) and 8(1) CRD.

⁶³ See <ec.europa.eu/environment/eussd/smgp/ef_transition.htm> accessed 3/11/2020.

⁶⁴ This rule also applies to non-distance sales (art 17(1) CRD).

⁶⁵ Art 25 CRD.

⁶⁶ See RPA, CSES and EPRD, *Study on the application of the Consumer Rights Directive 2011/83/EU* (European Commission 2017) 28 and 48 <ec.europa.eu/newsroom/document.cfm?doc_id=44637> accessed 3/11/2020; Geraint Howells, Christian Twigg-Flesner and Thomas Wilhelmsson, *Rethinking EU Consumer Law* (Routledge 2018) 179.

door or give them to a neighbour.⁶⁷ But, notwithstanding exceptions such as in case of perishable goods, deliveries in rural areas or at houses with parcel lockers, this still generally remains rare in B2C e-commerce deliveries. The reason is because the trader continues to bear the many associated risks, such as theft by third persons or through collusion with the driver, damage to delivered goods caused by weather conditions, animals or persons, signalling an unattended house to potential burglars or an untruthful denial of receipt by the consumer.⁶⁸ Consequently, in most cases the trader or carrier will remain in possession of the goods and retry completing delivery at a later time. The resulting 'failed deliveries' are very common in current B2C e-commerce and, given that they require retaking the goods and undertaking a new delivery attempt, they create very substantial extra environmental externalities.⁶⁹

Broadly speaking, three strategies to reduce failed deliveries can be identified. The first strategy consists of consumer information and choice on more precise timing of deliveries. Currently, most consumers only receive very large estimated delivery timeframes.⁷⁰ Updates on more precise timing can be given through notifications or track & trace technology. And it is possible to let e-commerce consumers even choose an individual delivery timeslot.⁷¹ The latter, however, supposes carriers with large local market shares and densely populated areas in order to preserve logistical efficiency and corresponding sustainability. Artificial intelligence can assist in optimizing planning of such individually customized deliveries.⁷² A second strategy consists of IoT-solutions like home access systems or parcel reception boxes.⁷³ These require cooperation and relaying of instructions between a consumer and carrier. A third strategy is the use of proximity stations, like manned pick-up points and automated parcel lockers in 'brick and mortar' stores and elsewhere.⁷⁴ During the COVID-19 pandemic, these points have (temporarily) become less popular and less accessible, while people are more often at home during working days which facilitates successful home deliveries. While proximity points in normal circumstances reduce failed deliveries, their overall environmental impact depends on their general uptake level, the transport means used to travel to and from them by both carriers and consumers and whether they are located on or near

⁶⁷ Naturally, if a parcel is small enough, it can simply be put in a letterbox. Some e-commerce traders intentionally reduce packaging size with this solution in mind (PAAZL (n 52) 9).

⁶⁸ See Alan McKinnon and Deepak Tallam, 'Unattended delivery to the home: an assessment of the security implications' (2003) 31 *Int.J.Retail.Distr.Mgmt.* 30, 31-35. Theft of an unattended parcel by persons who pass by, so-called 'porch piracy', appears to have become especially problematic in the United States, but it is also observed as a growing problem in European countries. See i.a. X., 'An experiment with in-home deliveries is under way' (23/12/2017) 425:9072 *Economist* 91, accessed 18/01/2020 <economist.com/business/2017/12/19/an-experiment-with-in-home-deliveries-is-under-way>; Hayley Dixon, 'Porch pirates on the rise as Covid-19 drives up online shopping' (7/11/2020) *Telegraph*, accessed 18/01/2020 <telegraph.co.uk/news/2020/11/07/porch-pirates-rise-covid-19-drives-online-shopping/>.

⁶⁹ See i.a. Edwards, McKinnon and Cullinane (n 8) 112-114; Edwards and others, 'Carbon Dioxide Benefits of Using Collection-Delivery Points for Failed Home Deliveries in the UK' (2010) 2191 *Transp.Res.Rec.* 136, 136-139; Pålsson, Pettersson and Hiselius (n 8) 776; PAAZL (n 52) 7-9.

⁷⁰ Johan Visser, Toshinori Nemoto and Michael Browne, 'Home Delivery and the Impacts on Urban Freight Transport' (2014) 125 *Proc.Soc.Beh.Sc.* 15, 19.

⁷¹ van Loon and others (n 8) 482 and 484. E.g. <post.ch/en/business-solutions/delivery-times/time-slot-delivery> accessed 3/11/2020.

⁷² See i.a. Rusal Abduljabbar and others, 'Applications of Artificial Intelligence in Transport: An Overview' (2019) 11 *Sustainability* 189; DHL and IBM, 'Artificial Intelligence in Logistics' (2018) 22-35 <dhl.com/content/dam/dhl/global/core/documents/pdf/glo-core-trend-report-artificial-intelligence.pdf> accessed 3/11/2020.

⁷³ E.g. <keymitt.com/> accessed 3/11/2020; <loxone.com/enen/products/access-control/> accessed 3/11/2020; <parcelhome.com/> accessed 3/11/2020; <bringme.com/uk-en/office/virtual-reception/bringme-box> accessed 3/11/2020; <<https://www.my-esafe.be/nl>> accessed 3/11/2020. See also Jeffrey Risher, Dana Harrison and Stephen LeMay, 'Last mile non-delivery: consumer investment in last mile infrastructure' (2020) 28 *J.Mark.Th&Pr.* 484.

⁷⁴ E.g. <dpd.com/be/en/pickup/> accessed 3/11/2020; <dhlparcel.nl/en/consumer/dhl-locker> accessed 3/11/2020; <inpost.pl/en/help-what-inpost-parcel-locker> accessed 3/11/2020.

routes of already planned consumer trips, like commutes.⁷⁵ The impact likely further improves when consumers can themselves choose a conveniently located proximity point and when they are informed on the aforementioned considerations when personally selecting an appropriate proximity point.⁷⁶

Two different consumer regulation approaches are possible to support the aforementioned strategies.

The first is based on the clear importance of information and interaction in all three strategies. As discussed in section II, first of all relevant consumer information requirements on the employed strategy or strategies to avoid a failed delivery can be imposed. A green default option appears more difficult to determine in advance, given that the eventual environmental impact of a specific strategy depends on the actual cooperation by the individual consumer with this strategy. This reveals another possibility. In contrast to the method of e-commerce delivery discussed in section III.A, there are reasons to go here a step further and to give consumers a genuinely active choice between the different possible strategies for a successful passing of risk. If well designed, such an active choice for the e-commerce consumer on the personally preferred strategy for dealing with the passing of risk could potentially help in greatly reducing the number of failed deliveries. This is because all parties including the consumer have at least some interest in a successful delivery attempt and because the consumer's cooperation is in practice always required for a successful physical handover. Since all traders have a vested interest in avoiding failed delivery attempts as much as possible and, consequently, in implementing the aforementioned strategies, it appears less important to impose an information requirement or an individual choice for the consumer on the preferred strategy, as early as possible in the e-commerce shopping process.⁷⁷ This is useful in light of the practical organisation of e-commerce platforms and the risk of 'information overload' suffered by consumers when they are still comparing products and traders. Finally, if traders or platforms would identify a recurring choice by individual consumers or an optimal option for him, it ultimately becomes possible to identify and present to an individual consumer the most effective strategy for him to avoid a failed delivery as a green default option (see section II).

The second possible approach consists of changing the current situation where consumers have little 'skin in the game' but their cooperation is nevertheless required for successful deliveries. A failed delivery attempt creates for consumers only delay. This is generally not considered as a major concern (section III.A), especially not by those consumers who have already let personal priorities prevail over delivery cooperation. This is in contrast to the significant costs that failed delivery attempts represent for traders.⁷⁸ Hence, it can be questioned why there are currently no consequences for consumers who cause failed deliveries. The CRD now precludes that in such cases the risk of loss of or damage to goods would already pass to the consumer and, notwithstanding diverging contractual terms, that the trader's delivery obligation could already be considered as completed.⁷⁹ Introducing an exception to articles 18(1) and 20 CRD for consumers who are responsible for delivery failures, will be criticized from a traditional consumer protection perspective. However, it is possible to counter this criticism by pointing out that the costs created by failed deliveries are currently charged to all consumers, including consumers who make efforts

⁷⁵ See Fraser McLeod and Tom Cherrett, 'Quantifying the environmental benefits of collection/delivery points' (2009) 22 *Op.Res.Soc.* 127; Edwards and others (n 69) 136.

⁷⁶ See also Conseil Central de l'Économie (n 50) 17.

⁷⁷ The current timing of arts 6(1), g) and 8(1) CRD can be maintained.

⁷⁸ See Visser, Nemoto and Browne (n 70) 19; Magento, 'Fixing Failed Deliveries: Improving Data Quality in Retail' (2018) 4-5 <magento.com/sites/default/files8/fixing-failed-deliveries-community-insight.pdf> accessed 3/11/2020.

⁷⁹ Arts 18(1) and 20 CRD. Potential consequences for the transfer of ownership are determined by national law (recital 51 CRD).

to avoid them and who consequently act more sustainably (a ‘free-rider problem’). This economic reality reveals that a more adequate solution might consist of simply charging the extra costs created by new delivery attempts to those individual consumers who have caused a failed delivery. However, both suggested solutions would likely create new disputes and corresponding costs, especially in light of the difficulties to prove the extent to which a consumer or carrier is responsible for an individual failed delivery.⁸⁰ Such challenges might be partially solved through technology, like carrier monitoring and smart doorbells. But for the time being, it seems unlikely that any ‘hard’ consequences for consumers contributing to failed deliveries would be introduced.

In conclusion, if the European legislator would eventually decide to address the problem of failed deliveries through consumer regulation, it will likely exclusively pursue the aforementioned approach of information requirements and (default) choice for consumers.⁸¹

IV. The right of withdrawal from an environmental sustainability perspective

A. The right of withdrawal and its environmental impact

The EU consumer who buys goods at a distance⁸² is not only protected by the information requirements and minimal rules on delivery and passing of risk set out above, but also by a right of withdrawal. This is currently regulated by articles 9-16 CRD, as lastly amended by article 4(8)-(12) Modernisation Directive, and, like most CRD rules, it is a mandatory consumer right and subject to maximum harmonization.⁸³ In distance sales, the consumer has a right of withdrawal of 14 days from the moment when he acquires physical possession of the goods.⁸⁴ A number of exceptions are foreseen, mainly to prevent speculation by the consumer or situations in which the disadvantages to the seller are deemed to outweigh the advantages for the consumer (see section IV.B.3).

The CRD regulates in detail the rights and obligations of both parties during the period for withdrawal and after withdrawal. When considering the environmental impact of within the e-commerce context, mainly the following rules are relevant:

- The consumer does not need to give reasons for the use of his right of withdrawal.⁸⁵
- The consumer is entitled upon withdrawal to a reimbursement of all costs of the initial contract (including the costs of the least expensive delivery service offered by the trader).⁸⁶ But the direct costs of returning the goods resulting from the withdrawal decision are borne by the consumer, unless the trader has agreed to bear them (‘free returns’) or has failed to inform the consumer before concluding the contract that he has to bear such costs.⁸⁷

⁸⁰ See also recital 51 CRD.

⁸¹ See also Mak and Terryn (n 19) 230-231.

⁸² There is also a right of withdrawal for off-premises sales and for distance and off-premises service contracts (arts 2(5)-(8) and 9 CRD).

⁸³ Arts 4 and 25 CRD.

⁸⁴ Art 9(2), b) CRD. See art 9(2), b), (i)-(iii) CRD for further detailed rules on the start of the period in case of multiple goods, lots or pieces or regular delivery.

⁸⁵ Art 9(1) CRD.

⁸⁶ See art 13(1)-(2) CRD.

⁸⁷ Art 14(1) CRD. See also art 6(1) i) CRD.

- The consumer is entitled to handle the goods during the period for withdrawal to “*establish the nature, characteristics and functioning of the goods*”.⁸⁸
- If the consumer uses the goods beyond that purpose, he may still return the goods, but the diminished value caused by such use can be imposed on the consumer if the consumer was informed of this possibility prior to concluding the contract.⁸⁹

This regulatory framework is combined with a fierce competition between traders to provide lenient return policies to consumers. For example, some traders no longer charge consumers for dirty or damaged returned goods.⁹⁰ The most noteworthy example is the growing trend among e-commerce traders to reimburse or prepay return costs.⁹¹ An implicit result of such ‘free returns’ is that these costs are paid by all consumers of these traders regardless of whether they individually use their right of withdrawal (see section IV.B.4.c). A final significant consequence of lenient return policies is that they further increase the total number of times when the right of withdrawal is used (the ‘return rate’).

The available data on e-commerce returns varies per country and sector. According to a 2016 study, 12,08% of electronics and 16,50% of fashion e-commerce purchases were returned.⁹² Certain is that e-commerce return rates are many times higher than in ‘brick and mortar’ shops.⁹³ And they continue to grow,⁹⁴ although the COVID-19 crisis may temporarily slow this trend.⁹⁵ Return rates are furthermore highly variable between different individual consumer groups. Emblematic is the emergence of some consumers who buy multiple products with the initial intent of freely returning some of them.⁹⁶ There is less publicly available information on the actual fate of returned goods. According to a German Händlerbund survey, the original packaging is damaged in 21% of cases and 44% of returned goods would be in some way damaged and require resales at (substantial) discounts.⁹⁷ Resales, possibly preceded by repairs or reconditioning, indeed seem the most common outcome. But the remaining lifespan of returned goods that are sold as ‘second-hand’ is shortened, if only in the perception of consumers. And there is the risk that some still functioning returned goods are disposed by means of incineration or landfills, just for storage costs reasons.⁹⁸ A recent German study found that 3.9% of returned goods are

⁸⁸ Art 14(2) CRD.

⁸⁹ Art 14(2) CRD. See also art 6(1) h) CRD.

⁹⁰ See i.a. Expertgroep GetRidofReturns, ‘Blue Paper’ (2020) 6 <shoppingtomorrow.nl/nl/themas/logistics/delivery-distribution/get-rid-of-returns> accessed 4/11/2020.

⁹¹ See i.a. KPMG (n 51) 112; Gioia Forster, ‘Free returns have become the mainstay of European online retail’ (2017) <dpa-international.com/topic/free-returns-become-mainstay-european-online-retail-urn%3Anewsml%3Adpa.com%3A20090101%3A170123-99-998583> accessed 4/11/2020.

⁹² Ecommerce Foundation and others, ‘Ecommerce Benchmark & Retail Report 2016’ (2016) 28 <ecommerce-europe.eu/wp-content/uploads/2016/06/Ecommerce-Benchmark-Retail-Report-2016.pdf> accessed 3/11/2020.

⁹³ See Edwards, McKinnon and Cullinane (n 8) 108.

⁹⁴ See DynamicAction, ‘Retail Index: 2019 in review’ (2019) <engage.dynamicaction.com/hubfs/RETAIL%20INDEX/RETAIL_INDEX_INFOGRAPHIC-2019-YEAR-IN-REVIEW_WEB_2020_JAN_EMEA.pdf?hsLang=en> accessed 3/11/2020; Steve Dennis, ‘The Ticking Time Bomb of E-commerce Returns’ (2018) <forbes.com/sites/stevendennis/2018/02/14/the-ticking-time-bomb-of-e-commerce-returns/?sh=77bcfabd4c7f> accessed 3/11/2020.

⁹⁵ See e.g. Regina Henkel, ‘Corona senkt bei Otto die Retourenquote’ (2020) <fashionunited.de/nachrichten/einzelhandel/corona-senkt-bei-otto-die-retourenquote/2020073136587> accessed 4/11/2020.

⁹⁶ See Barclaycard, ‘Emergence of ‘serial returners’ (2016) <home.barclaycard/media-centre/press-releases/emergence-of-serial-returners-hinders-growth-of-UK-businesses.html> accessed 3/11/2020; Klas Hjort and Björn Lantz, ‘(R)e-tail borrowing of party dresses: an experimental study’ (2012) 40 Int.J.Ret.Distr.Man. 997.

⁹⁷ Händlerbund, ‘Returns-study 2016: How fair are customers in online trade?’ (2016) 4 and 6 <slideshare.net/Haendlerbund/returns-study-2016-how-fair-are-customers-in-online-trade> accessed 4/11/2020.

⁹⁸ See e.g. <ndr.de/nachrichten/niedersachsen/lueneburg_heide_unterelbe/Winsen-Amazon-verschrottet-containerweise-Neuware,amazon392.html> accessed 4/11/2020.

destroyed, 0.9% are donated to non-profits and 2.1% are sold to industrial recyclers.⁹⁹ Comparable numbers are reported in a Dutch study.¹⁰⁰

Returns clearly create a negative environmental impact, but the precise implications depend on a number of factors. Most importantly, the transportation externalities depend on whether carriers who collect the packages do this as part of their standard delivery round or not and on whether consumers combine drop-off trips to a store or postal office with different trips.¹⁰¹ Naturally, the transportation means used by couriers, postal services and consumers during the return process are again as consequential as during the initial delivery (see section III.A). Additionally, there is the additional waste created by re-packaging and the impact of some of the handling needed in order to be able to resell goods (like steaming or dry cleaning). Finally, there are the abovementioned issues of decreased lifespans and disposal of some returned goods and the fact that the consumer likely proceeds to an alternative consumption, which entails new resource extraction, production and transportation externalities.

B. Towards a sustainable right of withdrawal: possible solutions

High return rates not only create extra environmental externalities, they also impact the profit margins of e-commerce traders and they disadvantage certain consumers. It is true that product return possibilities can encourage (e-commerce) consumption, which may have certain economic benefits. And it is true that for individual e-commerce traders lenient return policies may increase turnover. But lenient return policies and high return rates also threaten the profitability of e-commerce businesses, with higher costs on average for smaller traders.¹⁰² Ultimately, the costs of lenient returns are to the extent possible charged by traders in general prices, which disadvantages consumers who rarely return goods (see also section IV.B.4.c). It seems therefore not only in the interest of environmental sustainability to endeavor to reduce return rates (section IV.A), but also in the direct economic interests of at least smaller e-commerce traders and of a significant group of more sustainably-acting consumers.

The existing excesses in returns are definitely not solely caused by the European consumer-friendly right of withdrawal. On the one hand, there are the aforementioned commercial policies that provide even more lenient return conditions. On the other hand, similar trends can be perceived in countries with less consumer-friendly mandatory rules.¹⁰³ Lenient return policies are initially implemented in order to increase turnover and customer loyalty. But fierce competition in online retailing and the fear of bad reviews and consumer dissatisfaction makes it difficult for traders to offer to consumers less lenient return conditions, even if this is necessary for profitability. Consequently, e-commerce traders are stuck in a self-enforcing 'commercial paradox'.¹⁰⁴ Reconsidering the legal framework can therefore help companies to combat this paradox, which is demonstrated by remarkable requests from European e-commerce industry

⁹⁹ Forschungsgruppe Retourenmanagement, 'Retourentacho 2018/2019' (2019) <retourenforschung.de/info-retourentacho2019-ausgewertet.html> accessed 4/11/2020.

¹⁰⁰ Expertgroep ReturnOnReturns, 'Blue paper' (2020) 4 <shoppingtomorrow.nl/nl/themas/logistics/delivery-distribution/return-on-returns-2020#downloads> accessed 4/11/2020.

¹⁰¹ See Edwards, McKinnon and Cullinane (n 8) 108 and 116. See also Pålsson, Pettersson and Hiselius (n 8) 766, 774 and 776-777.

¹⁰² See Klas Hjort and Björn Lantz, 'The impact of returns policies on profitability: A fashion e-commerce case' (2016) 69 J.Bus.Res. 4980; Dennis (n 94).

¹⁰³ See e.g. in the United States, Aaron Orendorff, 'The Plague of Ecommerce Return Rates and How to Maintain Profitability' (2019) <shopify.com/enterprise/ecommerce-returns> accessed 4/11/2020; Appriss, 'Consumer Returns in the Retail Industry 2019' (2019) <appriss.com/retail/wp-content/uploads/sites/4/2020/01/AR3019-2019-Customer-Returns-in-the-Retail-Industry.pdf> accessed 4/11/2020.

¹⁰⁴ Expertgroep GetRidofReturns (n 90) 6; Barclaycard (n 96); Dennis (n 94).

groups for more strict mandatory rules surrounding the consumer's right of withdrawal.¹⁰⁵ A critical assessment and possible update of the right of withdrawal and broader return regulation indeed seems necessary to oblige, or at least give an incentive to, traders and consumers to reduce unnecessary returns and to create a more sustainable sectoral playing field.

The rationale for granting the consumer a right of withdrawal has already been amply discussed.¹⁰⁶ In case of distance sales, the main justification is the information asymmetry considered to be inherent in the sales method given that '*the consumer is not able to see the goods before concluding the contract*'.¹⁰⁷ Granting the consumer a right of withdrawal can allow the consumer to obtain the required information,¹⁰⁸ which can help avoid the performance of inefficient contracts.¹⁰⁹ It can increase consumer welfare, since it allows consumers to be not bound by contracts to which they would not have agreed in full knowledge. Consequently, it helps to ensure the consumer's right to self-determination.¹¹⁰ If the right of withdrawal has been questioned in the past in legal scholarship, the discussion was mainly centered on whether the modalities of the right of withdrawal actually ensured its efficiency and contributed to the welfare and right to self-determination of individual consumers.¹¹¹

In our opinion, however, there are several additional reasons to revisit the current modalities of the right of withdrawal. Firstly, in line with the overall analysis of this paper, the focus on individual consumer rights fails to take into account the wider sustainability implications of current product returns, which were discussed in section IV.A. Traditional consumer protection aims should in accordance with article 11 TFEU be combined with aims of environmental sustainability, in order to safeguard the possibility of consumption by future generations.¹¹² Secondly, as referred to before and discussed further in section IV.B.4.c, the current right of withdrawal results in higher prices for all consumers, including for consumers who rarely or never use this right. Thirdly, alternative means exist today that can at least partially overcome the information asymmetry serving as justification for the right of withdrawal. New and effective digital sizing technologies emerge, such as webcam self-scanning or 3D-avatars.¹¹³ But a big difference can also already be achieved by more simple size guides and product visualizations.¹¹⁴

¹⁰⁵ ECommerce Europe, 'Händlerbund: Product Returns Study 2016' (2016) <ecommerce-europe.eu/news-item/handlerbund-product-returns-study-2016/> accessed 4/11/2020; Expertgroep GetRidofReturns (n 90) 10-12. See also Hannu Saarijärvi, Ulla-Maja Sutinen and Lloyd Harris, 'Uncovering consumers' returning behaviour: a study of fashion e-commerce' (2017) 27 Int.R.Ret.Distr.Cons.Res. 284, 284-285.

¹⁰⁶ See e.g. Pamaría Rekaiti and Roger van den Bergh, 'Cooling-Off Periods in the Consumer Laws of the EC Member States. A Comparative Law and Economics Approach' (2000) 23 JCP 371; Peter Rott and Evelyne Terryn, 'The Right of Withdrawal and standard terms' in Hans Micklitz, Jules Stuyck and Evelyne Terryn (eds), *Consumer Law* (Hart 2010) 239-240; Christian Twigg-Flesner and Reiner Schulze, 'Protecting rational choice: information and the right of withdrawal' in Geraint Howells and others (eds), *Handbook of Research on International Consumer Law* (Edward Elgar 2011) 130, 145-146; Horst Eidenmüller, 'Why Withdrawal Rights?', (2011) 7 ERCL 1.

¹⁰⁷ Recital 37 CRD.

¹⁰⁸ Rekaiti and Vandenberg (n 106) 379-381. Whether physical possession eventually allows a consumer to overcome an information asymmetry, will furthermore depend on the nature of the goods, whereby a distinction can be made between 'search' goods (quality ascertainable upon inspection), 'experience goods' (inspection and consumption needed to ascertain quality) and 'credence goods' (quality not ascertainable even after purchase), see Phillip Nelson, 'Information and Consumer Behavior' (1970) 78 J.Pol.Econ. 311.

¹⁰⁹ See Rekaiti and Vandenberg (n 106) 379-381.

¹¹⁰ See i.a. Joasia Luzak, 'Herroepen of niet herroepen. That's the question' in Hendrik Boom and others (eds), *Capita Civilologie* (Boom Juridisch 2013) 279-283; Josef Drexl, *Die wirtschaftliche Selbstbestimmung des Verbrauchers* (Mohr Siebeck 1998).

¹¹¹ Including in the former research of one of the authors (Evelyne Terryn, *Bedenktijden in het consumentenrecht* (Intersentia 2008)).

¹¹² See also the references in footnote 19.

¹¹³ See e.g. <www.shavatar.be> accessed 5/11/2020; <sizer.me/> accessed 5/11/2020. See also Expertgroep GetRidofReturns (n 90) 13.

¹¹⁴ Ecommerce Foundation and others (n 92) 31.

Current legislation clearly does not stimulate the use of these practical alternative solutions. In the following paragraphs, several regulatory options that may contribute to a more environmentally sustainable and more fair right of withdrawal are considered.

1. Period for withdrawal

The length for the period of withdrawal in case of distance selling has already been questioned in efficiency terms. For ‘search goods’, even a 7 day period for withdrawal has been considered long, as the quality of such goods can be immediately determined upon receipt.¹¹⁵ This is *a fortiori* the case for a period of 14 days. However, reducing the legal period for withdrawal will not be helpful in reducing the return rate. Even longer periods are currently provided in many commercial return policies and, interestingly, the return rate actually drops with longer return periods.¹¹⁶ The ‘endowment effect’ can explain this.¹¹⁷ Consumers tend to overvalue goods in their possession and get attached to them quite easily. Such affection would increase over time.¹¹⁸

2. Recalibrating the rights and obligations of the parties during the period for withdrawal

The consumer’s rights (and obligations) during the period for withdrawal are another point of discussion, that is usually again seen in terms of effectiveness, efficiency and costs/benefits. Since the right of withdrawal in distance contracts is meant to cure the information asymmetry due to the sales method, the consumer should be allowed the same handling at home as in a shop to overcome this deficit.¹¹⁹ The Consumer Rights Directive exceeds that aim by entitling the consumer to handle the goods during the period for withdrawal, not only to ‘*establish the nature and characteristics*’ but also ‘*the functioning of the goods*’.¹²⁰ The latter goes beyond the rights a consumer has in a brick and mortar shop. If it is unnecessary to cure the information deficit caused by the selling method, it could perhaps be explained or justified by a willingness by the EU legislator to stimulate (cross-border) e-commerce.¹²¹ But when taking into account the ecological impact, we believe that the balance tips in favour of limiting the rights enjoyed by the consumer under this mandatory right. Testing the functioning of the goods can make it impossible to resell the goods as new, thus creating an unnecessary loss of value and new environmental externalities caused by disposal and replacement. If it occurs that certain purchased goods do not function properly, the consumer still enjoys sufficient protection on the basis of the legal guarantee for non-conformity under European consumer sales law.¹²² We believe that the rights during the period for withdrawal should not go beyond the rights a consumer has in a physical shop and these rights do not include the invariable right to test the functioning of and, hence, already ‘use’ a good. Such

¹¹⁵ Rekaiti and Vandenbergh (n 107) 385; Terryn (n 111) 604-605.

¹¹⁶ Expertgroep GetRidofReturns (n 90) 6; Alec Minnema, ‘Managing purchases and returns for retailers’ (DPhil thesis, RUGroningen 2017) <rug.nl/research/portal/files/39210411/Complete_thesis.pdf> accessed 5/11/2020; Charlotte Pavillon, ‘Onderzoeksstudie rondom consumentenrecht en ecologische duurzaamheid’ (2020) RUGroningen, 33 <rijksoverheid.nl/binaries/rijksoverheid/documenten/rapporten/2020/08/20/onderzoekstudie-duurzaamheid-en-consumentenbeleid/Onderzoekstudie+rondom+duurzaamheid+en+consumentenbeleid_def.pdf> accessed 5/11/2020.

¹¹⁷ Narayan Janakirama and others, ‘The Effect of Return Policy Leniency on Consumer Purchase and Return Decisions: A Meta-Analytic View’ (2016) 92 J.Retail. 226, 233.

¹¹⁸ Luzak (n 110) 288-289; Michal Strahilevitz and George Loewenstein, ‘The Effect of Ownership History on the Valuation of Objects’ (1998) 25 J.Consu.Res. 276, 285.

¹¹⁹ J. Hijma, ‘Bedenktijd in het contractenrecht’ in J. Hijma and W. Valk, *Wettelijke bedenktijd* (Kluwer 2004) 83; Terryn (n 111) 470.

¹²⁰ Art 14(2) CRD.

¹²¹ See Luzak (n 110) 276.

¹²² See arts 6-7 and 10 Directive of the European Parliament and Council 2019/771/EU of 20 May 2019 on certain aspects concerning contracts for the sale of goods, amending Regulation 2017/2394/EU and Directive 2009/22/EC, and repealing Directive 1999/44/E [2019] OJ L136/28 (‘Sale of Goods Directive’).

amendment would not rule out that certain traders, as a commercial practice, continue to allow the (free) return of used goods. But, in our opinion, at least the current mandatory right of withdrawal should not oblige all traders to allow an unsustainable practice.

Similarly problematic from a sustainability perspective, is the continuation of the right to withdraw even if the goods have been used more than necessary to establish their nature, characteristics and function. In that case, the consumer may be charged for the diminished value, but the right to withdraw still stands.¹²³ And that is only the theory. In practice, traders report problems to estimate and agree with consumers on the diminished value as well as losses due to used goods not being resalable.¹²⁴ This results in a tendency to refund the full amount, for reasons of efficiency and to avoid bad reviews,¹²⁵ which ‘rewards’ consumers who use and subsequently return products which are no longer resalable. The 2017 Application Report on the CRD therefore concluded that the current rule ‘*can jeopardise the general objective quoted in recital 4 to strike the right balance between consumer protection and the competitiveness of enterprises*’.¹²⁶ If environmental sustainability is additionally taken into account, the balance in our opinion definitely tips in favour of abolishing a mandatory rule that allows consumers to cause goods to depreciate without consequences. We believe that traders should be allowed to simply refuse withdrawal in such cases.

3. Extending the exceptions to the right of withdrawal

Closely linked to the preceding discussion are the exceptions to the right of withdrawal. The aim of the exceptions, according to the CRD, is to strike the right balance between a high level of consumer protection and the competitiveness of enterprises.¹²⁷ However, to truly integrate sustainable development in the EU’s policies, the environmental impact of the right of withdrawal should also be included in the aforementioned balancing exercise. This is currently not the case. The CJEU, for example, recently decided that the exception to the right for ‘*sealed goods which are not suitable for return due to health protection or hygiene reasons and were unsealed after delivery*’¹²⁸ does not apply to mattresses from which the consumer has removed the protective film. According to the Court, the unsealing does not make the mattress definitely unsuitable for reuse or reselling. In support, the Court referred to the use of a single mattress by successive hotel guests, the existence of a second-hand market for mattresses, the possibility of deep-cleaning as well as an equation with garments.¹²⁹ However, in our opinion, the overall environmental impact of such returns should also be taken into account. And in the discussed case this additional component may tip the scale in the direction of no right of withdrawal. Every time goods can no longer be sold as new after withdrawal, not only the costs for traders (which are eventually passed on to all consumers) but also the environmental impact of the withdrawal further increases (in addition to the externalities caused by the return process and a possible replacement). The limited benefit of maintaining such a right of withdrawal for the consumer, which simply consists of the

¹²³ Art 14(2) CRD.

¹²⁴ RPA, CSES and EPRD (n 66) 115.2017 Fitness check, Final report on the application of the CRD, https://ec.europa.eu/newsroom/just/item-detail.cfm?item_id=59332, p. 115.

¹²⁵ Ibid, 115 (with reference to a survey by the Danish Chamber of Commerce); Expertgroep GetRidofReturns (n 90) 6. Anecdotal reference can also be made to a test performed in an episode aired on 13/01/2021 of the Belgian public broadcast TV show, ‘Factcheckers’. As a test, a single journalist ordered a large amount of various, both cheap and more expensive e-commerce products, used and even damaged them extensively, returned them and still received full refunds (<vrt.be/vrtnu/a-z/factcheckers/2/factcheckers-s2a6/> accessed 19/01/2021).

¹²⁶ RPA, CSES and EPRD (n 66) 115.

¹²⁷ Recital 4 CRD. See also CJEU 27/3/2019 C-681/17 ECLI:EU:C:2019:255, *Slewo*, para 39.

¹²⁸ Art 16(e) CRD.

¹²⁹ CJEU 27/3/2019 C-681/17 ECLI:EU:C:2019:255, *Slewo*, paras 42-46.

possibility to test a mattress without its protective film, does in our opinion not outweigh the many disadvantages.

Such a more comprehensive approach that also respects article 11 TFEU, should in our opinion guide the interpretation of currently existing exceptions to the right of withdrawal. The strict interpretation currently given by the CJEU to these exceptions,¹³⁰ which one-dimensionally focuses on a goal of perceived consumer welfare, should hence be corrected. Furthermore, the list of exceptions could in the future be extended to all cases in which the exercise of the right of withdrawal makes it impossible to resell goods as new. Such a new exception would have an impact on consumers who test and use goods in such a way that the goods can no longer be sold as new, but they would certainly not become deprived of all protection. If delivered goods eventually are not of the promised quality or if there is any other non-conformity, the consumer remains protected by the mandatory remedies of the consumer sales regime.¹³¹

4. More drastic changes: limiting the right of withdrawal

If the aim is, however, to substantially reduce unnecessary returns and to rule out unsustainable practices, more drastic changes to the regulatory framework will be necessary. Parties could be obliged or at least receive an incentive to take the external effects of unnecessary returns into account. Several options to do so are considered below, starting with the least intrusive proposal.

To be clear, the options discussed below continue to focus exclusively on the right of withdrawal in e-commerce distance contracts. In off-premises contracts, and other types of distance selling, such as cold calling, the right of withdrawal has a different justification and the concerned consumers are generally more vulnerable. Consequently, there are reasons to retain for such consumer contracts the current right of withdrawal without the limitations discussed below.

a) Making it explicit that the right of withdrawal should be exercised in good faith

Making it explicit that a right of withdrawal must be exercised in good faith (and thus can be abused) could already make it easier for traders to deal with consumers engaging in abusively excessive return practices. Some examples of what are in our opinion abusive practices by consumers, which clearly have a negative environmental impact (see section IV.A), are ordering many sizes or colours of the same product or many different products only to send most back (the ‘fittingroomer’) or ordering new shoes or clothes to wear them at an occasion and to subsequently return them (the ‘wardrober’).¹³² It is currently not unanimously accepted in all jurisdictions that a right of withdrawal, as a discretionary right, can be abused.¹³³ Hence, at least this theoretical discussion could be resolved by explicitly requiring that consumers should exercise their right of withdrawal in good faith. This can be evaluated, among other elements, by taking into account

¹³⁰ See also recently CJEU 14/5/2020 C-208/19 ECLI:EU:C:2020:382, *NK*, para 56; CJEU 8/10/2020 C-641/19 ECLI:EU:C:2020:808, *EU*, para 43.

¹³¹ See arts 6-7 and 13-16 Sale of Goods Directive.

¹³² See regarding these and other excessive practices Expertgroep GetRidofReturns (n 90) 7. See also Mark Rosenbaum and Ronald Kuntze, ‘Looking good at the retailer’s expense: investigating unethical retail disposition behaviour among compulsive buyers’ (2005) 12 *J.Ret.Consu.S.* 217; Hjort and Lantz (n 96).

¹³³ See in the sense that there is no requirement to exercise the right of withdrawal in good faith: Cour de Cassation (FR) 7/3/2006 (2006) *JCP (G)*737 II, 10056; Marco Loos, ‘Rights of withdrawal’ (2009) Centre for the Study of European Contract Law Paper 2009/04, 15-17 <papers.ssrn.com/sol3/papers.cfm?abstract_id=1350224> accessed 5/11/2020. See differently in the sense that abuse is possible: Hijma (n 119) 76; Peter Mankowski, *Beseitigungsrechte* (Mohr Siebeck 2003) 840; Terryn (n 111) 160; OLG Braunschweig 11 Zivilsenat 08/07/2020, 11.U.101/19, ECLI:DE:OLGBS:2020:0708.11U101.19.00. See also CJEU 3/9/2009 C-489/07 ECLI:EU:C:2009:502, *Messner*, paras 25-27.

help provided by the e-commerce trader to address the information gap, such as clear photos, uniform measurements and size comparisons, as well as more technologically advanced features.¹³⁴ Bad faith is of course often difficult to prove, which means that on its own such explicit requirement will only be effectively invoked against the most extreme and undisputedly abusive return practices. In less clear cases, an e-commerce trader will in our opinion be less likely to invoke this requirement in order to avoid dispute costs and the aforementioned risks of reputational damage. But as a signal and in combination with other measures, an explicit requirement of good faith exercise might still help indirectly to foster general awareness about the existence of limits to the currently mandatory right of withdrawal.

Additionally, we have mentioned above that a limited number of consumers is responsible for a large number of returns.¹³⁵ Companies may therefore want to completely refuse future sales to such consumers¹³⁶ and the legislator could at least make clear that it is allowed to establish such a 'blacklist' of consumers that engage in excessive returns without a valid reason. Such company policies will need to be transparent, but they should in our opinion not be prohibited, not only for environmental sustainability reasons, but also because the excessive return practices are in the end subsidized through price increases borne by all consumers.

b) *Prohibiting free returns: 'there is no such thing as a free return'*

The impact of the aforementioned proposal above is, however, likely to be limited due to the commercial pressure to apply lenient return policies and the fear of negative reviews (see section IV.A.). A more far-reaching and probably more effective measure would therefore be to introduce an outright prohibition on 'free returns' at EU level.¹³⁷ A (minimum) cost to be paid by the consumer in case of return of a package would put an automatic limitation on excessive returns and would help 'internalizing' some of the economic and environmental externalities created by current return decisions by individual consumers. It would furthermore provide an incentive to make use of the already existing technologies to assist consumers in making the right purchase decisions.¹³⁸ Free returns would continue to exist, but only in these cases where it is genuinely warranted, i.e. as part of a consumer sales remedy in case of a non-conformity. This might not be what most consumers desire,¹³⁹ but some resetting of what is considered normal seems necessary to ensure profitability for smaller e-commerce traders and the environmental sustainability of the growing e-commerce market. It would also end the current cross-subsidization between consumers that rarely or never make use of their right of withdrawal and frequent returners (see section IV.B.4.c). Consequently, it would make clear that there is no such thing as a free return.

c) *Abolishing the mandatory character of the right of withdrawal*

Less radical in terms of contractual freedom, but perhaps more so in terms of consumer protection would be to abolish the mandatory character of the right of withdrawal. Several authors have

¹³⁴ See footnote 113.

¹³⁵ See footnote 96.

¹³⁶ This is already happening in practice, see e.g. <ecommercenews.eu/wish-locks-out-accounts-for-excessive-refunds/> accessed 5/11/2020; <retaildetail.eu/en/news/m-tail/amazon-bans-customers-who-return-too-much> accessed 5/11/2020; <retaildetail.eu/en/news/fashion/esprit-no-longer-ships-customers-return-too-many-items> accessed 5/11/2020. See also Expertgroep ReturnOnReturns (n 100) 9.

¹³⁷ A plea that also comes from some e-commerce traders, see e.g. <vrt.be/vrtnws/nl/2020/01/03/wouter-torfs-gratis-terugsturen-pakjes-moet-anders-vandaag-ko/> accessed 5/11/2020.

¹³⁸ See footnotes 113-114.

¹³⁹ See UPS (n 18) 35.

already questioned the mandatory character of a withdrawal right,¹⁴⁰ but again the discussion was mainly conducted in terms of economic efficiency and balancing costs and benefits for consumers. It has been argued that a *mandatory* right of withdrawal for distance selling is inefficient.¹⁴¹ Although such right has benefits for consumers (and traders),¹⁴² it also comes with costs, ‘*especially when it is abused by a small subgroup of opportunistic consumers*’,¹⁴³ Costs that will be born, ‘*at least in part, by consumers, as sellers anticipate the likelihood of returns and increase prices accordingly*’.¹⁴⁴ Bar-Gill and Ben-Shahar mainly see two categories of consumers that are potentially hurt by the mandatory character of the right of withdrawal that bar traders from applying price differentiation:¹⁴⁵ (1) the poorest consumers, who may prefer lower prices over a right of withdrawal; and (2) consumers who are less likely to use their right of withdrawal. The latter category may consist of people that are familiar with the product, those who don’t like the effort of return and those averse of return for various reasons, including sustainability. Both categories of consumers pay for a right they will probably not use and are forced to cross-subsidize the frequent returners.¹⁴⁶

We already see the practice of price differentiation in the hotel sector, currently exempted from the mandatory right of withdrawal,¹⁴⁷ where it is considered a beneficial feature. The Study on the application of the CRD thus mentions: ‘*The exemption from the right of withdrawal is good because it allows to pass costs savings to the consumers. In addition, it is frequent practice that different prices are offered on the basis of the possibility to amend and cancel the booking. The consumers can benefit from a lower price if they resign from the right to cancel the booking.*’¹⁴⁸ A similar price differentiation for distance sales of physical goods would present similar advantages. Rather than completely abolishing the mandatory character of the right of withdrawal in distance sales, we propose that traders would be *obliged* to offer the right of withdrawal as an option to consumers, with an obligatory price differentiation for a contract with and without the right of withdrawal. Such legal obligation to differentiate in price between a more and less sustainable option for example exists in France in the context of take-away beverages.¹⁴⁹ The good news in e-commerce is that the greenest option (the distance contract without a right of withdrawal) would also be the cheapest option for consumers, for whom price remains the most important element in the decision-making process.¹⁵⁰ In accordance with what was set out in section II, we would furthermore propose to oblige traders to make the green option (no right of withdrawal) the default option.

A *mandatory optional* right of withdrawal has already been advocated by Eidenmüller as the option to be preferred over a withdrawal right as a default rule, because the default rule fails to allocate the decision competence to individual consumers and because of economic reasons of

¹⁴⁰ See e.g. Eidenmüller (n 106) 1-24; Oren Bar-Gill and Omri Ben-Shahar, ‘Regulatory Techniques in Consumer Protection. A Critique of European Consumer Contract Law’ (2013) 50 CML.Rev. 109, 121.

¹⁴¹ Bar-Gill and Ben-Shahar (n 140) 121.

¹⁴² As a quality signal that induce consumers to engage in remote purchases (ibid, 120).

¹⁴³ Ibid, 120. See regarding the differences among different e-commerce consumers regarding the extent to which they use their right of withdrawal: Saarijärvi, Sutinen and Harris (n 105) 286-287; UPS (n 18) 31. See also the sources in footnote 96.

¹⁴⁴ Ibid, 120.

¹⁴⁵ Ibid, 121.

¹⁴⁶ Ibid, 121.

¹⁴⁷ Art 16(I) CRD.

¹⁴⁸ RPA, CSES and EPRD (n 66) 118.

¹⁴⁹ Art L541-15-10, III, para 5 Code de l’environnement (as inserted by art 42 Loi 2020-105 du 10/2/2020 relative à la lutte contre le gaspillage et à l’économie circulaire, JORF 11/2/2020 n0035) oblige these sellers to apply cheaper prices for take away beverages in a reusable receptacle than for beverages in a disposable cup.

¹⁵⁰ UPS (n 18) 7.

contract standardisation.¹⁵¹ He also prefers the mandatory *optional* right over the current *mandatory* right, as it increases consumer's choice and as consumers who do not desire such a right would no longer have to pay for it.¹⁵² For e-commerce traders, it could also allow them to overcome the aforementioned current commercial paradox (see section IV.B). There are however also sustainability reasons that plead for this policy option. A *mandatory option* requires traders to differentiate between a less and a more sustainable option and it precludes them from only working with a less sustainable lenient return system. Furthermore, a mandatory option with price differentiation has the additional advantage that it gives an incentive to consumers to more carefully consider their choices and to use available sizing technologies and tools.¹⁵³ It would furthermore end cross-subsidization between different categories of e-commerce consumers to the detriment of the consumers who act more sustainably. The diminished consumer protection for consumers who stick with the default option of not having a right of withdrawal, would again be limited as consumers remain protected by the consumer sales regime in case of a non-conformity.

Approaching the current European *status quo* from our perspective that focuses on environmental sustainability, we also believe that a mandatory optional right of withdrawal is preferable over the option of full deregulation. In case of deregulation, it seems unlikely that consumers will base their basic e-commerce purchase decisions on the fact whether or not they seek a withdrawal right. Consequently, the decision competence on the withdrawal right will in practice be allocated to the e-commerce traders instead of the consumers, which diminishes the aforementioned aims of enabling consumers to make consumption choices on the basis of environmental considerations. Another consequence would be that certain, more sustainably acting consumers would pay again for a withdrawal right which they do not really want, although they did not consider this when making a purchase decision. These reasons are notwithstanding other possible arguments against full deregulation which might be based on the traditional consumer protection aims of the right of withdrawal (see section IV.B).

As a final remark, some companies already try to reduce return rates by offering consumers a discount on future purchases if they do not use their right of withdrawal.¹⁵⁴ This laudable business practice could, however, be more effective if the discount were for current instead of future purchases.¹⁵⁵ The mandatory character of the right of withdrawal currently prevents this. Moving to a mandatory option with price differentiation would remove this obstacle. Finally, a practical counterargument to a mandatory optional right could be that opportunistic consumers could first buy goods with a right of withdrawal, then return and consequently buy the same goods at a cheaper price without a right of withdrawal.¹⁵⁶ Making it explicit that the right of withdrawal should be exercised in good faith as discussed in section IV.B.4.a, should however suffice to curb such practices.

d) *Abolishing the right of withdraw 'without justification'*

The mandatory optional right of withdrawal proposed above is preferable to the at first sight more radical solution to just prohibit withdrawal without justification and to only grant the consumer a right to return if justified because of a non-conformity; a system similar to the so-called 'right to reject' as known in the UK and Ireland in case of non-conformity.¹⁵⁷ Such a system, however,

¹⁵¹ Eidenmüller (n 106) 10-11.

¹⁵² Eidenmüller (n 106) 9-10 and 11-14.

¹⁵³ See footnotes 113-114.

¹⁵⁴ See i.a. Eidenmüller (n 106) footnote 19; Expertgroep ReturnOnReturns (n 100) para 3.2.

¹⁵⁵ As humans tend to show a preference for reward that arrive sooner rather than later ('*hyperbolic discounting*').

¹⁵⁶ Eidenmüller (n 106) 13, who however estimates that such cases should be rare.

¹⁵⁷ See also art 3(7) Sale of Goods Directive that allows Member States to introduce or maintain such remedy.

makes abstraction of the fact that the major reason for returning goods in sectors like the fashion sector is that the goods ‘do not fit’,¹⁵⁸ which is not necessarily equal to a non-conformity. Even without a legal obligation to do so, companies will continue to offer the possibility of returns (without justification) on a commercial basis. Prohibiting the commercial practice of allowing returns without non-conformity would stifle e-commerce in fashion and similar sectors and would moreover be extremely difficult to enforce. Accordingly, this is not an option.

5. Accompanying measures beyond a reform of the right of withdrawal

The suggestions above are limited to amendments of consumer contract law, given the focus of this paper. They should however be part of a broader policy mix and additional and complementary measures to limit the environmental impact of e-commerce (see Introduction). And in particular unnecessary returns and potential destruction of such returns should be considered in this regard. Possibilities range from seemingly simple measures like EU standards for clothing sizes¹⁵⁹ and the aforementioned sizing-technologies and visualisations of e-commerce products,¹⁶⁰ to measures concerning the fate of returned goods. In France, it is now prohibited to destroy returned non-food products which are still ‘new’.¹⁶¹ In Germany, e-commerce traders now bear a duty of care to ensure that returned products remain usable.¹⁶² Given the cross-border nature of e-commerce, these measures can be circumvented and a pan-European regulation might be beneficial.¹⁶³ Finally, proximity points can also be beneficial for allowing consumers to return goods in a more sustainable way (‘drop-off points’), just like for deliveries (‘pick-up points’).¹⁶⁴ The considerations discussed in section III.B that determine the effective environmental sustainability of proximity points, also apply in the return process.

V. Geo-discrimination

Finally, given the importance of distance for the environmental impact of e-commerce delivery and return processes, it is also important to evaluate to what extent current EU law allows e-commerce traders to differentiate on the basis of the geographical location of consumers (‘geo-discrimination’). This is now primarily regulated by Regulation 2018/302/EU on geo-blocking (‘GBR’).¹⁶⁵

The first important rule is article 4(1), a) GBR, which prohibits traders to apply different general conditions of access for reasons related to a consumer’s¹⁶⁶ nationality, place of residence or place of establishment when a consumer wants to have goods delivered to either his location or a pick-up point if these are located in a member state to which the trader offers such delivery in his general conditions of access. Inversely, e-commerce traders can refuse to deliver goods in certain

¹⁵⁸ Expertgroep GetRidofReturns (n 90) 4.

¹⁵⁹ Expertgroep GetRidofReturns (n 90) 8.

¹⁶⁰ See footnotes 113-114.

¹⁶¹ Art L541-15-8 Code de l’environnement as inserted by art 35 Loi 2020-105 du 10/2/2020 relative à la lutte contre le gaspillage et à l’économie circulaire, JORF 11/2/2020 n0035.

¹⁶² §23.2.(11) Kreislaufwirtschaftsgesetz, this obligation is seen as part of a more general circular economy ‘*Obhutspflicht*’. See also Caroline Meller-Hannich and Elisabeth Krausbeck, ‘Sustainability, the Circular Economy and Consumer Law in Germany’ (2020) 9 EuCML 168, 172.

¹⁶³ See <retourenforschung.de/info-stellungnahme-zur-gesetzgebung-gegen-retouren-vernichtung.html> accessed 5/11/2020.

¹⁶⁴ See i.a. Conseil Central de l’Économie (n 52) 19.

¹⁶⁵ Regulation of the European Parliament and Council 2018/302/EU of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers’ nationality, place of residence or place of establishment within the internal market and amending Regulations 2006/2004/EC and 2017/2394/EU and Directive 2009/22/EC [2018] OJ L601/1 (‘GBR’). See also art 1(7) GBR.

¹⁶⁶ See also art 1(12)-(13) GBR.

member states, as long as they allow no exceptions. Since the GBR does not apply to ‘purely internal situations’,¹⁶⁷ e-commerce traders can also restrict their delivery services to geographical areas within the member state in which they operate.¹⁶⁸ But any delivery restriction needs to be communicated clearly and legibly to consumers at the latest at the beginning of an online ordering process.¹⁶⁹ Because of the mandatory nature of the right of withdrawal (see section IV.B.4.c), traders currently cannot ‘geo-discriminate’ regarding this right among consumers to whom they have already offered goods and delivered in accordance with the previous conditions. From an environmental sustainability perspective, it is positive that e-commerce traders continue to be able to objectively choose not to deliver in certain member states or parts thereof. Long-distance e-commerce by traders without appropriately decentralized depots and distribution networks, clearly has a detrimental environmental impact, especially if such delivered goods are subsequently returned by the consumer.

The second important rule is art 4(2) GBR, which confirms among other things that e-commerce traders are allowed to offer on a non-discriminatory basis net prices that differentiate between consumers in distinct geographical areas. Different delivery distances clearly constitute an objective factor which can justify price differences.¹⁷⁰ Moreover, it can even be argued that it is discriminatory to charge identical delivery costs to consumers when actual differences exist in individual delivery distances and corresponding costs.¹⁷¹ Nevertheless, such ‘freight absorption’, which is often misleadingly presented to consumers as ‘free shipping’, is a common practice that especially larger e-commerce traders are able to offer.¹⁷² Unfortunately, it not only constitutes a mild form of economic discrimination among consumers, but it is also a way in which the long-distance e-commerce transactions that cause most environmental externalities, are subsidized by other consumers. ‘Freight absorption’ furthermore removes the potential function of delivery costs to signal environmental externalities to consumers.¹⁷³ Given these reasons and given that more transparency is now being obtained about cross-border parcel delivery costs,¹⁷⁴ it seems worth contemplating whether the prevention of extreme cases of ‘freight absorption’ should not become a priority instead of the current perceived desire of the EU to evolve towards delivery prices which are as uniform as possible across the internal market.¹⁷⁵ The same considerations equally apply to return costs, when these are still charged to consumers (see also section IV.B.4.b).

Ultimately, the same considerations are also at play in the phase of contractual remedies. An e-commerce consumer who has received a purchased good lacking conformity, is entitled to demand either a repair or a replacement unless such remedy would impose disproportionate costs on the

¹⁶⁷ Art 1(2) GBR.

¹⁶⁸ But they cannot refuse a foreign consumer to ‘shop-like-a-local’ in these areas, for example when he arranges his own pick-up and delivery (see Commission, ‘Questions & Answers on the Geo-blocking Regulation in the context of e-commerce’ (2018) 11, 22 and 36-37 <ec.europa.eu/newsroom/dae/document.cfm?doc_id=55375> accessed 17 September 2020).

¹⁶⁹ Art 8(3) CRD.

¹⁷⁰ See recital 95 Services Directive and recitals 27-28 GBR. See also on transportation costs CJEU 14/2/1978 C-27/76 ECLI:EU:C:1978:22, *United Brands*, para 228.

¹⁷¹ See Janja Hojnik, ‘Tell me where you come from and I will tell you the price: Ambiguous expansion of prohibited geographical price discrimination in the EU’ (2019) 56 CML.Rev. 23, 53-54.

¹⁷² See KPMG (n 51) 75 and 145-147;

¹⁷³ See e.g. Enterprise europe network, ‘A guide to e-commerce in Europe’ (2018) 19 and 25 <een-sachsen-anhalt.de/fileadmin/user_upload/Sachsen_Anhalt/Seiten/Testformular/een_guide_ecommerce_2018.pdf> accessed 18 September 2020.

¹⁷⁴ See footnote 13; Commission, ‘Guidelines to national regulatory authorities on the transparency and assessment of cross-border parcel tariffs pursuant to Regulation (EU) 2018/644 and Commission Implementing Regulation (EU) 2018/1263’ (Communication) COM(2018) 838.

¹⁷⁵ It is worth noting that the original Commission proposal was less nuanced than the final GBR and i.a. did not include current art 4(2) (see Commission, ‘Proposal for a Regulation on addressing geo-blocking’ COM(2016) 289, 19).

seller.¹⁷⁶ If such goods are located far away from where they were originally delivered, the increased postage and carriage costs could in some cases justify a refusal by the seller to repair or replace such goods.¹⁷⁷ Elsewhere, we have argued that environmental considerations should generally be considered in the determination of the appropriateness of a consumer sales remedy.¹⁷⁸

VI. Conclusion

We would like to highlight the general finding referred to in the Introduction,¹⁷⁹ that B2C e-commerce distribution of physical goods has the potential to have on average a more positive environmental impact than the traditional brick and mortar retail system, but this outcome is highly dependent on a number of factors, among which is the applicable consumer contract law. And the current version of the latter, as this paper has shown, admittedly squanders this sustainability potential of e-commerce. Environmental externalities of e-commerce distribution are actually exacerbated by applicable EU consumer contract law. This is first of all because the information and choice that is currently offered to consumers insufficiently allows them to take the sustainability aspects of the delivery process of different e-commerce supply offers into account and, secondly, because consumers now have few incentives to cooperate with avoiding failed deliveries. An important third reason is the way in which current EU rules on the right of withdrawal stimulate unnecessary returns as well as returns of goods that can no longer be resold as new.

Several changes to the current framework have therefore been proposed in this paper. These proposals include the introduction of an obligation for traders to set the most sustainable delivery method as the default option in the e-commerce ordering process and to offer relevant information and choice to allow consumers to help avoiding failed deliveries. This paper furthermore proposes to consider several potential changes to the right of withdrawal (section IV.B), such as a new exception for all situations in which the exercise of such right makes it impossible to resell goods as new, limiting the consumer's rights during the period for withdrawal, explicitly requiring an exercise in good faith, prohibiting free returns and, most importantly, abolishing the right's mandatory nature. Indeed, we propose to only offer the right of withdrawal as a mandatory option, coming with a price that is slightly higher than the contract without such a right. The option without a right of withdrawal should be offered as the 'green default' option. Such system would provide more freedom to consumers, give them an incentive to carefully consider their choices and would end cross-subsidization between different categories of consumers.

The same cross-subsidies (or 'free-rider costs') are currently also present in the absence of consequences for consumers who cause failed deliveries (section III.B) and in the phenomenon of 'freight absorption' (section V). Interestingly, these are each time to the detriment of e-commerce consumers who act more sustainably. As a consequence, combatting them appears a good overall strategy to enable e-commerce's environmental sustainability potential. This analysis also reveals that the current interpretation of consumer protection found in the CRD and in other Union regulation, can be criticized. Even if one ignores environmental sustainability, these rules clearly benefit only certain types of consumers and actually disadvantage others. What seems necessary is to rethink these rules in a more complete balancing exercise. Such exercise should not only pay attention to (indirect) costs for all 'consumers', but in accordance with articles 7 and 11 TFEU and

¹⁷⁶ Art 13(2) Sale of Goods Directive.

¹⁷⁷ See recital 49 Sale of Goods Directive. See also Dirk Staudenmayer, 'The Directives on Digital Contracts: First Steps Towards the Private Law of the Digital Economy' (2020) 28 ERPL 219, 243-244.

¹⁷⁸ Mak and Terryn (n 19) 236; Van Gool and Michel (n 6) para 5.2.

¹⁷⁹ See footnote 8.

the Union's sustainable consumption policies also consider the environmental consequences of 'consumption'.¹⁸⁰

¹⁸⁰ See the analysis by Krämer in 1993, holding that EU consumer policy will become marginalized if it continues to focus only on (individual) 'consumers' and ignores 'consumption', Ludwig Krämer, 'On the Interrelation Between Consumer and Environmental Policies in the European Community' (1993) 16 JCP 455, 458 and 465.