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## Netherlands

### Introduction

1. E-commerce in the European Union (“EU”) is steadily evolving and the EU is one of the largest e-commerce markets in the world. In 2017, 85% of the individuals aged 16-74 in the EU used the internet, of whom 68% ordered goods or services online.<sup>1</sup> Also in the Netherlands, consumers increasingly use online shops to make everyday purchases. In 2017, online sales in the Netherlands increased by 13% compared to 2016 and more than 75% of Dutch consumers stated they had made an online purchase.<sup>2</sup>

2. E-commerce has driven two important developments from the competition perspective. Firstly, it has led to new online business models, notably the growth and importance of online platforms. This has provided more choice for consumers and opened up new markets for businesses. However, it also raises concerns about consumer protection, dominance and (big) data issues. Secondly, e-commerce has led to increased price transparency.<sup>3</sup> The increased possibility to compare prices gives consumers more bargaining power. They can compare competing offline and online offerings and choose the best deal on the spot. At the same time, online price transparency also enables businesses to easily monitor each other’s prices. Furthermore, it seems that e-commerce has led to more vertical agreements. An example is a selective distribution system, by which a producer wishes to protect its brand and the margins of retailers. Online distribution has also led to new kinds of vertical restrictions such as price parity clauses and online platform bans. In this paper the ACM discusses the consequences of these market developments for enforcement practice.

3. The Netherlands Authority for Consumers and Markets (ACM) is a multifunctional authority, combining enforcement of competition law, with consumer protection and empowerment, as well as telecommunications and energy regulation. This enables the ACM to address e-commerce issues regardless of whether they are labelled as competition or consumer. The first section of this paper sets out the ACM’s dynamic approach to e-commerce, illustrated by the use of our instruments. The second section discusses how the ACM assesses vertical agreements in e-commerce. In the third section, three specific challenges in the area of e-commerce are examined.

### 1. The ACM’s dynamic approach to e-commerce

4. The ACM’s strategy makes no distinction between online and offline problems, although the outcomes can be different depending on the specific characteristics of the

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1 Available at: [http://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce\\_statistics\\_for\\_individuals](http://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce_statistics_for_individuals).

2 See: [www.emerice.nl/nieuws/nederlandse-online-omzet-225-miljard-2017-groei-vertraagt](http://www.emerice.nl/nieuws/nederlandse-online-omzet-225-miljard-2017-groei-vertraagt) (in Dutch) and [www.cbs.nl/en-gb/news/2017/47/more-purchases-being-made-online](http://www.cbs.nl/en-gb/news/2017/47/more-purchases-being-made-online).

3 European Commission, “Final report on the E-commerce Sector Inquiry”, May 2017, link: [http://ec.europa.eu/competition/antitrust/sector\\_inquiry\\_final\\_report\\_en.pdf](http://ec.europa.eu/competition/antitrust/sector_inquiry_final_report_en.pdf).

online and the offline environment. Nowadays, almost all products and services can be bought online and a lot of businesses use a hybrid strategy, having both online and brick-and-mortar shops. As a consequence, the term e-commerce is not as useful as it used to be. Therefore the ACM defines e-commerce broadly, as the sale or purchase of goods or services over the internet. This definition also includes services for which consumers “pay” with their data and attention, such as social network services offered on an advertising-based model.

5. As stated above, e-commerce has driven new developments. Moreover, e-commerce markets are often fast-moving because of network effects, the scale of investments and the speed of technological advances. Online players can grow fast, but also disappear fast. For competition authorities, these facts lead to a lot of new questions that require timely answers. The ACM believes that speed and flexibility are especially important for enforcement in e-commerce markets.

6. In the ACM’s strategy, the impact that practices of undertakings in the market have on consumer welfare is central to enforcement. The ACM sets priorities and selects cases in which it believes the harm to consumer welfare is the highest. Then the instrument, or a combination of instruments, is selected that offers the highest probability of a solution. As already mentioned, the ACM can address e-commerce issues regardless of whether they are labelled as competition or consumer. This proves useful in e-commerce, because in these markets competition and consumer problems are often closely related. Consumer empowerment leads to increased competition.

7. Depending on the problem at hand, the appropriate instrument could be an enforcement case to assess the alleged infringement, or a market study to learn about the functioning of the market. Other instruments that the ACM uses are guidance tools to create awareness among businesses or campaigns to empower consumers. This mix of instruments allows us to enforce timely and effectively in present and future cases. Below, our instruments, and the challenge of market definition in multi-sided markets are discussed.

### **1.1. Mix of instruments to enforce timely and effectively**

8. In recent years, the ACM has undertaken various enforcement cases in the area of e-commerce, many of which have been in the consumer protection domain. For example, in 2016 the ACM took action against various online stores in order to ensure that consumers would get their money refunded after cancellation of their purchases. These online stores provided insufficient information about cancellations for consumers on their websites. In total, the online stores were fined over EUR 590,000.<sup>4</sup>

9. In recent years, the ACM conducted preliminary investigations in competition cases into vertical agreements, one of which was published in December 2016. This last concerned the use of a vertical agreement (narrow price parity clause) in the food delivery sector, to assess its effect on consumer welfare. The case will be further discussed under 2.1.1. The preliminary investigation is one of the ACM’s instruments to speed up enforcement. The ACM conducts a prima facie investigation to determine the potential

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4 See: [www.acm.nl/en/publications/publication/16527/Five-online-stores-fined-for-violating-order-cancellation-rules](http://www.acm.nl/en/publications/publication/16527/Five-online-stores-fined-for-violating-order-cancellation-rules). Several of these decisions are under appeal in the Dutch court.

harm for consumers. This allows a relatively swift screening for possibly problematic cases.

10. Besides these types of investigations, the ACM also conducts market studies to understand the developments in markets and to detect possible problems. An example is the ACM's 2017 market study into online video platforms that was conducted by a team of lawyers and economists with competition and consumer backgrounds.<sup>5</sup> The study showed the intricate working of fast-moving multi-sided markets. Online video platforms compete heavily for consumer attention. This battle primarily takes place in the fields of video content and new service provision. The online video platforms compete with each other on various sides of the platforms (viewer side, content side and advertiser side), and possibly also with other services. Also, it is clear that the competitive behavior on one side of the platform is partly influenced by the competition situation on other sides. Most platforms rely on an advertisement-based business model. The study suggests that none of the online video platforms - at the time of publication - had a dominant position in online advertising (it did not further explore content issues) in the Netherlands. The large platforms such as YouTube and Facebook face competition on these markets from each other and from smaller competitors.

11. In the course of this study it also came to light that there were possible problems in the general terms and conditions in use by the platforms. The ACM found that the general terms and conditions contained unfair or potentially unfair terms. The ACM has taken action to inform Dutch consumers about these risks. In addition, the ACM put this issue on the agenda of the worldwide network of consumer protection agencies (ICPEN) with a view to tackle this problem together with other consumer authorities. As a result of the cooperation between European consumer authorities, companies like Google, Facebook and Twitter adapted their terms in the beginning of 2018.<sup>6</sup>

12. Another instrument the ACM uses are consumer campaigns. In the autumn of 2017 the ACM launched an awareness campaign called "Don't just order something on social media. Find out first who they really are". With this campaign, the ACM aims to make consumers aware of the risks of impulse buying on social media. An offer may seem attractive in the advertisement, but, in order to prevent problems afterwards, it is important to find out who the seller is and if they can actually be reached before you buy something from them.<sup>7</sup>

13. To keep up with the challenges of digitalization, the ACM also invests in deepening and expanding its knowledge base and its capabilities. The ACM has recruited data specialists to work closely together with legal and economic case handlers, and it experiments with digital tools for data-driven enforcement. For example, by using algorithms in the detection phase.

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5 ACM, "A closer look at Online video platforms", October 2017, link: [www.acm.nl/sites/default/files/documents/2017-10/acm-a-closer-look-at-online-video-platforms-2017-10-16.pdf](http://www.acm.nl/sites/default/files/documents/2017-10/acm-a-closer-look-at-online-video-platforms-2017-10-16.pdf).

6 See: [www.acm.nl/en/publications/urged-european-regulators-social-media-platforms-google-facebook-and-twitter-adjust-terms-and-conditions](http://www.acm.nl/en/publications/urged-european-regulators-social-media-platforms-google-facebook-and-twitter-adjust-terms-and-conditions).

7 See: [www.acm.nl/en/publications/acm-warns-consumers-about-impulse-buying-social-media](http://www.acm.nl/en/publications/acm-warns-consumers-about-impulse-buying-social-media).

## 1.2. Defining multi-sided markets: challenging but feasible

14. In a number of cases, the ACM addressed market definition in multi-sided platform markets. In its already mentioned online video report, the ACM looked at the market definition of online video platforms. It used the approach of Filistrucchi et al., that makes a distinction between transaction markets and non-transaction markets.<sup>8</sup> On a transaction market a transaction is facilitated between the different sides of the platform. An example is an online hotel booking platform which facilitates transactions between consumers and hotels. On a non-transaction market no transaction takes place between the different sides. Filistrucchi et al. argue that for transaction markets it is sufficient to define one relevant market encompassing both sides of the platform. This means that substitutes also must be active on both sides of the platform. In other words, in these cases only other platforms are complete substitutes.

15. For non-transaction markets, it is necessary to define a relevant market for each of the different sides of the platform, because a product can be on one side of the platform but not on the other.

16. The ACM is of the opinion that online video platforms such as YouTube fall within the category of non-transaction markets. For example, YouTube facilitates an interaction between users and advertisers, but no direct transaction takes place. This means that in the competitive analysis of online video platforms, different markets must be defined on the various sides of the platform.

17. The method described above can be complicated by the specific characteristics of the case. In a recent case before the district Court of Amsterdam, VBO, a real estate association, claimed that Funda Real Estate abused its dominance with the online real estate platform Funda.<sup>9</sup> Funda is a platform that connects people who want to sell their houses with people who are looking for houses, but no transaction takes place on the platform. The platform charges a fee to sellers and generates income from advertising, but is free for buyers. The Court decided that Funda had a dominant position on the market, but that it did not abuse its dominance. The market was defined (based on an expert report) as a transaction market, namely the market for real estate websites in the Netherlands. However, it could also have been argued that Funda is a non-transaction platform, because no transaction is taking place on the platform and because it uses an advertising-based model. So it seems possible that there are hybrid multi-sided markets that carry elements of both transaction and non-transaction markets.

18. Another point is that market definition can be less useful in some cases because of the market characteristics. In the *Thuisbezorgd.nl* case, market definition was outside the scope of the preliminary investigation, but the ACM did find that the market was highly dynamic with strong market growth and entry of new concepts. High dynamics make market definition less useful, because even if a relevant market is defined, it could quickly change over time.

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<sup>8</sup> L. Filistrucchi, D. Geradin, E. van Damme, P. Affeldt, “Market Definition in Two Sided Markets – Theory and Practice”, *Journal of Competition Law & Economics* (2014) 10 (2): 293-339.

<sup>9</sup> Ruling of the district Court of Amsterdam dated 21 March 2018, link: <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBAMS:2018:1654> (in Dutch).

19. Overall, the ACM believes that market definition in multi-sided markets is more complex, but not impossible. Depending on the specific market characteristics of the case, the ACM chooses the appropriate method of market definition to make a correct assessment of the competitive pressure that a platform experiences.

## 2. The ACM's assessment of vertical agreements in e-commerce

20. The growth of e-commerce has led to the occurrence of more and new vertical agreements by producers and distributors. In 2015, the ACM published the document "ACM's strategy and enforcement priorities with regard to vertical agreements".<sup>10</sup> In vertical cases, as in other cases, the most important principle is the effect on consumer welfare. This means a case-by-case prioritization in which the ACM selects the cases in which the harm to consumer welfare is the highest. The ACM tries to estimate the effects of a vertical restriction at an early stage and take into account possible efficiencies and harms in each specific case. This is done by making an initial assessment of the effects of the agreement on consumer welfare.

21. Economic insights help in the estimation of the expected effects of vertical agreements on consumer welfare. The ACM is of the opinion that vertical agreements generally speaking, and especially in the absence of market power, more often than not benefit consumer welfare. Relevant efficiencies of vertical agreements in e-commerce are for example reduction of free-riding problems and protection of brand image. Other efficiencies can be the stimulation of opening up new markets, preventing a hold-up problem and achieving economies of scale in distribution.

22. In the context of vertical agreements, it is important to determine the level of competition between distribution chains (interbrand competition). When interbrand competition is strong, consumers generally have more opportunities to switch to products that are not affected by the vertical agreement. This acts as an incentive for undertakings to conclude vertical agreements that are appreciated by the consumer. In other words, some intra-brand competition may be sacrificed in return for stronger inter-brand competition.

23. Below, two much debated vertical agreements are discussed : price parity clauses and online platform bans. Next, the disadvantages of labelling vertical restrictions as hardcore in e-commerce are mentioned.

### 2.1. Price parity clauses: effect-based approach

24. Many platforms use so-called price parity clauses. These clauses restrict price competition between the platform and the affiliated seller, but also generate possible efficiencies. Broadly speaking, two types exist. A wide parity clause obliges the seller on the platform to offer the same price on the platform as on all its other sales channels (its own sales channel and other platforms). A narrow parity clause obliges the seller to offer the same price on the platform as on its own sales channel, but the seller is free to set

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10 "ACM's strategy and enforcement priorities with regard to vertical agreements", April 2015, link: [www.acm.nl/sites/default/files/old\\_publication/publicaties/14226\\_acm-strategy-and-enforcement-priorities-with-regard-to-vertical-agreements.pdf](http://www.acm.nl/sites/default/files/old_publication/publicaties/14226_acm-strategy-and-enforcement-priorities-with-regard-to-vertical-agreements.pdf).

different prices on other platforms. The ACM assesses the balance between pro- and anti-competitive effects of price parities in each specific case.

### *2.1.1. Narrow parity clause in *Thuisbezorgd.nl* case: Consumer harm unlikely*

25. The ACM started a preliminary investigation into a narrow price parity clause in the Dutch food delivery sector in 2016.<sup>11</sup> A restaurant owner filed an enforcement request against the narrow price parity clause of the platform *Thuisbezorgd.nl* (subsidiary of *Takeaway.com NV*), which he considered to be in violation of the competition rules. *Thuisbezorgd.nl* is an online food delivery platform on which restaurants can sell their meals and consumers can search, compare and order meals. In this case, a possible efficiency of the narrow price parity clause is the reduction of free-riding. Without the price parity clause, affiliated restaurants could attract new customers by using the platform, and thereafter lure the customers away from the platform by offering them lower prices on their direct sales channel.

26. In the preliminary investigation, the ACM found that there is sufficient choice for restaurants and consumers to enter into transactions via other sales channels than *Thuisbezorgd.nl*. Other channels are for example competing food delivery platforms and restaurants' direct sales channels. The ACM also noticed that the market is dynamic, with considerable entry of new players and rapid market growth. On the basis of the preliminary investigation, the ACM came to the conclusion that the narrow price parity clause used by *Thuisbezorgd.nl* was unlikely to harm consumer welfare. Therefore the ACM decided not to investigate this case further.

### *2.1.2. Online hotel booking monitor by EU competition authorities*

27. The ACM contributed heavily to the economic analysis underpinning the monitoring exercise in the online hotel booking sector, carried out by EU competition authorities.<sup>12</sup> The results show that both allowing the use of narrow price parity clauses, and prohibiting the use of price parity clauses, have generally improved conditions for competition and led to more choice for consumers. The ACM considers these results as supporting its view that allowing narrow price parity clauses can be beneficial for competition depending on the specific circumstances of the case. Another finding of the monitor is the lack of awareness among hotels about the fact that hotel booking platforms changed or removed their price parity clauses. Creating awareness among businesses on platforms about their possibilities to price differentiate can strengthen competition. The ACM tries to do this by for example sharing its considerations in the *Thuisbezorgd.nl* case.

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11 Decision in ACM case 15.1073.53 dated 18 November 2016, link: [www.acm.nl/sites/default/files/old\\_publication/publicaties/16836\\_besluit-thuisbezorgd-english-new.pdf](http://www.acm.nl/sites/default/files/old_publication/publicaties/16836_besluit-thuisbezorgd-english-new.pdf).

12 "Report on the monitoring exercise carried out in the online hotel booking sector by EU competition authorities", April 2016, link: [http://ec.europa.eu/competition/ecn/hotel\\_monitoring\\_report\\_en.pdf](http://ec.europa.eu/competition/ecn/hotel_monitoring_report_en.pdf).

## 2.2. Online platform bans: can be pro-competitive

28. Another much debated vertical restriction is the online platform ban. Such a platform ban was the subject of dispute in the *Coty* case that was brought before the European Court of Justice (ECJ) by the German Court for a preliminary ruling. The question in this case is whether Coty Germany, a suppliers of luxury cosmetic goods, can prohibit the use of online platforms (such as Amazon.de) by its retailers within a selective distribution system.

29. In a selective distribution system distributors are selected on the basis of specific criteria. Such systems are used to protect competition parameters, such as quality and brand image, that are valued by consumers and therefore also important for producers. According to case-law, selective distribution systems comply with Art. 101(1) Treaty on the Functioning of the European Union (TFEU) where three criteria (the *Metro* criteria) are met: (1) distributors are chosen on the basis of objective criteria, (2) the nature of the product, including the prestige image, requires selective distribution in order to preserve the quality of the product and to ensure that it is correctly used, and (3) the criteria do not go beyond what is necessary.<sup>13</sup> The question in the case of selective distribution clauses, such as online platform bans, is whether they have a net positive effect on competition, taking into account not only competition on price, but also on choice, quality and service. The ACM believes that, depending on the market circumstances, the effects can be pro-competitive. Producers should have the opportunity to protect their investments in quality and brand image against free-riding. However, this should not lead to a complete ban on online sales by distributors, which is considered a hardcore restriction and therefore prohibited.<sup>14</sup>

30. The Dutch government submitted written comments to the ECJ in the *Coty* case. It argued that the legality of a platform ban depends on the specific circumstances of the case. It is likely that such clauses can protect the investments of the supplier and distributors to improve the quality and image of the product and reduce free-riding. On the other hand, there is a risk of softening competition by limiting online commerce. The outcome of the assessment depends on the market conditions, notably interbrand competition and the availability of online sales channels. Therefore, the Dutch government argued against labelling these clauses as hardcore, but preferred a case-by-case assessment of the effects on consumer welfare. In the *Coty* case, the ECJ decided along the same lines, that an online platform ban within a selective distribution system aimed at preserving the luxury image of goods is compatible with Art. 101(1) TFEU, provided that the above mentioned *Metro* criteria are met.<sup>15</sup>

31. Just prior to the publication of the *Coty* judgment, there was a Dutch civil case with a strong resemblance to *Coty*.<sup>16</sup> The case was between Nike and a distributor, and concerned Nike's ban on authorized distributors selling Nike products on third-party

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13 ECJ, case 26/76 *Metro SB-Großmärkte v Commission*, 25 October 1977.

14 ECJ, case C-439/09 *Pierre Fabre Dermo-Cosmétique SAS*, 13 October 2011.

15 ECJ, case C-230/16, *Coty Germany GmbH v Parfümerie Akzente GmbH*, 6 December 2017.

16 Ruling of the district Court of Amsterdam dated 4 October 2017, link: [www.navigators.nl/document/idf71dc76c4ee24a419f2ae98742ab453e/ecli-nl-rbams-2017-7282-rb-amsterdam-04-10-2017-nr-c13615474-ha-za-16-959](http://www.navigators.nl/document/idf71dc76c4ee24a419f2ae98742ab453e/ecli-nl-rbams-2017-7282-rb-amsterdam-04-10-2017-nr-c13615474-ha-za-16-959) (in Dutch).

platforms of unauthorized resellers. The Dutch district Court ruled on October 4, 2017 that the prohibition was compatible with Art. 101(1) as long as the *Metro* criteria were met. Notably, the Court referred extensively to the Opinion of Advocate General Wahl in the *Coty* case. Another significant point is that the *Nike* case was not about luxury cosmetics as in the *Coty* case, but about sporting goods. This may be relevant given the discussion about whether the *Coty* judgment only applies to luxury goods or to all quality goods. Here, the ACM sees no reason why the arguments laid out in the *Coty* judgment could not apply to all products for which the nature of the product legally requires selective distribution.

### 2.3. When to label vertical restrictions as hardcore in e-commerce?

32. From the enforcement perspective, vertical restrictions should only be labelled as hardcore restrictions<sup>17</sup> if they generally can be presumed to restrict competition. In e-commerce, because of the ubiquity of sales channels and price transparency, switching is often easy for consumers. These developments may require a rethinking of vertical restrictions that should be considered hardcore in e-commerce. The ACM is of the opinion that labelling vertical restrictions such as price parity clauses and online platform bans as hardcore would lead to over-enforcement. As explained above, these clauses generally have strong efficiency effects but could give rise to competition concerns under specific market conditions (e.g. market power in a specific geographic or product market).

## 3. The ACM's approach to three specific challenges of e-commerce

33. In this section the ACM discusses three challenges for enforcement in e-commerce. For each of these challenges, the ACM also discusses the extent to which the ACM's current instruments can solve these problems.

### 3.1. Data in e-commerce: often efficiencies, sometimes risks

34. E-commerce is becoming more and more data-driven because of the huge technological breakthroughs in the collection and use of data. Data has a lot of applications in e-commerce. It allows consumers to use "free" services that they value in exchange for their attention (which has value for advertisers). Data use also leads to innovation and improved products and services in e-commerce. For example, online clothing shops are able to give size recommendations using feedback data from customers. This increases customer satisfaction and lowers costs of returned orders. Similarly, the use of real-time location data allows online retailers to show customers the time, accurate to the minute, at which their order will arrive. So, data provide many benefits for consumers and businesses in e-commerce. However, data collection and use may in some cases contribute to market power.

35. The ACM is currently conducting an exploratory study to understand the role of data in the competitive process of various sectors. This role depends on the particular market characteristics. A relevant factor in the assessment is the importance of data in the

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<sup>17</sup> Hardcore restrictions violate Art. 101(1) TFEU and do not fall under the "Block exemption".

competitive process. In a lot of e-commerce markets, data are important to compete, but are not the main product. For example, in the online fashion sector, data are an important input, but there are other important factors on which businesses compete, such as price and quality of the fashion items. In markets where data are part of the product or closely related to the product, the importance of data seems higher. An example of such a market is online dating platforms: the more users who provide the dating service with their personal profile, the more attractive the dating service becomes for new users.<sup>18</sup> Another important factor is the availability of data on the market. It seems that a lot of businesses in e-commerce are able to collect their own data or acquire it from third parties, especially in markets where consumers are multi-homing. The availability of data reduces the chance that one of the market participants acquires an unmatched data advantage. Moreover, data alone are no guarantee for success. There are other important factors, such as the quality of the algorithm and the level of investment. Lastly, dynamic competition (innovative products and new business models) could mitigate concerns relating to data-driven market power in some markets.<sup>19</sup>

36. The above factors are important for the assessment of the risk of data leading to market power. The ACM believes that in many e-commerce cases, data will probably not lead to abuse of market power, but in some cases it might. For these exceptional cases, it is an open question whether our instruments are up to the task to solve the problem. There is no fundamental objection in the law to treat data-driven market power under Art. 102 TFEU. However, because of the fast changing digital economy, a formal intervention may come too late to solve the problem, because of the duration of these investigations. Here, the ACM is in favor of an evaluation of the currently chosen balance between, on the one hand, ex ante regulation and, on the other hand, general and specific rules with ex post regulation.<sup>20</sup>

### 3.2. The rise of algorithms in pricing

37. Nowadays, it is possible for online retailers to engage in price changes at a pace and frequency that was unknown in the offline world. Where in the past prices were changed manually, it is now often an automated process that is executed by algorithms. These algorithms determine the price on the basis of sometimes countless data points, such as demand, quantity in stock, prices of competitors (which can often be easily monitored online), and even changes in the weather. In many cases, the outcomes of these algorithms are defined by humans, but developments in machine learning make algorithms more and more self-learning.

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18 This example was used in the joint report of the French and German competition authorities, “Competition Law and Data, 2016, link: [www.autoritedelaconcurrence.fr/doc/reportcompetitionlawanddatafinal.pdf](http://www.autoritedelaconcurrence.fr/doc/reportcompetitionlawanddatafinal.pdf).

19 Report issued by the Dutch Ministry of Economic Affairs: Ecorys, “Big data and competition”, June 2017, link: [www.rijksoverheid.nl/documenten/rapporten/2017/06/13/big-data-and-competition](http://www.rijksoverheid.nl/documenten/rapporten/2017/06/13/big-data-and-competition).

20 See for a more extensive consideration on this topic ACM “InSight”, April 2018, link: [www.acm.nl/sites/default/files/documents/2018-04/insight-2018.pdf](http://www.acm.nl/sites/default/files/documents/2018-04/insight-2018.pdf).

38. A specific concern among competition authorities is that these self-learning algorithms could form automated cartels.<sup>21</sup> This could result in the exact same outcome as classic cartels, but because there is no agreement it is uncertain how an infringement of current European and Dutch competition law could be established. These risks call for a timely policy response, taking into consideration whether or not our instrument mix needs to be adjusted or expanded. In that context, amendments to statutory rules must be taken into consideration as an option. At the European level, this could include discussions on the definition of concerted practices and agreements in an online world. Also worthy of consideration could be more structural solutions such as the mandatory inclusion of a code of conduct in algorithms, transparency, and arrangements over who bears responsibility for the algorithm.

39. To stay on top of these developments, the ACM is currently investigating how algorithms affect prices in selected markets and whether collusion between algorithms already occurs. This is being done on a qualitative and where possible quantitative basis.

### 3.3. Personalized pricing: call for a public debate

40. Prices and offers are becoming more and more personalized in digital markets. For instance, airline tariffs depend on the time of booking, algorithms determine which hotels from the search results are shown first, or what is included in the consumer's timeline or newsfeed on social media. In the consumer protection domain, these personalized offerings based on personal profiles lead to concerns about online privacy. There are also concerns about price discrimination. The most extreme form of personalization in an economic sense is individual price discrimination (each consumer pays exactly the maximum amount that they are willing to pay). There are currently limited real-life examples of this, but the technological possibilities make it likely that personalization will be increasingly used in more and different contexts.

41. At this moment, the balance between the possible efficiencies and harms is unclear. Consumers might benefit from information that is tailored to their preferences, but tailored prices might lead to results that are perceived as unfair. Personalized pricing may also result in the skimming off of the consumer surplus by businesses. The current consumer and competition toolkit offers few opportunities to combat unwanted forms of personalization. Also, in the absence of market power, it is not plausible that price discrimination will lead to anticompetitive concerns. That means that enforcement actions will not likely lead to positive results for consumers. So primarily, this calls for a public debate about the desired level of personalization from a societal perspective, in which there is an important role to play for politicians and policy makers.

## 4. Conclusion

42. Consumers and businesses take advantage of e-commerce every day. However, profound developments in these often fast-moving markets also lead to new questions for the competition enforcer that require timely answers. Therefore, the ACM believes that speed and flexibility of enforcement are important in e-commerce. As a multifunctional

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21 OECD, "Algorithms and Collusion: Competition Policy in the Digital Age", 2017, link: [www.oecd.org/competition/algorithms-collusion-competition-policy-in-the-digital-age.htm](http://www.oecd.org/competition/algorithms-collusion-competition-policy-in-the-digital-age.htm).

authority, the ACM can address problems regardless of whether they are labelled competition or consumer. The ACM selects cases in which it believes the effect on consumer welfare is the highest and chooses the appropriate tool from its mix of instruments.

43. By using this strategy, the ACM is able to tackle a lot of the issues in e-commerce, for example in the area of vertical agreements. Also, the use of data by businesses will probably lead to pro-competitive effects in a lot of e-commerce markets. However, for some questions, it is unclear whether the ACM has the right instruments to solve the problem. For example, an intervention on data-driven abuse of dominance may come too late in the fast changing digital economy. Here, the ACM is in favor of evaluating the balance between ex ante and ex post regulation. Then there are developments in e-commerce for which it is unclear what precisely their implications will be for the competition domain and whether the ACM has a role to play. The ACM invests in learning about these developments, but primarily politicians and policy makers have an important role to play.