Abstract
The study analyses the inconveniences of paper receipts and guarantees that are lost or fade away. The collected evidence indicates that missing paper documents may result in problems for consumers in the enforcement of their rights. The study assesses e-receipt solutions already existing on the market and evaluates whether the regulation of such schemes could contribute to the Single Market. Some guidelines are given concerning a possible regulation of e-receipt schemes, including the impact of other fields of the EU law.

This document was provided by Policy Department A at the request of the IMCO Committee.
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LIST OF ABBREVIATIONS

ADR      Alternative Dispute Resolution

Art.    Article

DSM     Digital Single Market

EU      European Union

GDP     Gross Domestic Product

ODR     Online Dispute Resolution

Para.   Paragraph

RAPEX   Rapid Exchange of Information System

SME     Small and Medium Enterprises

TEC     Treaty on the European Community

TFEU    Treaty on the Functioning of the European Union
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EXECUTIVE SUMMARY

The overarching aim of the research was to investigate whether any measures can be proposed in the area of e-receipts and digital guarantees that would enhance the effectiveness of consumer protection, while correcting market failures and removing barriers to establishing a common market.

Problems with enforcement of substantive consumer rights

The enforcement of consumer rights is at the heart of the EU consumer protection policy. Even the most exemplary list of substantive rights is meaningless if it is not supported by effective enforcement tools. The core element of proper enforcement is that consumers actually claim their rights. This requires both strengthening the consumer’s position towards the trader in disputes in court or in any out-of-court proceedings and motivating consumers to effectively claim their substantive rights. The lack of enforcement of substantive rights causes detriment to individual consumers, and has a negative impact on the market, as it leads to inefficient transactions that were not intended by both parties.

Receipts (including e-receipts) and digital guarantees may be of importance for the enforcement of consumer rights. There are cases where the obstacle that prevents consumers from enforcing their substantive rights or hinders their effective enforcement is a result of the fact that the consumer has lost the receipt confirming the transaction, or the receipt was issued on thermal paper and has faded away. Where goods were accompanied by a commercial guarantee, the consumer might also lose information on the guarantee.

Such problems occur mostly in the case of cash transactions, which still constitute the majority of transactions on the EU market. In more than 75% of the Member States, cash represents over 50% of all payment transactions, and in almost all Member States it is the largest payment instrument in terms of volume.

Missing receipts have been reported in the press as constituting a hurdle to the enforcement of consumer rights. National consumer protection associations have released various press releases indicating that consumers who are enforcing their guarantee rights need to provide proof of the transaction. The receipt, while not constituting the only possible way to prove a transaction, is the most convenient evidence in the case of cash transactions, unless the consumer wants to litigate in court and has witnesses to the transaction. The EU ODR platform may also not help a customer who lost the receipt and paid by cash, as the ODR system applies only to online sales and service contracts.

Private and public e-receipt solutions are still not very well developed on the EU market. Public e-receipt solutions were created for fiscal reasons and have a minor influence on consumer rights enforcement. Private digital guarantee schemes are becoming popular in the white and brown goods sectors. Their growing number and popularity indicate that consumers see e-receipt schemes as convenient and offering added value in the process of receipt storage. Despite the fact that private schemes are popular and offer convenience to consumers, there is no guarantee that the schemes will continue to exist, as it is not possible to profit from them unless they are connected to some marketing functionality.

Both e-receipt and digital guarantee schemes could contribute to consumer rights being exercised more frequently, more efficiently and more effectively.

Some private schemes are discriminatory, as becoming their member depends on having the nationality or place of residence of the Member State where the scheme operates. Some private schemes operating through apps have a potentially discriminatory character,
to the extent that app stores use geoblocking.

The need to possess a certain e-ID may lead to the discriminatory treatment of consumers both in public and private schemes.

**Reasons to regulate e-receipt at European level**

Regulating e-receipt schemes at the EU level could serve as a means of convenience for consumers as it would facilitate the enforcement of consumer rights, provide consumers with information on their rights, digitalize the storage of information connected with the sale of goods, guarantee continuity of services and eliminate the risk of discrimination of the scheme users.

The EU regulation of the e-receipt schemes has a potential to intensify the trust of the EU citizens in the Single Market.

Such schemes could also serve as an information vehicle, providing consumers with detailed information relating to their rights. A standardised e-receipt scheme could include not only information relating to the content of warranty and guarantee rights, but also information on the enforcement of such rights. This information could relate to ADR and ODR, as well as the functioning of the judicial system and raise awareness of consumers in this regards. Additionally, an e-receipt scheme could be used to inform consumers about product recalls and withdrawals.

A European e-receipt scheme could contribute to a better functioning of the Single Market. It could increase consumer confidence in businesses that offer e-receipts in combination with a digital warranty scheme. It could also create trust in the Single Market and the legal infrastructure provided by the EU. Last but not least, the e-receipt and the digital warranty scheme would make the life of European citizens easier and demonstrate the benefits of the EU in their everyday life.

Establishing sectors where the e-receipt scheme could function depends on the technical solution chosen for the scheme. The less complicated and costly for traders it is, the more retail sectors could (and would be willing to) be covered.

The e-receipt schemes could be complemented by a link to the relevant terms and conditions of commercial guarantees. In addition, e-receipt schemes could display information on the applicable legal guarantees, in particular when the rights and remedies of consumers are fully harmonised throughout the EU.

**Outline of European e-receipt regulation**

The technical solutions chosen for e-receipt schemes should have the potential to solve the problems that consumers have with paper documents that are lost or fade away. There are two possible ways of regulating e-receipt schemes at the EU level: (1) introducing an obligation to provide the consumer with an e-receipt by the trader, and (2) standardising paper receipts as well as e-receipts to ensure the digitability of the first ones and the portability and management of e-receipts by consumers. Each of the solutions should be supported with a regulatory framework for e-receipt software that would regulate the scope of gathered data, the scope of information provided to consumers and the basic conditions of access to the scheme preventing discriminatory treatment.

It seems that, at the moment, no other alternative technical solution could ensure that consumers will be provided with durable proof of the fact and the date of the transaction. Therefore, only introducing an e-receipt scheme (alternatives as presented above) allows for solving the problems that consumers have with paper documents that are lost or fade away.

From the traders’ perspective, the proposed technical solutions should be proportional and without a negative impact on their commercial activity. The assessment about which of the
suggested technical solutions would be less burdensome for the traders is given without a
detailed financial and technological assessment. However, the consequences of introducing
each of these solutions would certainly require additional technical and financial research, as
well as consulting traders’ and consumers’ organisations.

The e-receipt schemes could serve as an information vehicle, particularly for consumer
rights and product safety information, e.g. covered presently by the RAPEX system.
1. INTRODUCTION

KEY FINDINGS

- The enforcement of consumer rights is at the heart of the EU consumer protection policy. Even the most exemplary list of substantive rights is meaningless if it is not supported by effective enforcement tools.

- The core element of proper enforcement is that consumers actually claim their rights. This requires both strengthening the consumer’s position towards the trader in disputes in court or in any out-of-court proceedings and motivating consumers to effectively claim their substantive rights.

- The lack of enforcement of substantive rights causes detriment to individual consumers, and has a negative impact on the market, as it leads to inefficient transactions that were not intended by both parties.

- Receipts (including e-receipts) and digital guarantees may be of importance for the enforcement of consumer rights.

- There are cases where the obstacle that prevents consumers from enforcing their substantive rights or hinders their effective enforcement is a result of the fact that the consumer has lost the receipt confirming the transaction, or the receipt was issued on thermal paper and has faded away. Where goods were accompanied by a commercial guarantee, the consumer might also lose information on the guarantee.

1.1. Why consumers do not claim their rights?

The enforcement of consumer rights is at the heart of the EU consumer protection policy. Many actions have already been undertaken by the EU to enhance the effectiveness of the enforcement. The actions target various policy aspects: from obligations imposed on the Member States to assure effective, proportionate and dissuasive remedies to enforce consumer rights, to a more efficient system of on-line and alternative dispute resolutions and informational and formal duties of traders. The core element of effective enforcement is that consumers actually do claim their rights. This requires both strengthening the consumer’s position against the trader in disputes in courts or in any out-of-court proceedings, and motivating consumers to effectively claim their substantive right.

The caseload of some national courts in small claims procedures indicates that the number of cases in which consumers enforce their rights is decreasing.\(^1\) The reasons that cause consumers to be reluctant when it comes to initiating disputes with traders are manifold.

The intuitive opinion is that consumers claim defects in goods only when the detriment caused by a malfunctioning product is substantially higher than the cost of enforcing their substantive rights. The potential investment in terms of time, effort and costs, including the cost of information, is counterbalanced by the potential loss suffered when the consumer does not act. Consumers are discouraged when they know or assume that the process of claiming will be too troublesome, when they do not know what is required in order to initiate the claim, or when the seller’s policy aims at discouraging potential claims. A significant factor may also be the court fees and other costs of litigation that frequently exceed the value of the defective

item itself. The higher the cost of claiming substantive rights, the lower the incentive for consumers to actually enforce their substantive rights.

The lack of enforcement of substantive rights causes detriment to individual consumers, and has a negative impact on the market as it leads to inefficient transactions that were not intended by both parties.

Importantly, the uncertainty as to the costs or results of claiming the enforcement of substantive rights will also discourage consumers from taking effective steps towards enforcement. In many cases, the obstacle for effectively enforcing substantive rights by consumers occurs when the consumer has lost a receipt confirming a transaction, or a receipt issued on thermal paper has faded away. In cases where goods were accompanied by a commercial guarantee, it might also be the case that the consumer has lost the information on the guarantee.

This study explores the importance of receipts and guarantees for the enforcement of consumer rights. It also contemplates possible actions of the EU in the context of e-receipt solutions.

1.2. The legal landscape regarding receipts and the system of liability for a sold good at EU level

1.2.1. Receipts

Receipts (including e-receipts) were not the subject of the legislator’s interest in light of consumer entitlements. At a national level, in the context of consumer rights, there is normally an obligation imposed on the trader to provide its customer with a receipt. In Slovenia, Croatia and the Czech Republic, electronic systems were recently introduced for taxation purposes that give customers access to single receipts issued and stored in electronic form. The customers do not have personalised accounts that would make it possible to check all the e-receipts of a given customer in one place.

So far, the EU has regulated only the digitalisation of invoices, and only for tax and public procurement purposes, in Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax (OJ L 347/1 of 11.12.2006). In Recital 46, the directive explains that the use of electronic invoicing should allow tax authorities to carry out their monitoring activities. It is therefore considered appropriate, in order to ensure the internal market functions properly, to draw up a list, harmonised at Community level, of the details that must appear on invoices, and to establish a number of common arrangements governing the use of electronic invoicing and the electronic storage of invoices, as well as for self-billing and the outsourcing of invoicing operations. The directive regulates issues relating to sending invoices by electronic means (Articles 232 – 237) and the right to access invoices stored by electronic means in other Member States (Article 249). Furthermore, e-invoicing has been standardised at the EU level through Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement Text with EEA relevance (further: the e-Invoicing Directive). The main ground for the introduction of the standard was the fact that the varying formats of e-invoices caused unnecessary complexity and high costs to businesses and public entities. However, the e-Invoicing Directive provides only a standard instead of establishing any European e-invoicing infrastructure.

At a national level, in the context of consumer rights there is normally an obligation imposed on the trader to provide its customer with a receipt. In Slovenia, Croatia and the Czech

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1.2.2. Liability for sold goods

The EU system of liability for sold goods includes two main regimes that may be used by the consumer in case of defects in an acquired good.


The second one is liability for commercial guarantees, which is not mandatory and may be voluntarily introduced by the trader. Regarding commercial guarantees, there is no EU regulation per se, though certain informational requirements have been introduced.

Both liability regimes are presented in detail in point 2.1. of the Study.
2. OVERVIEW OF THE PROBLEM

KEY FINDINGS

- The level of awareness among consumers regarding their rights is not satisfactory. To remedy this, the European Commission started a Consumer Rights Awareness Campaign concerning consumer rights, and including rights related to the defectiveness of goods.
- If a consumer decides to exercise rights against the seller in court, he must prove that the contract was concluded with the given seller and on the given date. From this perspective, a receipt that identifies the seller and records the time of concluding the contract is one of the most convenient means to establish the consumer’s entitlement to the claim he is enforcing.
- The fact that a consumer is not in possession of a receipt or guarantee document may cause problems for him/her when enforcing rights connected with the defectiveness of a product originally accompanied by a receipt or guarantee document.
- Such problems occur mostly in the case of cash transactions, which still constitute the majority of transactions on the EU market. In more than 75% of the Member States, cash represents over 50% of all payment transactions, and in almost all Member States it is the largest payment instrument in terms of volume. That being said, the percentages of cash payments vary widely among the Member States.
- Missing receipts have been reported in the press as constituting a hurdle to the enforcement of consumer rights. National consumer protection associations have released various press releases indicating that consumers who are enforcing their guarantee rights need to provide proof of the transaction. The receipt, while not constituting the only possible way to prove a transaction, is the most convenient evidence in the case of cash transactions, unless the consumer wants to litigate in court and has witnesses to the transaction.
- Even though most consumer associations and authorities have not reported serious problems with lost receipts, the majority of them indicated that the proof of transaction is the necessary prerequisite for claiming consumer rights. They focus on ensuring that it will be possible for the consumer to prove the fact of the transaction with other evidence. In the case of cash payments, the consumer will often have no such evidence. Therefore, it is conceivable that lost receipts constitute a real but unreported problem, as if there is no proof of transaction, then consumers decide not to claim their rights without requesting consumer associations or authorities for assistance.
- In order to better assess exact magnitude of the problem in practice, an empirical study on the reasons why consumers do not enforce their rights is recommended.
- E-receipts can be seen as a means of convenience for consumers for many reasons, among which is facilitating the enforcement of consumer rights.

2.1. Consumer rights

2.1.1. Non-conformity (warranty)

The EU system of liability for sold goods, which applies to movable tangible goods with the exception of (1) goods sold by way of execution or otherwise by authority of law, and (2)
water and gas where they are not put up for sale in a limited volume or set quantity, is established in Consumer Sales Directive.

The Consumer Sales Directive introduces a mandatory regime of liability for the non-conformity of goods. Although the seller's liability does not depend on the consumer's knowledge about his rights, it is evident that a consumer must know about his rights in order to be able to invoke them. On the basis of the Consumer Sales Directive, the seller is not obliged to inform the consumer about the conformity regime. However, an obligation to inform is provided for in Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights (further: Consumer Rights Directive).

2.1.2. Commercial guarantee

In addition to the legal rights in cases of the non-conformity of goods, consumers may benefit from commercial guarantees offered by producers, sellers or other parties. A definition of the term guarantee is contained in the Consumer Sales Directive (Article 1(2)(e)) as well as in the Consumer Rights Directive (Article 2(14)). According to the Consumer Sales Directive, a guarantee means any undertaking by a seller or producer to the consumer, given without extra charge, to reimburse the price paid or to replace, repair or handle consumer goods in any way if they do not meet the specifications set out in the guarantee statement or in the relevant advertising. Although Article 6 of the Consumer Sales Directive formulates certain transparency requirements regarding guarantees, an infringement of these requirements does not affect the validity of the guarantee, and the consumer may still rely on it and require that it be honoured. This means that, also in the case of guarantees, the existence of rights does not depend on the knowledge of the consumer.

2.1.3. Informational inadequacies of consumers: conformity and guarantees

Generally speaking, the level of awareness among consumers regarding their rights is not satisfactory. In this respect, the last Eurobarometer study on consumer awareness, from April 2011,\(^3\) shows that only 39% of European consumers knew that they have a right to repair or replace a good after 18 months from purchasing it. Due to the low awareness of consumers, the European Commission started the Consumer Rights Awareness Campaign concerning consumer rights, and including rights related to the defectiveness of goods.\(^4\) The situation is slightly different in the case of guarantees. The absence of appropriate knowledge may firstly lead to not exercising rights to which the consumer is entitled on the basis of the guarantee (when the consumer does not know the content of the guarantee). Secondly, the lack of knowledge may also impede the possibility of exercising the legal rights for non-conformity. When a consumer receives (or acquires) a guarantee, this may create the misapprehension that the guarantee covers all the rights that the consumer is entitled to. In addition, even if the consumer knows that legal rights for non-conformity exist, but does not know their content, it is difficult for him to make an informed and rational decision as to which regime to claim the entitlements under. Consumers may assume that guarantees offer them some extra protection as compared with the legal rights in the case of non-conformity, whereas the scope of a guarantee (either the defects covered or the available remedies) may in fact be more restrictive than under the conformity regime. The “extra” element of a guarantee may be limited to an additional person against whom the consumer may raise a claim (if a guarantee is given by a person other than the seller).

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\(^{3}\) Special Eurobarometer 342, p. 94.
\(^{4}\) http://ec.europa.eu/justice/newsroom/consumer-marketing/events/140317_en.htm
2.1.4. Informational duties regarding consumer entitlements stemming from non-conformity and guarantee

In order to promote knowledge among consumers concerning their rights, the Consumer Rights Directive obliges traders to inform consumers, in a clear and comprehensible manner, on the existence and the conditions of after-sales services and commercial guarantees, where applicable, in addition to a reminder of the existence of a legal guarantee of conformity for goods. This must be done:

- before the consumer is bound by a contract other than a distance or an off-premises contract, or any corresponding offer, if that information is not already apparent from the context (Art. 5 (1) (e));
- before the consumer is bound by a distance or off-premises contract, or any corresponding offer (art. 6(1)(e)).

The Consumer Rights Directive also formulates formal requirements that traders must meet when providing such information. According to Article 7, in the case of off-premises contracts, the trader must provide the information on paper or, if the consumer agrees, on another durable medium. That information must be legible and in plain, intelligible language. In distance contracts (Article 8), the information must be given or made available to the consumer in a way that is appropriate to the means of distance communication used, in plain and intelligible language. In so far as that information is provided on a durable medium, it must be legible.

When it comes to guarantees, further informational duties can be found in the Consumer Sales Directive. Article 6 (1) requires that guarantees must state that the consumer has legal rights under the applicable national legislation governing the sale of consumer goods, and make clear that those rights are not affected by the guarantee. In addition, the guarantee document must set out, in plain, intelligible language, the contents of the guarantee and the essential particulars necessary for making claims under the guarantee, notably the duration and territorial scope of the guarantee, as well as the name and address of the guarantor. At the consumer’s request, the guarantee must be made available in writing, or feature in another durable medium available and accessible to him (Article 6(3)).

2.1.5. Recent US developments – information placed on the internet

The approach adopted in the EU is different from an approach recently adopted in the US. The EU and the US systems of liability for the quality of the sold goods are based on different assumptions: In the EU, the statutory regime has a mandatory character, whereas in the US the system of implied guarantees can be renounced and replaced by express warranties. Both systems, however, rely heavily on information duties (although in different contexts).

On 24 September 2015, the US Congress changed the Magnuson–Moss Warranty Act of 1975, in order to allow manufacturers to meet warranty and labelling requirements for consumer products by displaying the terms of warranties on internet websites. The US Congress acted on the following assumptions:

- Many manufacturers and consumers prefer to have the option to provide or receive the warranty information online.
- Modernising warranty notification rules is necessary to allow the United States to continue to compete globally in manufacturing, trade, and the development of consumer products connected to the internet.
- Allowing an electronic warranty option would expand consumer access to relevant consumer information in an environmentally friendly way, and would provide additional flexibility to manufacturers to meet their labelling and warranty requirements.
Section 102(b) of the Magnuson-Moss Warranty Act was amended by adding that all the requirements concerning the availability of terms of a written warranty on a consumer product can be satisfied by

- making available such terms in an accessible digital format on the internet website of the manufacturer of the product in a clear and conspicuous manner, and providing the consumer (or prospective consumer) with information with respect to how to obtain and review such terms, by indicating the information on the product or product packaging, or in the product manual;
- providing the consumer (or prospective consumer) with information on how to obtain and review such terms by indicating on the product packaging, or in the product manual: (a) the internet website of the manufacturer where such terms can be obtained and reviewed; and (b) the phone number of the manufacturer, the postal mailing address of the manufacturer, or another reasonable non-internet-based means of contacting the manufacturer to obtain and review such terms.

With respect to any requirement that the terms of any written warranty for a consumer product be made available to the consumer (or prospective consumer) prior to the sale of the product, in a case in which a consumer product is offered for sale in a retail location, by catalogue, or through door-to-door sales, the rules only apply if the seller makes the terms of the warranty for the consumer product available, through electronic means or at the location of the sale to the consumer purchasing the consumer product, before the purchase.

2.2. Problems connected with a missing paper document

2.2.1. When does a consumer need a paper document?

If a consumer decides to exercise rights against the seller in court, he must prove that the contract was concluded with the given seller and at the given date. From this perspective, a receipt that identifies the seller and records the time of concluding the contract is one of the most convenient means to establish the consumer’s entitlement to the claim he is enforcing.

Many legal systems in the EU require sellers to provide consumers (or widely – customers) with a receipt; sometimes the receipt is to be provided at the consumer’s request.

Table 1: Obligation to provide a consumer with a receipt across the EU

<table>
<thead>
<tr>
<th>MS</th>
<th>Obligation to issue a receipt</th>
<th>Obligation to issue a receipt upon request</th>
<th>No obligation to issue a receipt</th>
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<tbody>
<tr>
<td>Austria</td>
<td>x</td>
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<td>Belgium</td>
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<td>x</td>
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<td>Cyprus</td>
<td>x</td>
<td>x</td>
<td></td>
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<tr>
<td>The Czech Republic</td>
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<td>x</td>
<td></td>
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<tr>
<td>Denmark</td>
<td>x</td>
<td></td>
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<tr>
<td>Estonia</td>
<td>When the price is higher than 300 kr</td>
<td>When the price is lower than 300 kr</td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>Obligation to issue a receipt</td>
<td>Obligation to issue a receipt upon request</td>
<td>No obligation to issue a receipt</td>
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<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------</td>
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</tr>
<tr>
<td>Finland</td>
<td>If the seller has more than € 10,000 net in sales/year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>x</td>
<td>x but the seller has to provide written confirmation of price</td>
<td></td>
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<tr>
<td>Germany</td>
<td>x</td>
<td></td>
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<tr>
<td>Greece</td>
<td>x</td>
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<td></td>
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<tr>
<td>Hungary</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>Ireland</td>
<td>In the case of taxi drivers</td>
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<tr>
<td>Italy</td>
<td>x</td>
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<td></td>
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<tr>
<td>Latvia</td>
<td>x</td>
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<td>United Kingdom</td>
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</table>

**Data for 2010, source:** ECC Network Guide to Shopping in Europe with updated information concerning Finland and France
In general it appears that there is no legislation in the EU Member States that would require the buyer to present a receipt he has received. The consumer is, however, required to prove that the transaction took place. For this reason, national consumer associations on the one hand suggest that consumers should keep receipts, and on the other inform consumers that every transaction can be proven by a number of means, like a credit card statement, a bank account statement, or even through a witness.

The receipt, however, remains the most convenient and practical measure to allow consumer claims. As indicated in the previous chapter, the enforcement of rights is much easier for a consumer who possesses the receipt, than for a consumer that needs to prove the transaction by indicating a witness during court proceedings.

Receipts are particularly important in the case of cash transactions, where there is less proof relating to the money transfer. If a cash transaction was concluded and the consumer lost the receipt, he may be discouraged from pursuing his rights, considering that enforcing the rights in the case of a missing receipt will be more complicated, will necessitate court litigation and may have an uncertain outcome.

2.2.2. Lack of receipt as a hurdle for enforcement

The lack of a legible receipt may cause significant problems for consumers trying to enforce their substantive rights, especially in case of cash payments. It may also discourage customers from even trying to exercise their rights.

As the press articles cited in point 2.3.3. prove, many customers believe that the receipt is necessary in order to claim warranty rights. In such cases, the consumer will not even attempt to contact the seller of the defective product, even though the latter could potentially accept the complaint.

In practice, even if the consumer decides to contact the seller, it is possible that the seller will reject the complaint due to the lack of a receipt. This practice by retailers is confirmed by press articles (point 2.3.3.). It is difficult to assess the probability that the consumer will decide to anyway enforce his rights, in spite of the initial denial by the seller to accept the complaint. Much here depends on the determination of the consumer, as well as the functioning of consumer organisations and other agencies that provide practical assistance to consumers.

Should the consumer decide to enforce his warranty rights taking legal actions against the seller, the lack of a legible receipt will still cause practical problems. In the case of a potential legal dispute with the seller, concerning the defectiveness of goods, it is, generally speaking, the buyer who carries the burden of proof. In particular, this relates to proving the purchase. The most significant difficulties arise in the case of cash transactions, where testimony is normally the only alternative evidence. Moreover, this testimony will, in many cases, be confronted with a contradictory statement from the alleged seller, which will make the entire procedure cumbersome. In some national systems, the consumer could also have the right to claim a document related to the transactions concluded by the seller within a certain period of time after the purchase. However, the financial documents of the seller might frequently not be enough to prove the fact of purchase.

Even if there would be a chance to enforce the warranty rights in court proceedings, a potential consumer who paid by cash and no longer has a legible receipt would most probably refrain from enforcing his rights in court due to factors such as: (i) the uncertainty of the outcome of the case, (ii) additional costs of a legal dispute that normally have to be pre-paid by the claimant, and (iii) the length of the court proceedings.

The EU ODR platform may also not help a customer who lost the receipt and paid by cash, as the ODR system applies only to online sales and service contracts.
2.2.3. Lack of guarantee document as a hurdle for enforcement

The same practical problems apply to lost or illegible guarantee documents. The lack of a guarantee document also poses a problem even in the case of online payments, as the consumer might not be aware of the exact content of his guarantee rights. Even assuming that the consumer would be able to establish such rights by obliging the seller to disclose the general terms of guarantee over a certain period, such an operation would normally require a court action, and therefore could be too troublesome for the consumer (here, one can easily see the lack of effectiveness of the means traditionally employed to fulfil transparency requirements).

2.3. Lack of a paper document – a problem in practice

2.3.1. Introduction

If traditional paper receipts would undermine the effectiveness of enforcing consumer rights in case of cash payments, e-receipts could be seen as a potential solution. However, the first necessary step here is the diagnosis, i.e. establishing whether paper receipts do have a negative impact on the possibility to claim rights by consumers and, if so, how frequent this practice is.

2.3.2. Two cases of missing documents: lost and fading documents

Basically, consumers can be deprived of their receipts in two cases. First, this might be as a result of a consumer simply losing the receipt. Second, as a result of the technology used to produce the receipt, i.e. when, after certain time, the receipt fades away and becomes unreadable.

The fact of losing the receipt does not normally preclude consumers from enforcing their rights, as it is generally admissible to prove the fact and the date of conclusion of a sales contract with other evidence. As already mentioned, this may be done by various means: credit card statements, guarantee certificates, previous customer complaint reports, original packaging, bank account statements, witnesses, or even indirectly through the fact that only a specific seller offers a given product for sale. As explained in previous chapters, in practice, in particular in case of cash transactions, a consumer may have considerable difficulties to present other prove of transaction and of transaction´s date (to prove that the legal guarantee period did not lapse), if the receipt is lost.

When it comes to fading receipts, if the trader is obliged to present the consumer with a receipt, it is logical that, since the receipt provides the consumer with the means to prove the foundation of his claim, the receipt should last as long as the consumer is entitled to formulate the claim. If the receipt fades away before that time, it cannot be held that the trader has fulfilled his statutory duty. In some countries, including Denmark and Finland, in of the event that a receipt that faded away, the burden of proof is shifted to the seller. In practical terms, the customer may have problems to prove that the faded receipt was indeed issued by the trader if all print is lost.

Unlike ink cartridges, thermal printers do not require ink. The printers form text by directing heat onto temperature-sensitive paper. But, because the paper is chemically unstable, the writing can fade if the receipt is exposed to light or heat, including body temperature.\(^5\)

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\(^5\) S. Smith, Consumers left without warranties as text on receipts fades away, The Telegraph, 10 July 2016, http://www.telegraph.co.uk/news/2016/07/10/consumers-left-without-warranty-as-text-on-receipts-fades-away/
2.3.3. Refusing a claim when there is no receipt

Refusing consumer claims on the basis that there is no receipt seems to be one of the strategies employed by traders to discourage consumers from claiming their rights.

National consumer protection associations, in various press releases, have indicated that consumers enforcing their guarantee rights need to provide proof of the transaction. The receipt, while not constituting the only possible way of proving a transaction, is the most convenient evidence in the case of cash transactions, unless the consumer wants to litigate in court and can present witnesses to the transaction.

**Belgium:** The Belgian association of suppliers of goods and services informs their members that they have no right to decline the guarantee rights when the customer lost a receipt if he has other evidences of purchase. 6

**Germany:** A German internet newspaper writes in an article that the enforcement of guarantee rights is also possible without a receipt. The title of the article is: "It is possible also without a receipt." 7

In another article, a German provider of consumer tests informs the consumers that it is possible to enforce the guarantee rights also when a receipt is lost, but that the purchase may be proven by other evidence. 8

Another newspaper informs its readers that it is possible to claim the replacement of a defective product also when a receipt is lost. 9

**Ireland:** The authority for consumer rights protection informs consumers that: “Even if you lose your receipt, your consumer rights still apply when returning faulty goods. All you need is proof of purchase, which doesn’t necessarily need to be a receipt.” 10

**Poland:** An association of consumers informs its members that the enforcement of guarantee rights is possible also without a receipt. 11 Recently, a contractual clause stating that “The basis for accepting a complaint is a proof of acquisition of the product (a fiscal receipt or an invoice)” was qualified by the Court of Competition and Consumer Protection as an abusive contract term and was included on a list of such terms. 12

In another article, a website with legal information informs consumers that they can enforce the guarantee rights also in the event that the receipt is lost, but they have another proof of purchase. 13

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7 [http://www.n-tv.de/ratgeber/Es-geht-auch-ohne-Kassenbon-article3350041.html](http://www.n-tv.de/ratgeber/Es-geht-auch-ohne-Kassenbon-article3350041.html)


10 [http://www.consumerhelp.ie/buying-goods#receipts](http://www.consumerhelp.ie/buying-goods#receipts)


12 registration No 4242 on the basis of a judgment of the Court of Competition and Consumer Protection dated 26 October 2012

Spain: An association of consumers informs its members that, even if the receipt fades away, it is possible to enforce guarantee rights as long as there is some other proof of purchase.\textsuperscript{14}

Sweden: The national consumer agency informs consumers: “You do not need to have the receipt, as long as you can prove when you bought the goods from the shop in some other way. But, since it is up to you to prove this, it is always easier if you keep the receipt.”\textsuperscript{15}

United Kingdom: Hints to consumers include an internet newspaper states that: “If goods are faulty and you have lost the receipt, all you have to do is provide proof of purchase, such as a cheque book stub or a credit card statement.”\textsuperscript{16}

In order to verify how frequent and how detrimental these occurrences are, within the frame of this research, a number of consumer organisations were contacted.

At the EU level, BEUC was not aware of any serious issues arising in this regard. When it comes to the national level, most of the received answers were, in principle, very similar. The respondents claimed that, although such practices do take place on the market (the receipts either get lost or fade away), this does not constitute a major practical problem, since consumers are able to prove the transaction using other means. The cases where a consumer paid with cash and had no proof of purchase were very rare, according to our respondents. In other words, the data gathered from administrative authorities and consumer organisations does not confirm that lost receipts constitute an obstacle in claiming rights by consumers. The consumer organisations and authorities were asked two questions:

1. Do the consumers ask you if it is possible to claim their rights if they lost the receipt or if it faded away?
2. Does it happen that consumers contact you reporting problems with sellers denying their rights due to the fact that a receipt was lost or faded away?

The respondents did not always formulate a separate response to both questions, concentrating sometimes just on the most important issues from their point of view.

Among the provided responses 11 out of 17 organisations indicated no particular problems with lost receipts or receipts that faded away. The most frequently indicated reasons were: (i) the potential possibility to prove the fact of purchase with other evidence and (ii) the rarity of cash transactions.

However, some of the national administrations we contacted clearly indicated the problem of the lost receipts:

- French National Institute for Consumer Affairs the consumers reported problems with exercising warranty rights where they had lost the receipt. The receipt was described as the only proof of purchase. The Institute advises consumers to always make a copy of it.

- According to the Bulgarian European Consumer Centre, in the case of a lost receipt, the supplier would probably refuse repair or replacement, as a claim may be made only with a receipt or an invoice;

- The Finnish Competition and Consumer Authority said that receipts where the text has faded away have constituted a problem in Finland for several years. It was so in particular because the minimum legal guarantee period of two years does

\textsuperscript{14} http://cecu.es/campanas/cuadernos/Calidad%20resguardos%20en%20olas%20compras.pdf

\textsuperscript{15} http://www.konsumentverket.se/Global/Konsumentverket.se/Best%C3%A4lla%20och%20ladda%20Broschyrer/Dokument/kis_engelska_06.pdf

\textsuperscript{16} http://www.thisismoney.co.uk/money/bills/article-1585686/Consumer-rights.html
not apply in Finland. “In such cases, consumers can have difficulties to prove where and when the product was bought if the receipt is no longer readable (...)”.

- The Hungarian Authority for Consumer Protection indicated that, in the respect of the guarantee and warranty report of 2015, 16 infringements were reported where the trader accepted only the original invoices and receipts.

- The Italian Centro Tutela Consumatori Utenti/Bolzano (Italy) indicated that, in cash transactions, if there was no receipt, it would be up to the judge to clarify the situation. But this would rarely be the case, as most products are of a modest price in contrast to the price of possible legal proceedings.

- The Spanish Asociación General de Consumidores stated that the problem appears sometimes in case of electronic devices and leads to the impossibility of exercising warranty rights.

It is unclear to what extent the problem of lost receipts goes unreported by consumers, since there are no surveys on whether consumers systematically collect receipts, and if a missing receipt has discouraged them from enforcing their rights. The response of the Italian authority is symptomatic, as it explains that enforcement proceedings are not litigated in the courts because most of the products are of a modest price compared to the cost of possible legal fees. A strong indication for such a conclusion could be suggested by the press information for consumers, mentioned above, on how to react in the case of a lost receipt. None of the articles suggest, however, a good solution for a consumer who has no other proof of transaction, which is generally the case with cash transactions.

The lack of any case law ruling in favour or against consumers that have lost receipts indicates that consumers might shy away from litigation when they have no receipt to prove their transaction.

2.3.4. Cash payments

a. Introduction

At the moment, the majority of transactions concluded on the EU market involve cash payments. According to the Cash Report 2016 Europe,¹⁷ cash represents 60% of all payment transactions in the EU²⁸ and is by far the largest payment instrument in terms of volume. This is reflected in another source (statista.com) presenting statistics regarding the share of cash payments in all transactions on the European retail market from 2005 to 2020. The estimate shows a gradual decline in cash transactions on the European retail market, where in 2020 the payments in cash are expected to decrease to 60 percent.

Table 2: Volume of cash transactions in the EU.

¹⁷ http://www.g4scashreport.com, p. 10.
The Cash Report 2016 Europe suggests that, when limited to a C2C or C2B environment, where cash is used most often, the percentage of cash transactions could be even higher. In 20 out of 28 Member States cash represents over 50% of all payment transactions, and in 26 out of the 28 cash is the largest payment instrument in terms of volume. The percentages of cash payments vary widely among the Member States, with 29% being the lowest (Luxembourg) and 97% the highest (Greece).

As the Cash Report 2016 Europe points out, cash transaction volumes are very difficult to establish given their anonymous nature. Many cash transactions are not registered on an individual basis. Furthermore, cash transaction volumes are not consistently measured and most reported numbers are likely to be lower than the actual reality, as peer to peer transactions are mostly excluded, for instance. Based on key indicators, such as cash in circulation (value, volume and ratio of GDP) and the number and value of ATM withdrawals, the Report claims that the number of cash transactions could also be increasing. At the same time, non-cash transaction volumes, especially card transactions, seem to be growing faster, resulting in a diminishing share of cash in the total transaction volume.

The Report concludes that, overall, cash still plays a crucial and dominant role in the European payment market and, as long as it continues to (uniquely) cover valued attributes, it is expected to do so for years to come. It points out future developments that may have an impact on the use of cash and/or the share of cash transactions in the total payment transaction: the development of alternative (electronic) payment instruments, an increase in access to and the availability of electronic payment infrastructure, and the discussion regarding the unique legal tender status of cash.

**b. Tendencies in cash payments**

The Cash Report 2016 Europe makes a number of observations concerning the payments market:

1. Transaction volumes for both cash and non-cash payments are steadily increasing year-on-year;
2. Cash transaction volumes are growing;
3. Non-cash transaction volumes are growing;

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18 Cash Report 2016 Europe, p. 11.
4. Non-cash transaction volumes are growing faster than cash transaction volumes, resulting in a reducing share of cash transactions in the total volume.

On this basis, the Report makes two conclusions:

1. Based on transaction volumes, the payments market is growing for non-cash as well as cash.
2. A trend towards electronic payments is clearly present.

The Report does not make a stand as to the “tipping point” at which the share of cash payments will be so marginal that the move towards a “Cashless Society” will be almost natural, although it points out that at present stakeholders seem to be moving away from “War on Cash” into the direction of “The world cannot do without cash”.

**c. Restrictions in cash payments**

Among the EU Member States, there is characteristic trend present at the moment, to introduce restrictions concerning the possibility to use cash with regard to transactions that involve payments of substantial amounts of money.

Such restrictions are introduced for various reasons: combating organised crime (see for example: Why is cash still king? A strategic report on the use of cash by criminal groups as a facilitator for money laundering. European Police Office, 2015), preventing terrorist activity as well as eliminating tax evasion and the shadow economy. Most of the Member States have already introduced specific restrictions in this regards.

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Map 1: Cash payment restrictions in EU

Table 3: Detailed list of cash payment restrictions in the EU

<table>
<thead>
<tr>
<th>MS</th>
<th>Limit</th>
<th>Referring legislation</th>
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</thead>
<tbody>
<tr>
<td>Austria</td>
<td>No limit.</td>
<td>§ 61 Nationalbankgesetz (NBG, BGBl. Nr. 50/1984 idF BGBl. I Nr. 55/2002).</td>
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<tr>
<td>Belgium</td>
<td>EUR 3,000 since January 2014. It applies not only to the purchase of goods, but also to services (i.e. real estate agent, ICT consultant, etc.). As of January 2014, all payments in cash for the purchase of real estates are prohibited. A notary or a real estate agent (and some categories of sellers) are obliged to inform the authorities of any violations. Fines on offenders (EUR 250 to EUR 225,000) can be imposed by the Belgian authorities.</td>
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<tr>
<td>Bulgaria</td>
<td>Limited to 14,999 leva (approximately EUR 7670). If a transaction exceeds this limit, then the consumer should pay</td>
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<td>MS</td>
<td>Limit</td>
<td>Referring legislation</td>
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<td>through a bank. The same applies if the price exceeds 15,000 leva but is paid in instalments. If the payment is in another currency, then the limit is 14 999 leva is calculated based on the exchange rate of the Bulgarian National Bank on the date of the payment.</td>
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<tr>
<td>Croatia</td>
<td>Cash payment limitation: EUR 15,000.</td>
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<tr>
<td>Cyprus</td>
<td>No limit.</td>
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<tr>
<td>Czech Republic</td>
<td>The limit for cash payments is CZK 350,000 (about EUR 14,000) in one day. As for the coins, the limit is 50 pieces. Banknotes must be accepted without limitation, though notes damaged in a non-standard manner may be refused.</td>
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<tr>
<td>Denmark</td>
<td>No limit on cash payments for the purchase of goods. A legislative proposal (not yet adopted) may allow a seller not to refuse cash payments. However, in cases where the purchase of services is paid in cash exceeding DKK 10000 (including VAT) – approx. EUR 1,340, the consumer will be jointly and severally responsible with the trader if the trader does not pay taxes and VAT on the purchase price. If the consumer cannot pay digitally, he can be released from the joint responsibility if he reports the amount of the purchase to the Taxation Authority.</td>
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</tr>
<tr>
<td>Estonia</td>
<td>The Central Bank of Estonia and all credit institutions operating in Estonia are obliged to accept coins and banknotes without limits. All other entities are obliged to accept up to 50 coins irrespective of their worth, and banknotes without limits.</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>There is no provision in the legislation that would force anyone to accept cash as payment. Companies are not obliged to receive a large amount of coins (more than 50 coins for the same payment) or exceptionally large amounts of banknotes. If a company accepts cash</td>
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<td>MS</td>
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<tr>
<td>France</td>
<td>As of September 2015, there is a limit of EUR 1000 for fiscal residents in France (and EUR 10 000 for non-residents). This was previously EUR 3,000 for fiscal residents in France and EUR 15,000 for non-residents acting as consumers, and EUR 3,000 if acting as traders. As long as the consumer is under the above mentioned limit, the trader must accept a payment in cash, this means coins and banknotes.</td>
<td>Articles D112 -3 et D112 -4 (code monétaire et financier) - Article 1840J (code général des impôts). Sanction: up to 5% of the amount paid if it is higher than the authorised limit.</td>
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<tr>
<td>Germany</td>
<td>No limit.</td>
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<tr>
<td>Greece</td>
<td>Cash payments (including VAT) for the purchase of products and services are permissible up to EUR 1,500. Beyond that limit, payments should be made via bank accounts, cheques or credit/debit card.</td>
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<tr>
<td>Hungary</td>
<td>No limit for consumers. Limit of HUF 1.5 million (about EUR 5,000/month) for legal entities, unincorporated business associations and VAT registered individuals, which are obliged to open a bank account.</td>
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<tr>
<td>Iceland</td>
<td>No limit</td>
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<tr>
<td>Ireland</td>
<td>No limit in the referring legislation, though restricted use in practice.</td>
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</tr>
<tr>
<td>Italy</td>
<td>As of 6 December 2012, cash payments are only allowed up to an amount of EUR 999.99 (as of 1 January 2016: EUR 2,999.99). Above this amount, payment must be made using of debit cards, credit cards or non-transferable cheques, or by bank transfer. Fines start from EUR 3,000 up to 40% of the paid amount.</td>
<td>Legge di stabilità 2016</td>
</tr>
<tr>
<td>Latvia</td>
<td>No limit</td>
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<tr>
<td>Lithuania</td>
<td>No limit.</td>
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<tr>
<td>MS</td>
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<tr>
<td>Luxembourg</td>
<td>No limit.</td>
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<tr>
<td>Malta</td>
<td>No limit.</td>
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<tr>
<td>The Netherlands</td>
<td>No limit. However, some institutions and professionals have a duty to report any unusual transaction (including the identity and other personal details of the person involved).</td>
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<tr>
<td>Poland</td>
<td>The cash payment limit, as of March 2015 is EUR 15,000 (approx. PLN 66,000). There are plans to limit this amount to PLN 15,000 (approx. EUR 3,409).</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>The cash payments limit is EUR 1000, above this amount payment should be made to the trader’s bank account by means that allows the payer to be identified (bank transfer, bank debit or by a cheque).</td>
<td>Article 63-C of the decree law no. 398/98, of 12 December (General Tax Law), amended by law No 20/2012, of 14 May (amending the 2012 State Budget).</td>
</tr>
<tr>
<td>Romania</td>
<td>As of 9 May 2015, cash payments from individuals to traders are limited to RON10,000/person/day (approx. EUR 2,260).</td>
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<tr>
<td>Slovakia</td>
<td>Restrictions on the cash payments cover: B2B, C2B and B2C payments up to EUR 5,000; natural person who is acting for purposes which are outside his or her trade, business up to EUR 15,000 by payments higher than aforementioned limits can be processed only cashless transactions.</td>
<td>Act No 394/2012 Z.z. on restrictions of the cash payments (as of 1 January 2013).</td>
</tr>
<tr>
<td>Slovenia</td>
<td>No limit.</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>Since 19 November 2012, the limit is EUR 2,500 (for Spanish residents) and EUR 15,000 (for non-residents). For higher amounts, payments should be made by bank transfer. Fines are about 25% of the total transferred amount. The law applies to the payments between consumers and traders only.</td>
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<tr>
<td>MS</td>
<td>Limit</td>
<td>Referring legislation</td>
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</tr>
<tr>
<td>Sweden</td>
<td>No limits in the legislation. However, the accepted payment instruments may be limited on contractual basis. A trader is not obliged to accept cash as payment, if the limitation is stated clearly before making the sale.</td>
<td>Money Laundering Act (Lag (2009:62) om åtgärder mot penningtvätt och finansiering av terrorism) obliges several categories of business to request the identification of their customers, verify the origin of the money and report any suspected money laundering to the Financial Police. The companies that must do this include banks, exchange offices, life insurance companies, securities traders, law firms, casinos, real estate agents, accountants, tax consultants and the companies that sell against cash payment of EUR 15,000. Companies that do not follow these rules can be fined.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Consumers can make cash payments without any limits. Traders, however, need to register with the tax authorities as ‘High Value Dealers’ if accepting cash payments in excess of EUR 15,000. Exclusions apply.</td>
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</tr>
</tbody>
</table>


### 2.3.5. Need for further empirical research

The available data on the reasons why consumers do not enforce their rights related to defective goods should be supplemented by further empirical research in this field. An empirical study should be conducted on the question which market sectors would benefit from the establishment of an e-receipt scheme (e.g. sectors where cash payments frequently occur). In particular, the research should also attempt to find an answer to the question how frequently and how systematically consumers store receipts, and whether consumers abandon the attempts to enforce of their rights (warranty or guarantee) when they lose the receipts, as well as what percentage of consumers decide to pursue enforcement despite lacking the receipts and then experience problems due to lack of credible proof of a cash transaction. Moreover, the research should also examine the consumers’ attitude towards the introduction of e-receipt schemes. Such empirical studies would help to prove that consumers would benefit from e-receipt schemes and would facilitate the choice of the best regulation at the EU level.
2.4. **E-receipt – a means of convenience**

An E-receipt scheme could solve the problem of lost receipts and receipts that have faded away, as well as paper guarantee documents.

2.4.1. **Advantages of e-receipt schemes**

E-receipt schemes are simply convenient for consumers and have the potential to offer additional advantages.

- **Enforcement facilitation**
  
  As such, e-receipt schemes can contribute to consumer rights being exercised more frequently. Certainly, enforcement can be more efficient and effective; in other words, e-receipt schemes can serve as means of convenience (see point 4.1.1. on that).

- **Raising consumer awareness**
  
  Apart from providing a possibility to store receipts in a digital form, the scheme may also serve as an information vehicle for consumer information policy, and making sure that the information on consumer rights and product recalls are effectively placed at the disposal of consumers (see point 4.1.2. on that).

- **Digitalisation**
  
  Depending on the adopted technical solution, the e-receipt schemes might be less expensive and more convenient also for traders, as they will eliminate the need to provide and store paper receipts. Digitalisation is also environment friendly, as it reduces use and waste of paper. (see point 4.1.3. on that).

- **Platform for other services**
  
  Commercially operated e-receipts schemes offer a potential for linking them with other types of commercial services, concerning customer services, loyalty schemes product information and instructions (see point 6.3. on that).

2.4.2. **Problem areas**

The potential introduction of the e-receipt regulation at the EU level would require first finding solutions to problems concerning the scope and the functioning of such a regulation. Below, we present the core problem areas, which will be presented in detail in further chapters of the study.

- **Defining the scope of the scheme**
  
  An e-receipt scheme obligatory for traders should certainly not cover all the market sectors. It is difficult to imagine that the requirement to provide an e-receipt in small grocery stores or in the case of perishable goods. The scope of the possible application will depend on the chosen technical solution. The costlier the infrastructure for traders, the smaller the number of sectors that could be covered (see point 4.3 on that).

- **Proportionality of the scheme**
  
  Any e-receipt measure should be proportionate to the intended aim of its introduction, i.e. enforcement facility. It should impose on traders only such obligations that are suitable, necessary and proportional (see point 6.1. on that).

- **Access to databank**
  
  Any regulatory measure that provides such a scheme for consumers, where access will be based on personal data (and not on the product’s identity) carries a risk of allowing
excessive access to a consumer’s personal data (sanctioned by law) (see point 6.5. on that).

- Personal data protection issues.

If consumer enrols to a e-receipt scheme (normally via a loyalty scheme) proposed by the trader, it should be the decision of the consumer whether or not he wants to give the trader access to his data. Consumers may not want to make more personal data available to traders (profiling, targeting, manipulation of preferences) (see point 7.3. on that).
3. CURRENT E-RECEIPTS AND DIGITAL GUARANTEE SOLUTIONS

### KEY FINDINGS

- Private and public e-receipt solutions are still not very well developed on the EU market.
- Public e-receipt solutions were created for fiscal reasons and have a minor influence on consumer rights enforcement.
- Private digital guarantee schemes are becoming popular in the white and brown goods sectors. Their growing number and popularity indicate that consumers see e-receipt schemes as convenient and offering added value in the process of receipt storage.
- Despite the fact that private schemes are popular and offer convenience to consumers, there is no guarantee that the schemes will continue to exist, as it is not possible to profit from them unless they are connected to some marketing functionality.
- Both e-receipt and digital guarantee schemes could contribute to consumer rights being exercised more frequently, more efficiently and more effectively.
- Some private schemes operating through apps have a potentially discriminatory character, to the extent that app stores use geoblocking.
- The e-receipt technology could result in a win-win situation, both for retailers and for the consumers who have given consent to the processing of their personal data for this purpose: retailers might be able to identify their customers, link them to their transactions and gain a better understanding of consumer behaviour.
- Some private schemes are discriminatory, as becoming their member depends on having the nationality or place of residence of the Member State where the scheme operates.
- The need to possess a certain e-ID may lead to the discriminatory treatment of consumers both in public and private schemes.

#### 3.1. Introduction

At the moment there are both private (see point 3.1) and public (see point 3.2) e-receipt solutions present on the EU market. While the e-receipt solutions are mainly private initiatives, the digital guarantee schemes are offered exclusively by the private sector.

The schemes offer various types of services. Firstly, they enable consumers to store their receipts: consumers can either receive an e-receipt instead of a paper one, or can digitalise a traditional receipt, which will then be stored in a data cloud (see point 3.2.1.). Secondly, the schemes enable the provision of the e-receipts to consumers. Such schemes include software for retailers that enables them to issue e-receipts (see point 3.2.4.) as well as individual e-receipt systems offered by individual retailers (see points 3.2.2. and 3.2.3.).

Both e-receipts and guarantee schemes addressed to consumers are frequently connected with other services: personalised promotions, loyalty schemes, information on products, etc. This relates to both the software enabling storage of receipts, as well as software provided by individual retailers. The main aim of customer service software seems to be creating a marketing platform that enables retailers to inform customers quickly and in a personalised
way about products and campaigns. The same relates to loyalty cards issued by individual retailers.

In principle, the success of such applications depends on the number of shops that enter into a partnership programme with the application. It is worth noting that nearly all e-receipt schemes assume that the consumer already has a store card or a fidelity card. The schemes are therefore based on building long-lasting relations with consumers, rather than allowing them to simply safe-keep proof of a single transaction. This may be additionally confirmed by the fact that the largest number of e-receipt schemes are offered by the companies operating on the mobile services and utilities markets.

When it comes to public schemes (see point 3.3.), France has recently introduced a bill on e-receipts, though it only applies to public sector suppliers. In Croatia, as of 2013 there are regulations present that require all cash transactions to be registered for tax purposes. The Czech Republic and Slovenia are also planning to introduce similar such schemes.

This chapter sets out both private and public e-receipt schemes, and identifies schemes (in the last part) that might be discriminatory from the point of view of EU law.

### 3.2. Private e-receipt and digital guarantee schemes

Private e-receipt schemes include services directed on the one hand to customers, either in the form of mobile applications that allow scanning and storing receipts (often combined with other service options) (see point 3.2.1.), or via schemes offered by companies, where paper invoices are replaced by electronic ones (see point 3.2.2.), mostly on the market of long-term services (see point 3.2.3.). On the other hand, private e-receipt schemes include services directed to suppliers in the form of software enabling them to issue e-receipts (see point 3.2.4.).

#### 3.2.1. Software for customers that allows the management of e-receipts

There are a considerable number of software products on the market that enable customers to store and sometimes also digitalise their e-receipts. None of the analysed software products requires the use of any kind of e-ID. Examples of such software are presented below.

**a. Applications for smartphone devices enabling digitalisation of paper receipts**

The first example of an application is available in a leading German application store. It allows its users to store coupons, store cards and receipts in digital form on a smartphone device. This app is used by German stores, mostly online shops. The traders who participate do not have a homogeneous policy when it comes to the offered service options. There are traders that offer e-receipts directly with the app, there are traders that have officially announced they will offer it in the near future, and traders that only support the option of scanning paper-receipts and storing them in the app. Furthermore, there are online-shops that allow their customers to collect receipts. At the moment, the application can be used with regard to digital receipts in 11 points of acceptance while a further 8 shops will offer the digital receipt option in the near future. On top of that, there are 63 web shops that offer digital receipts via this application. In addition, there are a rather substantial number of shops listed on the application website that accept scanned paper receipts stored in the app.

The main functions offered by the application enable collecting loyalty and bonus points, organising purchases and saving time and money.
The offer includes in particular:

- **Receipts:**
  - receiving receipts directly in digital form;
  - subsequently digitalising paper-receipts;

- **"Easy Checkout"**:
  - collecting loyalty and bonus points, getting receipts, redeeming coupons and mobile payment by scanning the application;

- **Household diary**:
  - statements of expenditure;
  - reminder of warranties;

- **Collecting and dispensing coupons**;
- **Finding special offers for saving money**;
- **Store cards**:
  - digitalising store cards;
  - applying for mobile store cards;
- **Shopping lists**.

*Figure 1: Examples of using an e-receipt application*

*Overview of stored receipts*  
*Digital receipt*
Customer accounts are password protected. Personal data is transmitted to third persons only if the customer has explicitly accepted this, or if this is needed for contract execution or for billing purposes. The consent of the customer can be revoked at any time. According to an online press article, the application was downloaded about 200,000 times (data for September 2014).

Section 2.1. of the terms of service provides that the software may be used by any individual or legal entity. Nevertheless, the application is not available at least in some application stores in other Member States. Furthermore, the company website is drafted only in German, along with its terms of service.

Another German application for smartphone devices was founded in April 2011 and was downloaded by 250,000 persons. It enabled the digital storage of receipts, reminded users of warranty periods, automatically informed about product recalls, and enabled users to access support information of the manufacturer or manuals. The service was discontinued in August 2014, as it was not possible to make a profit from it. Its founders concluded that there is no market for this kind of app, when the intention is to make a profit (statement summer 2014).

To use the application, receipts had to be photographed using the application, and afterwards the barcode had to be scanned. Cooperating shops were immediately provided with the digital receipt via QR-Code. These copies could have been used for warranties or additional guarantees.

b. Application for smartphone devices enabling digital receipts without sharing personal information

Apart from the application that enables the digitalisation of receipts by scanning them, software has been developed that enables consumers to obtain digital receipts without having to share personal information, such as an email address, with stores. When using the app on an NFC-capable phone, the receipt data is directly transmitted from the transceiver to the phone via NFC, a data transmission technology that is used in payment related applications. If consumers use the tag, the data will go to a secure server before reaching the app via the internet connection on the phone. All over-the-air data is encrypted.

Furthermore (a patent-pending) Touch and Go technology has been developed to interact with existing point-of-sale systems through near field communications. Customers tap a small device at the register with their smartphone to receive an e-receipt. After beta-testing, the company is working with some retailers to install its technology, which has a built-in CRM and mobile marketing platform as well.

The terms of use specify in section 2, Eligibility, that any user of software has to have at least 13 years of age. No other limitations have been formulated. However, the application is not available, for example, in the main German and Polish app stores.

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27 http://www.sueddeutsche.de/wirtschaft/elektronische-kassenzettel-kassenbon-aufs-handy-1.2135096-2
28 https://nubon.de/informationen/nutzungsbedingungen.html
30 http://www.gremiumszene.de/allgemein/reposito-einstellung
31 http://www.proximiant.com
32 http://www.proximiant.com/legal/tos
c. Application for smartphone devices enabling the storage of digital receipts

It is not constructed with the immediate aim of storing digital receipts, but in the first place for saving money through identifying special offers, converting vouchers through the app and getting a percentage of the products price back.

The app assumes that the shop where the users buy the product will have a digital receipt available. The user can upload e-receipt in the app. Afterwards users can get money back via pay-out on the online payment account. The app can be seen as an additional feature in a situation, where e-receipt is already available.

The terms of service include neither limitation as to the nationality of the service user, nor use of an e-ID is required.

3.2.2. E-receipt schemes offered directly by retailers

E-receipt schemes are also often offered by individual retailer stores operating through supply chains. Such schemes are mostly offered by speciality stores and supermarkets and are connected with loyalty programmes (a.) Much less popular are schemes independent on the usage of customer cards (b.)

a. Schemes connected with usage of customer cards

i. German chain of retail cosmetics stores

As of September 2012, customers can register for an e-receipt service and leave it anytime. The scheme replaces paper receipts and is not combined with any app. Customers receive receipts via e-mail after registering for the scheme (it is possible when the customer has registered for a customer card).

To register, the customer must provide the following data: title, first name, surname and e-mail address. Through the customer card, the customer can be identified when paying in the store as a customer who is also registered for the scheme. As a result, the customer does not receive a paper receipt, but an e-mail with the e-receipt in the attachment.

The scheme receives data that customers disclose when they subscribe. In addition, it receives information on the date of the purchase and the amount spent by the customer at a participating retailer (with the use of the customer-card). The company may also receive information about the acquired products or services. This varies from retailer to retailer.

According to the information on the website, the scheme does not issue profiles on a personal level. All data and addresses of customers also remain in the scheme or the participating retailers. The company declares that it ensures high IT-safety by concretely defined interfaces to the retailers.

There is no official data available as to how many customers use that option. According to an online press article,33 Only 11,000 customers signed up for this scheme (data for September 2014).

According to section 1.2 of the terms of service, the card may only be issued to a person who is at least 16 years old and resides in Germany.34 Therefore, this scheme is discriminatory, unless justified by objective criteria.

33 http://www.sueddeutsche.de/wirtschaft/elektronische-kassenzettel-kassenbon-aufs-handy-1.2135096-2
34 https://www.payback.de/pb/agb/id/32704/
ii. **French hypermarket chain**

A French retail store chain offers its customers who hold a customer card the possibility to obtain their receipts in a digital form via email. The chain advertises it as a simple and environmentally friendly new system. The card may be used in all the stores participating in the loyalty programme.

According to section 1.A of the terms of service, the card may only be issued to a person who is at least 18 years old. Such a requirement is questionable, as consumers under this age may also generally enter sales contracts in the matters of everyday life. There are no additional requirements that would concern nationality or place of residence.

iii. **French sports outfitter**

For customers who have a store card/loyalty card, the venture established a system that stores all receipts in a digital form so that the customer can review them online.

The loyalty programme is offered according to the preamble of its terms of service to all adult individuals and legal entities without any limitations on nationality or place of residence. It may be also applied for purchases in stores of the chain outside of France.

b. **Schemes independent from the usage of customer cards**

Such a scheme is offered by a German chain of consumer electronics stores that operates in 11 EU Member States. In Belgium, it offers a specific solution that allows customers to store receipts with evidences of guarantees in a digital way. After activation, the customer may check it either online or at the local shop.

What is peculiar in the solution offered in Belgium is that, after establishing an account, the customer is requested to provide an ID number. This solution, however, seems to be specific to the Belgium branch, as it could not be found in Polish, German or Swedish branches, for example.

The website does not specify what kind of ID is required. However, after introducing a Polish ID number, the information appears that the field should either remain blank or be filled in with a 10-12 digit ID number, or an ID number containing “B” and 9-11 digits. When leaving the field blank, the customer receives information that an account has been created and he may now use his digital guarantee service. However, the purchases will be registered on his e-ID. Therefore, it seems that an e-ID would be required to use the system.

Attempts have been made to clarify this issue. An employee of a branch in Brussels informed us that the system does not require a Belgian ID, and that registration for foreigners is possible at the cash desk. An employee of a branch in Liège stated that the system may be used only by holders of Belgian e-ID cards. In response to an email inquiry, the company informed us that the system accepts only Belgian e-ID cards. However, the personal data of individuals not holding a Belgian e-ID may also be introduced manually. Using this system, it is possible to check purchases made online and the company will send receipts by email. Subsequently, we received another contradictory email stating that the system may only be used by holders of Belgian e-ID cards. Insofar this scheme relies on e-ID it seems to be discriminatory.


3.2.3. E-receipt schemes in long-term service contracts
The use of e-receipts seems to be most frequent in the case of long-term service contracts concerning, for example, the provision of communication services or utilities. The companies using such systems normally send emails to their customers or provide them with access to information on their receipts through a customer account. None of the analysed schemes required possession of an e-ID in order to issue e-receipts. Due to the nature of these services, the e-receipt scheme is not frequently used in cross-border transactions. Furthermore, as these schemes concern the provision of services, there are no guarantee rights of the customers that might be affected. Below, we present some examples of such schemes.

Examples of e-receipt schemes in long-term service contracts
Customers of a German service provider in the area of mobile communication and the internet have personal accounts where they can check their invoices and contracts after logging in. Customers also receive an e-mail informing them about a new invoice. A local German provider of communication services offers its customers invoices in digital form. This indicates that e-receipts are used also by companies active only at a local level, and not only state level, provided that they have a sufficiently numerous group of customers. Customers of a gas provider in Berlin can use an online service to check their invoices, change their down payment, or fill in their counter reading without using a letterbox. A Dutch mobile telephone service offers a system where its customers can log in to their personal accounts and check invoices. A Spanish energy provider allows its customers to log in and look for their invoices etc. An Irish mobile phone services provider offers an area on its homepage in which the customer can log in to its personal account and look for its receipts etc.

3.2.4. Software for retailers enabling e-receipts to be issued
Another commercial product concerning e-receipts is software offered to individual retailers enabling them to issue e-receipts. No product that would limit its application only to customers in possession of a given e-ID could be found on the market. On the contrary, the software providers underline that their services may be served to issue various types of receipt to various types of customers in an easy and user-friendly way.

A company established in the UK offers retailers a platform with technology that enables them to issue electronic receipts to customers. The receipts are stored in a secure online cloud and are accessible through a computer or mobile device.

As the company states, the e-receipt technology is a win-win situation, both for retailers and consumers: retailers are able to identify their customers, link them to their transactions, understand and engage the customers by issuing digital receipts via e-mail, an application for mobile devices or a website. The technology enables retailers to monitor spending habits and shopping trends. Based on this information, retailers can offer their customers targeted

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38 [https://www.mobilcom-debitel.de/online-service/#/login](https://www.mobilcom-debitel.de/online-service/#/login)
39 [https://www.osnatel.de/privatkunden/service-hilfe/az-rechnung-online.htm](https://www.osnatel.de/privatkunden/service-hilfe/az-rechnung-online.htm)
40 [https://www.gasag.de/Privatkunden/Meine-GASAG/Meine-GASAG/Online-Service/Seiten/Meine-GASAG.aspx](https://www.gasag.de/Privatkunden/Meine-GASAG/Meine-GASAG/Online-Service/Seiten/Meine-GASAG.aspx)
41 [https://www.telfort.nl/zakelijk/inloggen-zakelijk.htm](https://www.telfort.nl/zakelijk/inloggen-zakelijk.htm)
42 [https://www.endesaclientes.com/](https://www.endesaclientes.com/)
43 [https://my.meteor.ie/meteor/transactional/login](https://my.meteor.ie/meteor/transactional/login)
promotions, instruction manuals, surveys or warranties, minimise consumer returns fraud and reduce costs associated with printing paper receipts. This can increase the effectiveness of marketing and merchandising strategies. In return, customers can keep track of their receipts in an easy, user-friendly and non-wasteful way, and can profit by points, discounts, frequency or price match schemes.\(^4^4\)

Another example of such software has been developed by a US company that offers retailers a technology to issue their customers with digital receipts to improve their marketing and merchandising strategies.\(^4^5\)

The company provides information on the security of the solution it offers: data is securely transported via SSL, PI data is encrypted before being stored in the database, firewalls are used to prevent unauthorised access to the system. In addition, all users are required to have unique IDs and passwords for authentication, the physical access to data is restricted and only partial credit card information is received and stored.\(^4^6\)

3.2.5. **Examples of digital guarantee systems**

The fact and the date of sale may also frequently be proven by registering a guarantee with the manufacturer or the seller of a product. Such a registration at a given time is, in many cases, a condition for the customer receiving the guarantee. The registration itself is not a prerequisite for the possibility to enforce other consumer rights. However, it will secure the possibility for the consumer to claim his rights from the guarantor (the manufacturer of the goods in most cases). Additionally, it may sometimes constitute sufficient proof of concluding the sales contract. The registration of a guarantee is especially popular in the brown and white goods sectors. To exemplify this option, the following companies make it possible to register a guarantee online:

A German manufacturer of professional electrical devices enables the registration of a guarantee on the company’s website.\(^4^7\) The online registration prolongs the guarantee period, on the condition that it takes place within four weeks from the date of purchase. A customer has to create a personal account on the website of the producer and register his product. Finally, he is provided with a certificate of guarantee.

A UK manufacturer of vacuum cleaners offers its Spanish customers the possibility to register the guarantee online.\(^4^8\) The buyer has to indicate the date of concluding the contract of sale and the serial number of the product in order to identify a specific product.

A Japanese manufacturer of electronic products offers its Polish customers the possibility to register the guarantee online.\(^4^9\) The buyer has to indicate the date of concluding the contract of sale. According to the manufacturer’s website, online registration enables complaints to be settled more quickly, and gives access to software updates. For some products, it also prolongs the guarantee period.

A manufacturer of home appliances enables the registration of a guarantee on the company’s website.\(^5^0\) The registration of a guarantee requires creating a personal account and providing

\(^4^4\) ereceipts.co.uk
\(^4^5\) http://www.flexreceipts.com
\(^4^6\) http://www.flexreceipts.com/retail/security/
\(^4^7\) https://webapp.bosch.de/warranty/start!display.do
\(^4^8\) http://www.dyson.es/registrar-mi-dyson.aspx
\(^4^9\) https://www.toshiba.pl/registration/
\(^5^0\) https://partners.domgen.com/WhirlpoolOLR/indexServlet
personal data such as a name and address. Optionally, the customer may also indicate his telephone number and date of birth.

An Italian manufacturer of appliances offers its customers the possibility to register a guarantee online. The manufacturer encourages its customers to register the product in order to stay informed about new usage tips, to keep track of complaints and to receive important information on the purchase, such as e.g. safety messages and updates.

None of the listed providers of e-guarantee schemes required a certain nationality or possession of specific e-ID in order to register in the e-guarantee scheme.

3.3. Public e-receipt schemes

So far, two types of public e-receipt schemes can be identified, each with a distinctively different nature. The first one, applied only in France, relates exclusively to the public sector as a means of reducing the costs of issuing paper receipts and simplifying the process (see point 3.3.1. on that). The second type deals with general digital registration of transactions for tax reasons. This system has been operating in Croatia since 2013, and is going to be implemented in the Czech Republic and in Slovenia. The basic concept of this solution will be presented using the Czech example (see point 3.3.2. on that).

Neither of these systems was created for consumer protection reasons. In theory, the data collected by tax authorities confirms the conclusion of a given contract and could therefore be used as proof of a given transaction. The consumer, however, is not entitled to retrieve the data since the system does not introduce personalized consumer accounts. Further, no public e-receipt schemes have been found that would be based on e-ID.

3.3.1. France: the obligation for public bodies to generate their bills in a digital form

By 2020, all public bodies and their suppliers will be gradually obliged to generate all their bills in a digital way. This obligation will be imposed:

- on large companies and public law legal entities as of 2017;
- on mid-cap companies as of 2018;
- on small and medium sized businesses as of 2019;
- on microenterprises as of 2020.

The Agence pour l’´informatique financière de l´Etat created the platform – Chorus Factures – that enables its users to transfer bills easily and free of charge. The user only has to pay with regard to court fees. As of 2017, this platform will be replaced by Chorus Portail Pro 2017. The new platform is to ensure such things as the simplification of receiving, filing and dispatching invoices, with due regard to the current state of technical development.

At present, almost all utility bills are available in an electronic form. The electronic invoices have to include a series of information in order to guarantee the authenticity of the invoice, as stated in Article 242 nonies A of annex 2 of the Code général des impôts.
The Agence pour l’informatique financière de l’Etat expects to see several benefits, particularly regarding a decrease of costs (postage and printouts), an improvement of the ecological footprint, saving of time and guaranteed delivery.\textsuperscript{58}

Around 20\% of the French population currently has no access to the internet,\textsuperscript{59} so Article 3-III of the Arrêté du 31 décembre 2013 relatif aux factures des services de communications électroniques et à l’information du consommateur sur la consommation au sein de son offre offers consumers the opportunity to demand a paper copy of their invoice at any time.\textsuperscript{60}

3.3.2. The Czech Republic, Slovenia, Croatia: electronic records of sale

As of 2016, the Czech Republic will successively introduce a system of electronic records of cash sales of goods and services. "E-tržby" (in English: e-sales, Czech abbreviation: EET= elektronická evidence tržeb) are modern form of prompt communication between businesses and the Financial Administration\textsuperscript{61} of the Czech Republic. This is not per se, a system that is addressed to solve consumer problems, but since it allows the registration of transactions and gives customers access, it seems appropriate to present it.

At the moment of payment, every cash receipt will be recorded through the internet in the central data repository of the Financial Administration. A unique code for confirmation will be immediately sent back and stated on the receipt. The system covers all cash payments, including means that de facto represent money (tokens, vouchers), payments by card or other electronic means, and payments by meal vouchers or cheques. Payments via wire transfer or by debiting will not be subject to records. There will also be an off-line solution in the event of a temporary internet connection failure, or a simplified version of records for selected branches.

The electronic records of sales will make the possible fraudulent actions easily recognisable for the Financial Administration and customers. The e-sales (EET) system will increase the efficiency of audits, which will be aimed only at businesses with inconsistency in their bookkeeping, not bothering dutiful businesspeople with unnecessary audits. The Financial Administration of the Czech Republic finds it important to prevent the negative impacts of tax evasion on dutiful businesspeople and, by extension, all citizens who duly pay their taxes.

The obligation to record sales will be imposed on compulsory tax subjects: legal entities conducting business activity and sole traders who are tax resident in the Czech Republic.

The e-sales (EET) system will be introduced gradually:

1\textsuperscript{st} phase – (from the initiation of the system) entities providing catering and accommodation services;

2\textsuperscript{nd} phase – (three months after the initiation of the system) entities performing retail and wholesale business;

3\textsuperscript{rd} phase - (15 months after the initiation of the system) entities performing other business activities, with the exception of those included in the next phase;


\textsuperscript{59} http://www.inegalites.fr/spip.php?page=article&id_article=467

\textsuperscript{60} http://www.legifrance.gouv.fr/eli/arrete/2013/12/31/ESSC1331302A/jo/texte

\textsuperscript{61} Financial Administration (Finanční správa) is an administrative body consisting of General Financial Directorate and Financial Administration Bodies. It handles the whole “taxes” agenda in the Czech Republic and is subordinated to the Ministry of Finance.
4th phase - (months after the initiation of the system) entities performing selected crafts and business activities (e.g. husbandry, transport, freelancers).

**Figure 2:** Technical solutions and functioning of e-sales (EET)

1. The business entity sends an XML data message about the transaction to the Financial Authority.
2. The Financial Authority sends back confirmation of receipt with a unique code (FIK - Fiscal identification code).
3. The business entity issues a receipt (including the FIK) and provides it to the customer.
4. The customer receives the receipt.
5. Registration of the sale can be verified through the web application of the Financial Authority. The customer can verify his/her receipt; the business entity can verify the sales registered under its name.

The technical solution requires a device that can communicate electronically via the internet (PC, tablet, cell-phone, cash register ...) and an internet connection upon receipt of payment. It is at the business entity’s discretion as to what type of cashier equipment and software is used, as long as the obligation to send a data message and issue the receipt is met. The Act on EET was adopted and published on 13 April 2016 in the Official Journal No 112/2016. Similar fiscal solutions have been adopted in Croatia and Slovenia.

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62 http://www.porezna-uprava.hr/HR_Fiskalizacija/Stranice/FiskalizacijNovo.aspx
3.4. Advantages and challenges

3.4.1. E-receipt systems

Above all, the public e-receipt systems play a function in the fiscal system. They serve to provide the tax administration with full information about the volume of transactions performed by a single business. The Czech system allows the customer to check the record of the sale through a web application. However, in order to do this, the customer will have to have the information indicated on the receipt, known as the fiscal identification code. The customers will, therefore, not have individual accounts that would enable them to check all the purchases they have made. Moreover, the digital information transferred to the system does not even contain the personal data of the purchaser. Therefore, the system – like other public e-receipt systems – will have no influence on the possibility to enforce guarantee rights. Only the business entities will have individual accounts. Access to information relating to a single purchase by the customer using a fiscal identification code will not be limited only to Czech citizens, or on a basis of any other discriminatory criterion. Neither are the other public e-receipt systems discriminatory, as they concern transactions with all customers, irrespective of their nationality. In addition, none of the public e-receipt systems is based on a requirement to possess an e-ID.

Private e-receipt systems have different roles depending on their commercial character. When analysing the advantages and disadvantages of such systems, it is necessary to make a clear distinction between the products that enable the customer to store his e-receipts from different suppliers in a digital form, and products provided by individual suppliers connected typically with loyalty programmes.

Products that enable the storage of receipts from different suppliers certainly present a positive factor as far as the enforcement of guarantee rights is concerned. The customer is able to prove the fact of purchase even in the event of lost receipts or receipts that have faded away. However, the practical effect of such solutions on the increase of enforcement is hard to assess, as one could expect that such products will be used mostly by customers who already take good care of their receipts and would most likely not lose a paper receipt. Empirical research on available private e-receipt storage solutions has proven that, in general, they do not limit access on a discriminatory basis. However, there is an open question of geo-blocking techniques used by internet stores that distribute apps necessary to use such services.

The e-receipt systems provided by single suppliers are, in the majority of cases, connected with another services such as loyalty programmes or payback systems. From the point of view of enforcement of guarantee rights, these systems are advantageous for the customer, as they make the proof of purchase possible also in the case of lost receipts or receipts that have faded away. In most cases, the use of such a system, however, requires participation in a loyalty programme or a payback system, and the provision of personal data. This may discourage customers from using such systems, especially as, in order to store all of their receipts, they would have to participate in many different loyalty programmes and payback systems, or limit themselves to given suppliers. The empirical research has indicated that such systems can be discriminatory and limit consumer access to them based on nationality or place of residence.

Despite the high popularity and utility for private consumer schemes, there is no guarantee of the continuity of such schemes, as it is not possible to make a profit from them unless they are connected to some marketing functionality. E.g. a German app for smartphones founded in April 2011 and downloaded 250,000 times, which enabled the digital storage of
receipts, reminded users of warranty periods, automatically reported product recalls and enabled users to access support information of the manufacturer or manuals, was discontinued in August 2014 as not being profitable.

3.4.2. Digital guarantee systems

In addition, the digital guarantee systems have a main role other than proving the fact of purchase. They serve primarily to enable traders to track products just like other product registration systems. This enables quicker and more efficient service and support. The customers may also more easily receive any product support alerts, including product recalls. In most cases, they concern the registration of single products of a given manufacturer who runs the digital guarantee systems. Still uncommon are digital guarantee systems offered by retail stores that enable the registration of many products offered by different manufacturers but purchased in a given retail store. The main purpose of such schemes is the management of the digital guarantees by the customer.

3.5. Existing EU law against discrimination by e-receipt schemes

3.5.1. Proof of identity requirement

Most of the e-receipt or digital guarantee systems require no reliable proof of identity such as the e-ID. The systems in most cases offer the possibility to create a personalised account through which the customers have access to information. The account is secured only with a password. Provisions conditioning the availability of e-receipt and digital guarantee services upon a certain nationality, including the requirement to possess a given e-ID, could be potentially qualified as discriminatory in the understanding of Article 20(2) of Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market, which applies also to retailers (further: the Service Directive). According to this legal norm, Member States must ensure that the general conditions of access to a service made available to the public at large by the provider do not contain discriminatory provisions relating to the nationality or place of residence of the recipient, but without precluding the possibility of providing for differences in the conditions of access where those differences are directly justified by objective criteria.

3.5.2. e-ID requirement

The requirement to possess the e-ID of a certain country could constitute an impediment to the freedom of movement and discrimination on the basis of nationality.

It is difficult to assess what would be the practical reasons for such a solution, as there are clearly other methods of identification that could be used in order to grant access to the stored e-receipts. There are no schemes that would explicitly require an e-ID for the use of a customer e-receipt account, even in the case of services that enable the storage of receipts issued by various suppliers.

Given that the e-IDs are generally only issued to the citizens of a given state (there are some electronic identity systems that are accessible also for non-residents, e.g. Estonia), such a requirement could amount to discrimination unless objectively justified. Among such objective reasons, Recital 95 of the Service Directive lists, for example, additional costs incurred because of the distance involved or the technical characteristics of the provision of

64 2006/123/EC on services in the internal market (‘the Services Directive’)
65 Commission Staff Working Document with a view to establishing guidance on the application of Article 20(2) of Directive, p. 7
the service, or different market conditions, such as higher or lower demand influenced by seasonality, different vacation periods in the Member States and pricing by different competitors, or extra risks linked to rules differing from those of the Member State of establishment. The reason for requiring a specific e-ID is not known, and therefore it is difficult to assess whether it is objectively justified. However, given that the vast majority of retailers do not impose such a requirement, its objective justification is rather doubtful.

As already indicated in point 3.5.1., EU law already formulates legal norms that prohibit such discriminatory requirements. Furthermore, it has to be once again stressed that no interaction between e-receipt or digital guarantee systems on the one hand and the e-ID systems on the other hand is currently visible. The individual case of using the e-ID for identification purposes in an e-receipt system may not be seen as a structural discrimination problem.

3.5.3. Nationality requirement

The nationality requirement for the provision of services is generally discriminatory and therefore forbidden by Article 20(2) of the Service Directive. It would be admissible only in case of justification using objective criteria. The Commission Staff Working Document, with a view to establishing guidance on the application of Article 20(2) of the Service Directive, clearly indicates that supermarket loyalty schemes are made conditional upon a consumer producing evidence of the nationality of the Member State where the service is provided would not appear to be acceptable under Article 20(2) of the Services Directive.

3.5.4. Geo-blocking

Some providers of e-receipt schemes restrict the cross-border provision of their services by limiting the access to their content for customers in another Member States. These practices constitute a form of geo-blocking, against which the Commission decided to take action proposing a regulation of the European Parliament and of the Council on addressing geo-blocking and other forms of discrimination based on customer nationality, place of residence or place of establishment within the internal market, and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC. The general objective of this proposal is to give customers better access to goods and services in the Single Market by preventing direct and indirect discrimination by traders artificially segmenting the market based on customer residence. The proposal generally forbids geo-blocking in the case of electronically delivered services, such as cloud services, and would also cover private e-receipt schemes.

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66 Commission Staff Working Document with a view to establishing guidance on the application of Article 20(2) of Directive, p. 11.
4. REASONS FOR REGULATING E-RECEIPT SCHEMES

KEY FINDINGS

- Regulating e-receipt schemes at the EU level could serve as a means of convenience for consumers as it would facilitate the enforcement of consumer rights, provide consumers with information on their rights, digitalize the storage of information connected with the sale of goods, guarantee continuity of services and eliminate the risk of discrimination of the scheme users.

- The EU regulation of the e-receipt schemes has a potential to intensify the trust of the EU citizens in the Single Market.

- Such schemes could also serve as an information vehicle, providing consumers with detailed information relating to their rights. A standardised e-receipt scheme could include not only information relating to the content of warranty and guarantee rights, but also information on the enforcement of such rights. This information could relate to ADR and ODR, as well as the functioning of the judicial system and raise awareness of consumers in this regards. Additionally, an e-receipt scheme could be used to inform consumers about product recalls and withdrawals.

- A European e-receipt scheme could contribute to a better functioning of the Single Market. It could increase consumer confidence in businesses that offer e-receipts in combination with a digital warranty scheme. It could also create trust in the Single Market and the legal infrastructure provided by the EU. Last but not least, the e-receipt and the digital warranty scheme would make the life of European citizens easier and demonstrate the benefits of the EU in their everyday life.

- Establishing sectors where the e-receipt scheme could function depends on the technical solution chosen for the scheme. The less complicated and costly for traders it is, the more retail sectors could (and would be willing to) be covered.

4.1. Means of convenience - introduction

Losing a receipt or a guarantee document, or the fact that these documents faded away, may cause problems for consumers in claiming their rights arising from warranty and guarantee. Standardising and promoting e-receipt schemes could reduce problems with the enforcement of consumer rights, by making it possible to prove the fact of the purchase and establish the liability period. Furthermore, such schemes could also serve as an information vehicle providing consumers with detailed information relating to their rights. Finally, they would help eliminate the need to store paper documents.

4.1.1. Enforcement facilitation

Introducing e-receipt schemes could eliminate problems that consumers may experience nowadays when losing paper receipts or guarantee documents, or if these documents fade away (see point xx on that). In the case of a cash transaction, the only option the consumer has is to prove the transaction through witnesses. This, while possible, is rather cumbersome and might discourage consumers from enforcing their rights. Through e-receipt schemes, consumers would be able to prove their purchase and the date of purchase, which would serve for the calculation of the warranty and guarantee period. The scheme would also allow information to be provided on the consumer rights stemming from conformity, as well as the guarantee (when applicable).
4.1.2. **Information vehicle**

Even though the content of rights the consumer is entitled to in the event of non-conformity of goods should be known to the consumer, this is often not the case. Therefore, including such information in an e-receipt scheme could not only raise the awareness of consumers, but also constitute an additional incentive to enforce their rights.

Further, such schemes could provide consumers with information on the transaction in his or her own (or selected) language, as the information could be translated automatically by the scheme. Such a possibility would contribute to eliminating one of the main barriers to the development of cross-border transactions, i.e. the language barrier. Presently, the language requirements applicable to consumer contracts are not harmonised in the EU (see. recital 15 of the Consumer Rights Directive). There should be no technical problems to ensuring that consumers have immediate access to the purchase information in all the official languages of the EU.

The standardised e-receipt scheme could include not only information relating to the content of warranty and guarantee rights, but also information on the enforcement of such rights. This information could relate to ADR and ODR, as well as information on the judicial system, and could raise consumer awareness in this regard. This awareness is particularly low in the case of the ADR system. On top of all this, an e-receipt scheme could be used as an information vehicle for product recalls.

4.1.3. **Digitalisation**

The storage of paper documents such as general terms and conditions, receipts and guarantee documents can pose a considerable problem for consumers. Some of them consciously choose not to store such documents, even accepting the possibility of losing the warranty or guarantee rights. This is indirectly evidenced by press articles encouraging consumers to store their receipts. An e-receipt scheme could eliminate this problem by ensuring immediate online access to information on consumer rights. Furthermore, the scheme would also reduce the use of paper and printing costs. Even though consumers would still be entitled to claim paper receipts, it should be expected that consumers would, in time, grow used to the digital receipts and stop claiming a paper version.

4.1.4. **Eliminating possible discrimination**

Regulating the operation of e-receipt schemes would also help eliminate potential cases of discrimination of consumers willing to use such schemes. For example, as presented in point 3.5.1., an eID requirement formulated for the purposes of identification in the scheme could constitute discrimination. Formulating standard rules relating to the means of identification in the scheme would eliminate the risk of future discrimination.

4.2. **Contribution to the Single Market**

An e-receipt scheme would consist of three main elements, namely:

- an e-receipt scheme,
- (a set of) harmonised European forms on warranties and,
- a list of links to the terms and conditions of commercial guarantees, regardless of whether issued by sellers, producers, importers, service providers or any other person in the distribution chain.

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When fully operable, the e-receipt scheme would link any e-receipt to the relevant harmonised form on legal warranties and, if applicable, to a commercial guarantee.

This basic functionality could be supplemented by further features to make the scheme more comfortable for users. For instance, depending on the case, the date of purchase or delivery stored in the e-receipt scheme could be used to calculate any relevant time limit under the applicable legal warranty or commercial guarantee. The consumer could be informed in good time before the expiry of any deadline via email, SMS or other means specified in the settings. If the documents are available in several languages, the consumer could be provided with the preferred language version.

Moreover, the digital warranty scheme could be linked with ADR institutions that accept complaints against the seller or service provider who issued the e-receipt. This could promote the use of ADR by consumers.

It is plausible that such an e-receipt scheme could contribute to the better functioning of the Single Market. It would increase consumer confidence in businesses that offer e-receipts in combination with a digital warranty scheme. It would also create trust in the Single Market and the legal infrastructure provided by the EU. Last but not least, the e-receipt and the digital warranty scheme would make the life of the European citizens easier and demonstrate the benefits of the EU for their everyday life.

### 4.3. Scope of sectors to be covered

The EU legislation on sales, and particularly on buyers’ rights, has so far been limited to the B2C transactions, but applies to all tangible movable goods, with exceptions listed in Article 1 sec. 2 (b) of the Consumer Sales Directive. Taking into consideration the limitation of the EU sales law only to B2C transactions, the e-receipt scheme should also be limited to these transactions.

Furthermore, it should be analysed in which sectors the e-receipt scheme might be applied without having a negative impact on the business activity of SMEs. The possible scope of application of the e-receipt scheme will depend on the chosen technical solution of this scheme.

Introducing an obligation to issue an e-receipt in digital form and provide it to every consumer would be connected with financial and infrastructural burdens that could be problematic for many SMEs. In such cases, a possible landmark for the application of the scheme could be the value of the goods, even though such a solution fully disregards the complexity, the nature and the lifespan of the goods.

Other solutions that would not require the trader to digitalise the receipt – such as the introduction of a standard form of a paper receipt – could be easier to implement and could apply to the majority of cash transactions. In this regards, establishing in national legislations the sectors that are obliged to provide consumers with a paper receipt would be helpful. That would allow an e-receipt scheme to be implemented based on the idea of harmonising paper receipts in order to enable their digitalisation by consumers using appropriate software. When such a solution is accepted, there would be no reason to adopt any limitations when it comes to the scope of application of the EU standard.
5. RIGHTS TO BE COVERED BY THE EUROPEAN SCHEME

KEY FINDINGS

- EU law provides a minimum level of legal warranties for goods, but not for services. In the future, the legal warranties for goods and for certain digital services might be fully harmonised.
- Sellers and producers often provide voluntary commercial guarantees that grant consumers rights and remedies on top of the legal warranty, as established in the terms and conditions of such guarantees.
- Sellers and service providers are obliged to inform consumers about the terms and conditions of commercial guarantees.
- The e-receipt schemes could be complemented by a link to the relevant terms and conditions of commercial guarantees. In addition, e-receipt schemes could display information on the applicable legal warranty, in particular when the rights and remedies of consumers are fully harmonised throughout the EU.

The e-receipt schemes could be complemented by a link to the relevant terms and conditions of a commercial guarantee. Moreover, e-receipt schemes could display information on the applicable legal warranty, in particular when the rights and remedies of consumers are fully harmonised throughout the EU.

5.1. Content of the warranty

5.1.1. Legal framework in EU law and national law on the obligatory minimum content of a digital warranty

Since the transposition of the Consumer Sales Directive (1999/44/EU), EU law provides a minimum legal warranty for goods. This directive makes sellers of consumer goods liable for the conformity of goods with the contract. It sets certain standards for assessing when conformity can be assumed and when not. If the goods are not in conformity with the sales contract, consumers are entitled to have the goods repaired or replaced, or reduced in price, or the contract to be rescinded. These remedies are granted for a period of (at least) two years after the delivery of the goods.

The Consumer Sales Directive is a minimum harmonisation directive. Many Member States have 'gold-plated' the EU minimum by stricter rules (e.g. on the prescription periods, which are six years in England, for example, and five years in Scotland, while in the Netherlands consumer remedies even last for the average lifetime of the goods). The European Commission has made a proposal for the full harmonisation of consumer rights in the case of distance sales of goods. This proposal is, however, currently under discussion and not prioritised in the Council.

70 Cf. Art. 8 (2) Consumer Sales Directive (1999/44/EU)
5.1.2. Warranties for digital content

For digital content and digital services, there is no horizontal harmonisation of the rights and remedies of consumers in cases of non-conformity of the digital content or service. As a result, consumer remedies vary between Member States. The European Commission has made a proposal on contract rules on the supply of digital content (e.g. software, anti-virus, games and cloud storage, cloud services, streaming music or videos).\footnote{Proposal for a Directive on certain aspects concerning contracts for the supply of digital content, COM(2015) 634 final.} If it comes into force, the new directive will fully harmonise the supplier’s liability for defects and the consumer’s remedies. For contracts that fall into the scope of the future directive, the remedies of consumers under the legal warranty will be the same in the entire EU. It would be feasible to inform consumers about their rights with an EU standardised form on consumer rights and remedies, which could easily be linked with any e-receipt scheme.

5.1.3. Introduction of a harmonised European form for warranties

In some specific sectors, the EU obliges service providers to inform customers about their rights and remedies. The most prominent example is the poster on air passenger rights under the Air Passenger Rights Regulation.\footnote{Regulation (EC) No 261/2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights.} Regarding the rights and remedies under a contract for sale or services, however, the introduction of a harmonised European form for warranties is much trickier. As already mentioned, EU law only provides minimum harmonisation for consumer goods and none for services. The actual rights and remedies of consumers vary between the Member States. Moreover, in cross-border cases, the applicable conflict of law rules, in particular Article 6 of the Rome I Regulation,\footnote{Regulation (EC) No 593/2008 on the law applicable to contractual obligations (Rome I).} may have the effect that the laws of a certain Member State apply, but that the consumer is also protected by the more favourable rules of the Member State of the consumer’s habitual residence. A harmonised European form for warranties with comprehensive information on the consumer’s rights and remedies would have to take into account all these alternatives and variants. Such information would be lengthy and clumsy, and probably not very useful for consumers. As the harmonisation stands now, only a form that presents the minimum level of legal warranty granted by the EU seems realistic. However, this form would be of limited use for consumers too.\footnote{See, for example, the materials for the “Consumer Rights Awareness Campaign” of the European Commission; available at: \url{http://ec.europa.eu/justice/newsroom/consumer-marketing/events/140317_en.htm}.} It would, for instance, contain information that, under the law of certain Member States, the consumer loses remedies for non-conformity unless he or she notifies the seller of a defect within two months after having discovered it.\footnote{Cf. the information given under “Your Europe” on Guarantees and returns: \url{http://europa.eu/youreurope/citizens/consumers/shopping/guarantees-returns/index_en.htm}.} However, the form can probably not tell the consumer which law applies. The more complex the information has to be in order to be accurate, the less useful it is for the consumer. In other words: The more harmonised the laws of the Member States are, the more useful a harmonised European form on the rights and remedies under the applicable legal warranty.

At the moment, the introduction of a harmonised European form on warranties might be premature. However, when, and to the extent that fully harmonised EU legislation will come into force, introducing a harmonised European form on warranties becomes feasible and reasonable. This form could easily be combined with any e-receipts scheme.
5.2. Content of the guarantee

The Consumer Sales Directive also harmonises some aspects of the law on commercial guarantees.\textsuperscript{78} However, the directive accepts that commercial guarantees are legitimate marketing tools that can stimulate competition. The directive, therefore, does not interfere with the content of commercial guarantees, but it only seeks to ensure that guarantees do not mislead the consumer. For this purpose, the directive requires that guarantees contain certain information, including a statement that the commercial guarantee does not affect the consumer's rights arising from a legal warranty. Regarding the content of commercial guarantees, there is no harmonisation. The content of commercial guarantees does not only vary between the Member States. The rights on remedies of a consumer primarily depend on the individual terms and conditions under which the applicable commercial guarantee has been issued.

6. OUTLINE OF THE EUROPEAN E-RECEIPT REGULATION

**KEY FINDINGS**

- The technical solutions chosen for e-receipt schemes should have the potential to solve the problems that consumers have with paper documents that are lost or fade away. There are two possible ways of regulating e-receipt schemes at the EU level: (1) introducing an obligation to provide the consumer with an e-receipt by the trader, and (2) standardising paper receipts as well as e-receipts to ensure the digitability of the first ones and the portability and management of e-receipts by consumers. Each of the solutions should be supported with a regulatory framework for e-receipt software that would regulate the scope of gathered data, the scope of information provided to consumers and the basic conditions of access to the scheme preventing discriminatory treatment.

- It seems that, at the moment, no other alternative technical solution could ensure that consumers will be provided with durable proof of the fact and the date of the transaction. Therefore, only introducing an e-receipt scheme (alternatives as presented above) allows for solving the problems that consumers have with paper documents that are lost or fade away.

- From the traders’ perspective, the proposed technical solutions should be proportional and without a negative impact on their commercial activity. The assessment about which of the suggested technical solutions would be less burdensome for the traders is given without a detailed financial and technological assessment. However, the consequences of introducing each of these solutions would certainly require additional technical and financial research, as well as consulting traders’ and consumers’ organisations.

- The establishment and operation of e-receipt schemes may be left to the private sector.

- The e-receipt schemes could serve as an information vehicle, particularly for consumer rights and product safety information.

- There is no need to create a databank of receipts, where traders or public authorities would have access to the personal accounts of consumers. Data should be accessible only to consumers, who would personally manage their private accounts themselves. The interaction of public authorities should be limited to updates of information provided to consumers, concerning such areas as consumer rights or product recalls and withdrawals.

6.1. Proportionality of possible technical solutions

When analysing the possible technical solutions, the principle of proportionality should be taken into account, as provided in Article 5 of the TFEU. The principle of proportionality should also be respected when setting out mandatory rules limiting the rights of the contracting parties.\(^\text{79}\) Proportionality, in this case, relates to the fair balance of interests between the

contracting parties, i.e. traders and consumers. The potential regulatory measure should be suitable, necessary and proportional in a strict sense, i.e. it should not constitute an excessive burden for traders.

6.1.1. Suitability

First, one should investigate which technical solutions could be suitable for achieving the main aim of regulating e-receipt schemes at the EU level, i.e. facilitating the enforcement of consumer rights by providing consumers with a more durable and practical proof of transaction.

The European e-receipt scheme regulation could be based on one of the scheme types already present on the market that fulfil the goals of facilitating the enforcement and serving as an information vehicle. Among the existing e-receipt schemes presented in Chapter 3, two types that appear generally suitable to meet these goals.

First, the scheme could consist of an obligation for traders to issue receipts in a digital form and provide them to consumers. There are two potential ways of providing consumers with e-receipts. The e-receipts could be sent to the consumer email account or stored in a personalised e-receipt account accessible to consumer after verifying the identity. In each case, the trader would generally have access to the consumer's personal data, unless the information on the email account or the personal e-receipt account could be provided in a coded way, e.g. through a barcode on the mobile phone of the consumer presented to the trader. Therefore, concluding sales contract with consumers would require an additional step, in order to provide the trader with the necessary information that would allow him to deliver the e-receipt. The trader would also have to differentiate between consumers and business clients.

An alternative could consist of standardising the paper receipts and introducing a regulatory framework for software that would enable consumers to digitalise paper receipts and store them on personal accounts. Such a system would base on ensuring digitability of all paper receipts. In this case, there would be no need for the trader to acquire information from the consumer enabling him to deliver the e-receipt. The consumer would also have the choice of whether to store paper receipts or to digitalise them. The trader would also have the option to provide the consumer with a digital receipt himself. In this case, it would be up to the consumer to use this option. Both the digitalised as well as e-receipts provided by traders would have to have the same digital format that would enable their storage and management in the digital database of paper receipts. The EU Regulation would concern the digitability of paper receipts and portability of e-receipts.

Both solutions, i.e. the obligation to provide consumers with an e-receipt as well as the standardisation of paper receipts to enable their digitalisation would secure the possibility of proving the fact and the date of the transaction for the consumer, and offer potential further benefits. As such, therefore, they would facilitate the enforcement of consumer rights. In addition, in both schemes it would be conceivable to implement software that offers not only the storage possibility but also includes other types of information relevant for consumers.

6.1.2. Necessity

The second step in the proportionality test is verifying, which of the possible solutions is less restrictive for traders, and if alternative solutions are available.

The first solution imposes on traders an obligation to issue receipts in a digital form. Such an obligation would certainly create logistical and financial burdens for traders. It would, for example, require acquisition of hardware enabling traders to issue e-receipts. Such a solution appears relatively restrictive especially with regards to SMEs as the costs of hardware could potentially materially influence the profitability of their commercial activity. Thus it could
constitute a barrier for them conducting commercial activity. Further, it would require the consumer to provide the trader with information enabling the latter to store the receipt at the consumer’s personal account. For privacy reasons, many consumers would probably refuse to use such a scheme.

The second solution appears to be logistically and financially less burdensome for traders. It would only require the standardisation of receipts, based on the already existing receipt standards, to facilitate their digitalisation. Some traders would still have to bear costs connected with exchanging the devices used to issue paper receipts, should their receipts fail to meet the requirements provided by the standard. The trader would have to provide consumers with a standardised receipt – either digitalised (with the customer’s consent) or on paper (in such case digitalization using the e-receipt scheme software would be up to the consumer). The common standard of digitalised receipts and e-receipts would ensure their storage and management in a digital database managed by the consumer himself. This measure will also not require the provision of personal data by consumers. Traders would, of course, have the option of issuing digital receipts, without the need to print them upon the consumer’s consent.

It seems that, at the moment, no other alternative technical solution would be able to ensure that consumers will be provided with durable proof of the fact and the date of transaction. Without analysing the potential costs of introducing each of these two solutions for individual traders, it is not possible to reliably conclude which one of them would be less burdensome. Therefore, before taking a decision in this scope, an additional investigation would be necessary. Such an additional research could constitute a basis for choosing the best measure to facilitate the enforcement of consumer rights, in the context of providing him with a practical and effective means of proof, at the same time constituting the least possible additional burden for traders.

6.1.3. Proportionality sensu stricto

Last, the regulation of EU e-receipt schemes in the form of standardised receipts combined with a digitalisation option and storage possibility would not constitute an excessive burden for traders. Already now, the vast majority of the Member States have introduced an obligation to provide consumers with a receipt. Providing consumers with a standardised receipt would, therefore, not constitute a greater burden for the trader. The only problem would consist in exchanging the infrastructure for issuing receipts in cases where it does not meet the standard. However, the potential problems of traders in this scope could be solved by varying the implementation periods in various market sectors.

It appears that the introduction of an obligation to issue digital receipts should also not constitute an excessive burden on the traders, in particular, if this obligation is not applied to SMEs. In some MS the traders are already obliged (or will be shortly) to issue digital receipts by the public e-receipt schemes. Therefore, such a solution would theoretically be possible from the financial and technical point of view. What seems to be more problematic is the fact that none of the existing schemes based on the obligation to issue an e-receipt obliges the trader to provide the consumer with the e-receipt. It is the fiscal administration that receives the data. Therefore, the consumer does not have to provide the trader with data enabling him the service the e-receipt to his personal account. The consequences of an introduction of such additional step in the sales transaction would certainly require additional technical and financial research as well as consultations with traders’ and consumer organisations.

6.1.4. Outcome of the proportionality test

The assessment of which of the suggested technical solutions would be less burdensome for traders is impossible without a detailed financial and technological assessment.
Nevertheless, some general principles of a potential EU e-receipt scheme may already be formulated:

1. Voluntary use of software by consumers;
2. The software would consist of an application enabling the user to manage the receipt in a digital cloud;
3. The introduction of the scheme would require establishing an obligation to provide the consumer with a standardised receipt on paper or in a digital form;
4. The EU regulation would also have to specify the information that must be included on the receipt and the form in which it is provided;
5. The digitalised receipt must be recognised as a valid proof of transaction.

6.2. Operator of the scheme

Another issue related to the functioning of the e-receipt scheme is the question of who the scheme should be operated by. In principle, regulating the e-receipt schemes at the EU level may take place through:

1. establishing harmonised technical requirements for EU e-receipts that would include e.g.: (i) the scope of information provided in the e-receipt, (ii) the basic technical concept of the e-receipt system.
2. creating a single European E-receipt Scheme operated by the EU.

The first solution assumes that the operation of the e-receipt systems is left to the private sector. It would remain responsible for distributing and maintaining the e-receipt software. Such software is already available on the market for both consumers and traders. The EU legislation would, in this case, just regulate the standard information requirements for the e-receipt, its data format and additional information that has to be presented in the consumer software. As in the case of the e-invoicing regulation, it would mean introducing a standard receipt and standard software for the digitalisation and storage of e-receipts.

The second solution would consist of developing a European e-receipt infrastructure distributed and maintained by the EU. Such a solution would, however, distort competition on the e-receipt schemes market. E-receipt software for consumers served the aim of providing consumers with durable proof of a transaction already available in the private sector. Promoting and regulating the e-receipt software in order to make it more attractive to consumers does not have to be accompanied by the introduction of a centralised EU e-receipt scheme.

6.3. Scope of information to be covered

The software for consumers could include additional options allowing consumers to fully use the potential offered by the legal protection granted. Instead of limiting the available information to information on the purchase, the software could provide information on the content of warranty and guarantee rights, as well as information on the enforcement of consumer rights, including court procedures, ADR and ODR. Going one step further, the software could also serve as a platform to inform the trader about the good’s non-conformity or not meeting the guarantee standards and filing claims in the ODR proceedings. Furthermore, it is also possible to use the software for product safety reasons, such as product recalls.
6.4. **Combining the e-receipt scheme with other services**

The e-receipt schemes could be combined with other commercial services, including the development of customer accounts and loyalty schemes. The regulation of the standard e-receipt scheme at the EU level should not exclude the possibility of combining it with other services, as already takes place in the case of private software enabling customers to digitalise and store their receipts. Providing access for the trader to the e-receipt scheme by the consumer should however always remain voluntarily.

6.5. **Access to the databank**

The e-receipt scheme in the form of software for consumers that would allow them to digitalise and manage e-receipts, as well as in the form of an obligation for traders to issue e-receipts, would require a databank accessible by consumers. There is, however, no need to provide traders and public authorities with general access to the databank. In any case, such access should be conditional upon the consumer’s consent.

6.5.1. **Interaction of customers with data**

The interaction of consumers with the records created by the supplier would require authentication. The means of such interaction may not be discriminatory in the understanding of Article 20 sec. 2 of the Service Directive. An account secured with a personalised password seems to be the most common solution that does not have a discriminatory effect. Therefore, it constitutes a preferable means of identification. The potential requirement of a certain e-ID could constitute discrimination on the grounds of nationality, and as such should not be accepted.

6.5.2. **Interaction of traders with data**

There is no need to provide traders with data regarding consumers’ purchases. Giving such access to traders could have a distorting effect on the competition on the Single Market. Traders should nevertheless be able to upload, on request, the e-receipt directly to the consumer’s e-receipt account. In order to make the upload possible, the consumer will have to provide the trader with information on his or her personal e-receipt account. This could be done for example with a 2D barcode displayed on the mobile phone display of the consumer, or by providing the trader with a personal e-receipt account number of the consumer. The chosen method should guarantee the anonymity of consumers.

6.5.3. **Interaction of public authorities with data**

It is also not necessary to provide the public authorities with access to information on the purchases of consumers. The already existing public e-receipt schemes have only tax collection purposes. This means that the public authorities do not receive personal data of consumers who conclude sales contracts. Facilitation of consumers’ rights enforcement in no way justifies providing public authorities with a possibility to gather data relating to particular purchases made by consumers.

6.6. **Optional character**

6.6.1. **Optionality for consumers**

The European E-receipt Scheme should remain optional for consumers. They should have the right to decide whether to store paper documents or digitalise receipts. Therefore, traders should be obliged to provide consumers with paper receipts and it should only be at the discretion of the consumer whether or not to request an e-receipt instead of a paper one. The introduction of an obligatory digital form of receipt could undermine the enforcement of rights by those consumers who are not willing to use the software or are unable to use the software. Even though, as of October 2015, 69% of EU households had at least one mobile
internet access\textsuperscript{80} and the trend is rising (a 21 percentage point increase since 2014), there is still a considerable group of consumers who do not have mobile internet access or will not be willing to use an e-receipt scheme in spite of having such access. Such consumers should have the possibility to store paper receipts, as otherwise the enforcement of their rights would be undermined.

### 6.6.2. Partial optionality for traders

The standardisation of receipts in order to enable their digitalisation should be obligatory for all traders operating in the sectors covered by the scheme. Only compulsory standardisation will ensure that the digitalisation of receipts is available on a scale big enough to make using the e-receipt scheme attractive for consumers.

The provision of e-receipts should remain optional for traders, however. As consumers will be able to digitalise receipts themselves, there is no need to burden traders with an additional obligation to issue e-receipts. After the assessment of the functioning of the scheme, the provision of e-receipts could be gradually made obligatory for certain additional market branches, especially taking into account the reduction in paper waste produced.

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\textsuperscript{80} Cf. Special Eurobarometer 438, p. 21.
7. POSSIBLE IMPACTS IN RELATED FIELDS

KEY FINDINGS

- Establishing a European digital guarantee system would require full harmonisation of consumer warranty rights and could be used to provide consumers with information about their rights. Additionally, such a system could serve as a vehicle for information related to product safety, covered presently by the RAPEX system.
- Any development in this area would also have to observe the principles of data protection, as well as influence on cybersecurity issues.
- There would only be an impact on the eIDAS Regulation if eIDs were used to authenticate identity within the system. However, such a requirement is extremely rare at present, and does not pose a structural problem. The potentially discriminatory character of such a requirement should be analysed from the point of view of provisions on the free movement of services, which already sufficiently prohibit discrimination on the grounds of nationality.

7.1. Fields affected by the European digital guarantee

Establishing a European digital guarantee system would certainly have an impact on various fields of EU law. Firstly, it would require full harmonisation of consumer warranty rights, and could also serve as an instrument of providing consumers with basic information on their other rights. Furthermore, such a system would also impact the legal framework on the protection of personal data and eIDAS legislation, as well as raising cybersecurity issues depending on the exact technical solutions used.

7.2. Consumer law

7.2.1. Full harmonisation of warranty rights

As already mentioned in Chapter 5, the introduction of a harmonised form of European warranty would firstly require the full harmonisation of warranty rights. Unless the level of full harmonisation in this regard is reached, any information on warranty rights, including the rules of private international law, would be too complicated to be understood by the average consumer.

7.2.2. European digital guarantee as an information tool

The European digital guarantee could also potentially serve to provide consumers with information about their other rights provided by the EU consumer legislation. Especially given that providing only information on the warranty and guarantee rights could mislead consumers. For example, a consumer checking such information before the expiry of the 14-day term for unconditional withdrawal in the case of distance and off-premises contracts, could assume that the non-conformity of the product constitutes a necessary precondition for its return to the seller.

However, due regard has to be taken to the optimal scope of such information. Consumers could easily be discouraged to read lengthy texts formulated in complex legal language.

Among the possible pieces of information that could be provided to consumers in digital form, one should include some of the data listed in:

(i) Articles 5 and 6 of the Consumer Rights Directive and
(ii) Article 7 of the Services Directive.
7.2.3. Consumer safety

The issue of consumer safety is regulated by Directive 2001/95/EC on general product safety (the General Product Safety Directive). Among the measures established by the General Product Safety Directive to ensure consumer safety, two may be of importance for a European digital guarantee scheme: recall and the withdrawal of certain products.

According to Article 12 of the General Product Safety Directive, cooperation with regard to recalls and withdrawals of dangerous products is presently performed through the Rapid Information System (RAPEX). RAPEX allows the exchange of information on product recalls and withdrawals, whether carried out by national authorities or by manufacturers. At the moment, product recalls and withdrawals are published at the EU level in online Weekly Reports of RAPEX.

E-receipt schemes could be used to speed up product recalls and withdrawals, or alert services where products endanger life or health of consumers during their guarantee period.

a. Withdrawal

According to Article 2 (h) of the General Product Safety Directive, a withdrawal means any measure aimed at preventing the distribution, display and offer of a product dangerous to consumers. Certain digital guarantee schemes could facilitate product withdrawals and reduce the risk of a defective product being handed over to a consumer.

An example of such a system can already be found in EU law regarding medicinal products. Directive 2001/83/EC establishes an obligation for the medicinal products subject to prescription to bear safety features enabling, among other things, individual packs to be identified. Starting from 2019, each medicinal product pack must bear a unique identifier in the form of a 2D barcode. Such an identifier will have an inactive status should a medicinal product be withdrawn or recalled. In such a case, a pharmacist scanning the medicinal product before handing it in to the patient will receive information that the product may not be handed in to the patient.

b. Recall

There is currently no instrument that would enable information about a recall to be provided directly to a customer who acquired a certain product. A 2D barcode would also not be able to serve as a transmitter of such information to the customer. This would require the establishment of a scheme that would include the personal data of customers, or would automatically inform all customers that have an e-receipt for a given product. If a producer or a given authority takes the decision to recall a defective product, such a scheme could easily check the consumer data and notify them about the danger (and, for example, offer a replacement product).

7.3. Personal data protection

7.3.1. Introduction

a. Identification of personal data protection issues in e-receipts

Any assessment of the possibility to undertake any action in the area of EU digital receipts or guarantees must be accompanied by a thorough analysis of the personal data protection issues. Providers of the e-receipt / digital guarantees solutions offered and developed in the EU process large amounts of personal data for various purposes. Personal data is used to allow customers to claim a product’s guarantee, to return a product, or for other reasons. However, nearly all services concerning e-receipts assume that the customer already has a store card or loyalty card. Accordingly, the customer has to provide some personal data before being able to use the e-receipt service (e.g. NuBon, Reebate, eReceipts, Carte E.
Leclerc). This creates channels through which special (personalised) advertisements or offers can be made for the customers. The stores are only able to make specific advertisements or personalised offers, when they know about their customers’ preferences of past choices.

Almost all providers of the existing e-receipt applications collect customer data, not only to make it easier for the customers to enforce their rights when a problem with the product appears, but primarily the applications serve the providers’ aims and profits. The data is probably mainly used for marketing purposes.

In addition, the personal data collected via e-receipt applications is not anonymised (customers might receive a login and password to the e-receipt shop account, though they are not anonymous). As long as customers using e-receipts can be identified, directly or indirectly, in particular by reference to an identification number, or to one or more factors specific to their physical, physiological, mental, economic, cultural or social identity, then the personal data protection regulations apply.

Considering the above, an adequate analysis of existing e-receipt solutions in the context of personal data protection regulations is necessary, particularly in the context of Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (hereinafter referred to as Directive 95/46/EC).

b. Analysis in the context of the existing schemes

Instead of analysing the potential options in the context of the data protection rules, the analysis elaborates on the data protection requirements on the basis of the schemes existing at the moment. Any possible solution for e-receipts / digital guarantees will face the same regulatory requirements, based on Directive 95/46/EC, so presenting them in light of the existing systems illustrates problems that might appear with regards to any future proposal.

7.3.2. International Legal standards – overview

a. The European Convention for the Protection of Human Rights and Fundamental Freedoms

There are several personal data protection regulations that should be taken into account when considering the legal implications within the researched area. The Member States and the European Union are bound by the provisions of the European Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR). These rights have traditionally been exercised vertically (i.e. the individual towards the state) and the debate about the extent to which they can be exercised horizontally (i.e. as between individuals) is ongoing. However, it is clear that these rights are, in general, recognised. According to the Data Protection Working Party, when considering the application of the national measures adopted under Directive 95/46/EC, in order to contribute to the uniform application of such measures, it is necessary to recall the main principles. According to Article 8 of the ECHR, everyone has the right to have his private and family life, his home and correspondence respected.

b. The Charter of Fundamental Rights of the EU

The right to privacy is also regulated by the Charter of Fundamental Rights of the EU. According to Article 7 of this Convention, everyone has the right to have his or her private and family life, home and communications respected. In addition, pursuant to Article 8, everyone has the right to the protection of his or her personal data. Such data must be

81 Working document on the surveillance of electronic communication in the workplace adopted on 29 May 2002 by Article 29 of the Data Protection Working Party
processed fairly, for specified purposes, and on the basis of the consent of the person concerned, or some other legitimate basis set out by law. Everyone has the right to access the data that has been collected concerning him or her, and the right to have it rectified. Compliance with these rules is subject to control by an independent authority.

c. The Convention for the Protection of Individuals with regard to the Automatic Processing of Data No 108

Another important international legal instrument is the Convention for the Protection of Individuals with regard to the Automatic Processing of Personal Data No 108 (the 108 Convention). The 108 Convention opened for signature on 28 January 1981, and was the first legally binding international instrument in the data protection field. Under this Convention, the parties are required to take the necessary steps in their domestic legislation to apply the principles it lays down in order to ensure respect in their territory for the fundamental human rights of all individuals with regard to processing personal data. The basic data protection principles mentioned in this Convention, such as quality of data (e.g. that data should be stored for specified and legitimate purposes, or that data should be adequate, relevant and not excessive in relation to the purposes for which they are stored) were repeated in Directive 95/46/EC. The possible solutions for e-receipts / digital guarantee solutions must therefore be analysed in light of the principles established in these instruments.

7.3.3. Legitimacy of the e-receipt scheme (Art. 7 of Directive 95/46/EC)

a. Data controllers

According to Directive 95/46/EC, the controller is the entity that, alone or jointly with others, determines the purposes and means of the personal data processing. Determining the identity of the data controller is crucial, as data protection obligations are imposed on data controllers (only the obligation to implement appropriate technical and organisational measures is imposed on third parties such as data processors). In the case of e-receipts and digital guarantees, shops allow customers to use guarantees or to return products, they offer store cards, loyalty card, discounts and send targeted advertisements. Some of the e-receipt solutions are created by third parties and subsequently licensed to shops. Data controllers might also store e-receipts using a third-party cloud computing service. Even if a third party might be deeply involved in the e-receipt (as the app is actually created by the third party), third parties cannot be recognised as data controllers (they do not take any decisions on the purposes of the processing; they merely offer a solution, whereas the shop decides on how it will be used). Accordingly, shops or chains of shops that collect data in e-receipts schemes decide about the purposes of the processing and should be deemed as data controllers. These shops are obliged to meet several legal obligations.

b. Legitimacy principle

The first personal data protection principle, which should be fulfilled by any e-receipt application, is the legitimacy rule. Pursuant to Article 7 of Directive 95/46/EC, personal data may be processed only if an appropriate legal condition is met. The first data protection principle requires that a data controller must be able to satisfy one or more “conditions for processing” in relation to its processing of personal data. Many (but not all) of the conditions relate to the purpose or purposes for which the controller intends to use the information. The conditions for processing take account of the nature of the personal data in question. The conditions that need to be met are more exacting when the processed information constitutes sensitive personal data, such as information about an individual’s health or
criminal record. Each of these conditions is autonomous, separable and equal, and meeting one of them makes the data processing legitimate.

Personal data in the e-receipt schemes might be processed for different purposes, such as enforcing consumer rights (based on liability for non-conformity or guarantee), for product recalls or alert services where products endanger the life or health of consumers during their guarantee period. However, data collected via an e-receipt app may also be used for marketing purposes and be combined with other services, including the development of customer accounts and loyalty schemes. Finally, this data could be processed by third parties, such as banks or tax authorities, to serve as payment receipt or proof in automated compliance schemes. Considering the above, every data processing should be based on a specific legal basis.

c. Establishing an e-receipt database necessary to perform a contract to which a customer is a party

One of the legal bases that might justify data processing in the e-receipt schemes is Article 7 (b) of Directive 95/46/EC: processing is necessary for the performance of a contract to which the data subject is party. This legal basis is typically used when a consumer wants to return a product, or use his or her consumer rights resulting from the seller's liability for the non-conformity of the goods or guarantee. It might be used by a data controller only after concluding a contract with the consumer (e.g. after the product is sold). Additionally, only the data of a party to the contract could be processed on this basis (data of other individuals is not covered by this basis). Such data processing is strictly limited to the performance of a contract (the data cannot be used for other purposes, such as statistical or marketing).

Furthermore, in the Polish Data Protection Authority register there are many databases called “purchase complaints”, which cover the data of consumers who enforced their rights, i.e. guarantee. In these databases, the controller indicated that the legal grounds for processing data was the implementation of Article 7 (b) of Directive 95/46/EC. The data controller did not have to ask customers for consent for data processing. Nonetheless, the scope of data collected for this purpose is limited only to the data necessary for the performance of rights resulting from a guarantee. Accordingly, the data controller could not have collected data other than name, surname, phone number and ID number, for example. Other data could be recognised as too far-reaching and unnecessary.

One of the main functions of the e-receipts schemes is to facilitate enforcement of rights by consumers. Considering that customer data is processed only for the purposes of performing their rights, such data collection could be justified by Article 7 (b) of Directive 95/46/EC. As mentioned above, this legal ground would be valid only if the scope of the collected data was not too broad, and if data was not used for marketing purposes. Furthermore, the sufficiency of this legal basis would depend on the kind of solution adopted by the provider of e-receipts. If data on e-receipts is collected on the off-chance that a client would return the product or call on the guarantee (the database is created during the purchase, so in advance), then the data protection authorities might also recognise that creating the database at this stage is not necessary for performing the contract. In the view of some DPAs, only a solution whereby customers call on the seller to perform the guarantee might be legitimised by Article 7 (b) of Directive 95/46/EC. Therefore, in most cases it would be recommended to find another legal ground for such data processing.

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ICO explanations available under the URL: [https://ico.org.uk/for-organisations/guide-to-data-protection/conditions-for-processing/](https://ico.org.uk/for-organisations/guide-to-data-protection/conditions-for-processing/)
d. Establishing an e-receipts database necessary for compliance with a legal obligation to which the controller is subject

Another legal basis that could justify data processing in an e-receipt scheme is Article 7 (c) of Directive 95/46/EC: processing necessary for the compliance with a legal obligation to which the controller is subject.

Data operations for the purpose of performing a guarantee or rights arising from non-conformity might be validated by Article 7 (c) of Directive 95/46/EC. Such legal obligations, which are established in Article 7 (c), are provisions that stipulate statutory liability for the non-conformity of goods. Similar to the previous legal basis, the scope of the processed data here also has to be limited to the performance of this legal obligation (performance of a guarantee or rights based on non-conformity). Accordingly, this legal basis would not legitimise the processing of customer data for marketing purposes (as marketing purposes are not described by consumer law in this regard).

Nonetheless, if the EU or the Member States establish some form of e-receipt scheme and introduce new legal provisions (e.g. a directive on e-receipts) that would allow entities to process specified data not only for the performance of guarantee, but also for marketing purposes, then such activities would become legitimate under Article 7 (c) of Directive 95/46/EC.

e. Establishing an e-receipt scheme justified by the consent of a customer

Finally, according to Article 7 (a) of Directive 95/46/EC, personal data may only be processed if the data subject has unambiguously given his consent.

In most cases, e-receipt apps enable retailers to monitor spending habits and the shopping trends of customers. Based on this information, they can offer their customers targeted promotions, or discounts. The e-receipt apps could also create a profile of a customer (data profiling). It means that entities could examine the data collected via e-receipts, and collect new statistics and information about that data.

Such advanced data operations could be justified by the customer’s consent to processing data for marketing purposes. In the meaning of Directive 95/46/EC, consent means any freely given specific and informed indication of data subject’s wishes, by which the data subject signifies his consent to processing personal data relating to him. The fact that an individual must signify its agreement means that there must be some active communication between the parties. An individual may signify agreement by means other than in writing. Consent must also be appropriate to the age and capacity of the individual, and to the particular circumstances of the case. In most cases, consent will last for as long as the processing to which it relates continues, and the individual will be able to withdraw consent, depending on the nature of the consent given and the circumstances. Withdrawing consent does not affect the validity of anything already done on the understanding that the consent had been given. Consent obtained under duress or on the basis of misleading information does not satisfy the condition for processing.  

Accordingly, for using e-receipts for marketing purposes it is necessary to collect consents of the data subjects. Every consent should be preceded by information about the purpose of the data processing. One consent is given for one purpose of data processing (e.g. there should be two separate consents for marketing and using e-receipts by third parties like

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83 Information available on the website of ICO: https://ico.org.uk/for-organisations/guide-to-data-protection/conditions-for-processing/
banks or tax authorities, to serve as payment receipt or as proof in automated compliance schemes).

f. Could customers refuse to be included in such databases, for privacy protection reasons?

Customers could refuse to be included in e-receipt databases. There are several rights that provide this possibility.

First of all, as the gathered data is usually used for marketing purposes, customers can withdraw their consent for this processing. Secondly, according to Article 14 of Directive 95/46/EC, Member States will grant the data subject the right:

(a) at least in the cases referred to in Article 7 (e) and (f), to object at any time, on compelling legitimate grounds relating to his or her particular situation, to the processing of data relating to him or her, save where otherwise provided by national legislation. Where there is a justified objection, the processing instigated by the controller can no longer involve the data.

(b) to object, on request and free of charge, to the processing of personal data relating to him or her that the controller anticipates being processed for the purposes of direct marketing, or to be informed before personal data is disclosed for the first time to third parties or used on their behalf for direct marketing, and to be expressly offered the right to object free of charge to such disclosures or uses.

These rights are crucial, as data might be processed for marketing purposes. Additionally, some entities also justify data processing by Article 7 (f) of Directive 95/46/EC (processing is necessary for the purposes of legitimate interests pursued by the controller, or by the third party or parties to whom the data are disclosed, except where such interests are overridden by the interests for fundamental rights and freedoms of the data subject requiring protection under Article 1 (1)). In such cases, data subjects are entitled to object to the processing of data on this legal ground. The way the data subject expresses an objection differs in various legislations.

7.3.4. Application of the principle of purpose to e-receipt schemes

a. Specified, explicit and legitimate purpose

Article 6(1)(b) of Directive 95/46/EC lists the purpose limitation principle among the key data protection principles. It provides that personal data must be collected for specified, explicit and legitimate purposes and not further processed in a way that is incompatible with those purposes. Purpose limitation protects data subjects by setting limits on how data controllers are able to use the data, while also offering some degree of flexibility for data controllers. Processing personal data in a way that is incompatible with the purposes specified at collection is against the law and therefore prohibited.

Directive 95/46/EC requires that personal data must be collected for specified, explicit and legitimate purposes. The controller must therefore carefully consider, before setting up the e-receipt app, for what purpose or purposes the personal data will be used. These purposes must be explicit and communicated to the data subject before the data is collected. The requirement of legitimacy means that the purposes must be in accordance with the law in the broadest sense. This includes all forms of written and common law, primary and secondary legislation, municipal decrees, judicial precedents, constitutional principles, fundamental rights, other legal principles, as well as jurisprudence, as such law would be interpreted and taken into account by competent courts.84

Considering these rules, the purposes such as performing a guarantee, analysing the behaviours of consumers, sending marketing offers, speeding up product recalls or alert services where products endanger the life or health of consumers seem to be legitimate. Nonetheless, all other conditions regarding purposes must be met, especially the obligation to communicate the purposes to data subjects before collecting the data.

b. Compatibility assessment in further processing

Article 6(1)(b) of Directive 95/46/EC also introduces the notions of further processing and incompatible use. It requires that further processing must not be incompatible with the purposes for which the personal data was collected. The prohibition of incompatible use sets a limitation on further use.

A failure to comply with the compatibility requirement set out in Article 6(1)(b) of Directive 95/46/EC has serious consequences. Processing personal data in any way that is incompatible with the purposes specified at collection is unlawful, and therefore not permitted. In other words, the data controller cannot simply consider the further processing as a new processing activity disconnected from the previous one, and circumvent the prohibition by using one of the legal grounds set out in Article 7 to legitimise processing.\footnote{ibidem}

It must be emphasised that this position of the Working Party is strict, though rules in this regard may slightly differ in the Member States (a change of the purpose might be allowed under specific prerequisites listed in a national law). Furthermore, it was confirmed by the Council of Europe in its Recommendation on the protection of individuals with regard to the automatic processing of personal data in the context of profiling that combining data with other services and creating profiles is allowed under some conditions. According to the example given in the Recommendation: data collected using search engines should not be used in profiling systems for advertising purposes without the person concerned being made aware of this fact, or having obtained the relevant prior consent from the user (Explanatory Memorandum to Principle 3.1.)\footnote{Recommendation CM/Rec(2010)13 and explanatory memorandum. The protection of individuals with regard to automatic processing of personal data in the context of profiling Recommendation CM/Rec(2010)13 and explanatory memorandum P.43}

Every e-receipt scheme should make a compatibility assessment in further processing. It means that if a data controller collects and processes personal data in order to perform consumer rights such as a guarantee, it cannot subsequently change the purpose for marketing or add a new purpose (and start sending marketing offers to the data subjects), unless the prerequisites stipulated in the local personal data protection law allow it.

c. Could the e-receipt schemes be combined with other services, including the development of customer accounts and loyalty schemes?

The combination of an individual’s multiple behavioural characteristics might constitute a data subject’s identity. Data is considered personal (and Directive 95/46/EC applies) if an individual’s characteristics, whatever their nature (physical, physiological, cultural, economic or social), are unique in the data processing in question. Such a combination of personal data collected via e-receipt schemes, along with other even non-identifiable information, would constitute personal data. Such activities are not forbidden as far as personal data protection principles are observed (principles established in Directive 95/46/EC).

Customers should express their consent for such activities (as generally for data processing for marketing purposes) with a prior information notice about the purpose of the processing.
Accordingly, the possibility of expressing the consent and the information notice should be given to the e-receipt users before the data combination.

The data controllers must also comply with other legal obligations, which might be stipulated at national level (e.g. some laws prescribe limitations in combining data in e-commerce services).

d. Could databases be used to speed up product recalls or alert services where products endanger life or health of consumers during their guarantee period?

From a data protection point of view, the E-receipt schemes could be used to speed up product recalls or alert services where products endanger the life or health of consumers during their guarantee period. If a producer found out that the product is defective, it could easily check the consumer data and notify them of the danger (and e.g. offer a replacement product). However, the data controller would be obliged to inform the data subjects that their data might be used for such purposes. An appropriate legal foundation for such processing should also be found (e.g. consent, or that it is necessary for compliance with a legal obligation to which the controller is subject).

Importantly, the e-receipt schemes could not collect any data on the health of consumers for these purposes. This type of data is covered by special rules on sensitive data protection. Processing such data must be justified by special legal grounds (e.g. explicit consent of the data subjects – written consent in some Member States).

e. Could digital files be further used by third parties like banks or tax authorities, to serve as payment receipt or a proof in automated compliance schemes?

Generally, e-receipts might be further used by third parties like banks or tax authorities, to serve as payment receipt or proof in automated compliance schemes. Data controllers should preserve the rules regarding the disclosure of data to third parties. Additionally, as in other cases, customers must be informed about this.

7.3.5. Application of other personal data protection principles to the e-receipt schemes

a. Information rights and application of the principle of data proportionality to the e-receipt schemes

Article 5(3) of Directive 95/46/EC states that the user must be provided with information, "in accordance with Directive 95/46/EC, among other things about the purposes of the processing." Article 10 of Directive 95/46/EC deals with the provision of this information. It requires that the identity of the controller be provided, along with the purposes of the processing; as well as the recipients of the data and the existence of the right to access it if further information is necessary, to guarantee fair processing.87

As mentioned above, fulfilling this obligation will determine whether the processing is lawful. Consumers must be conscious about the purposes of the data collection (e.g. if data on e-receipts is collected only to perform consumer rights such as guarantee, or whether it is also used for marketing purposes).

The scope of data collected for an e-receipt product must be limited. The processed data must be adequate, relevant and not excessive in relation to the purposes for which it is collected, and/or further processed (Article 6(1)(b) of Directive 95/46/EC). An example of a violation of this rule would be the collection of data about occupation, or education, if the only purpose of the e-receipt scheme would be the performance of a guarantee (this kind of

data is not necessary for this purposes). Furthermore, it would be difficult to justify the processing of sensitive data such as health data for purposes like sending marketing messages.

**b. Disclosure: considerations on how third parties may be able to interact with the e-receipt database**

Shops may disclose data collected via e-receipt service to third parties. Such a disclosure may be organised in the following way:

- **Systematic data sharing.** This will generally involve the routine sharing of data sets between organisations for agreed purposes. It could also involve a group of organisations making an arrangement to pool their data for specific purposes (e.g. a shop discloses data to producers of certain products that want to use this data for its own marketing purposes – analyse the preferences of consumers and send them offers of their favourite products);

- **Ad hoc or ‘one-off’ data sharing.** Data controllers may also decide, or be asked, to share data in situations that are not covered by any routine agreement. In some cases, this may involve a decision about sharing in conditions of real urgency, for example in an emergency situation (e.g. disclosing data to public authorities);

- **Sharing with data processors.** There is a form of data sharing where a data controller shares data with another party that processes personal data on its behalf. In Directive 95/46/EC, these entities are known as data processors. The directive draws a distinction between one data controller sharing personal data with another, and a data controller sharing data with its data processor. The directive requires that a data controller using a data processor must ensure, in a contract (usually in writing), that:
  - the processor only acts on instructions from the data controller; and
  - it has security in place that is equivalent to that imposed on the data controller.

Therefore, the data processor involved in data sharing does not have any direct data protection responsibilities of its own; they are all imposed through its contract with the data controller. If data in the e-receipt schemes is gathered in the third party’s cloud, this third party should be recognised as the data processor. Furthermore, agencies that conduct marketing campaigns on behalf of shops should usually be deemed data processors.

- **Sharing within one group (e.g. with the parent’s company).** The same data protection principles apply also to sharing information within an organisation – for example between different companies belonging to one capital group.88

The first data protection principle says that data controllers have to satisfy one or more conditions in order to legitimise their processing of personal data. Data disclosure to third parties (other than data processors) should usually be justified by the consent of consumer (the same as data collection). The disclosure of data is also data processing. Accordingly, the conditions for data collection and data disclosure are the same. If data is collected and processed by group of companies, the consumer must express its consent for data processing by whole capital group. The exemption from giving consent is sharing data with the law enforcement authorities. The disclosure of data to courts, prosecutors, or police is justified in the Member State’s law and does not require the data subject’s consent. Additionally, if the collected data would be necessary to perform a guarantee, the data revealed to the repair service might be legitimised by Article 7 (b) of Directive 95/46/EC.

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After the data is shared with a new data controller, it should inform data subjects that the data was disclosed to it. The new data controller should inform consumers about the identity of the controller and his representative (if any), along with the purposes of processing, any further information such as the categories of the data concerned, the recipients or categories of recipients, the existence of the right of access to and the right to rectify the data concerning him, in so far as such further information is necessary with regard to the specific circumstances in which the data is processed. This is to guarantee fair processing in respect of the data subject. These rules might obviously differ slightly between Member States. The Member States’ law might stipulate that data disclosure without an individual’s knowledge is allowed in cases where, for example, personal data is processed for the prevention or detection of crime.

c. Other (Right of access, rectification and erasure, registration)

Finally, it must be said that Directive 95/46/EC and Member States’ personal data protection acts give individuals certain rights over their personal data. These include:

- the right to access personal data held about them;
- the right to know how their data is being used; and
- the right to object to the way their data is used.

Furthermore, e-receipt schemes databases are usually covered by the registration obligation in the Data Protection Authorities register. Databases of data processed for marketing purposes or databases of complaints are rarely exempted from the registration by national law. Sometimes the exemption takes place if the data controller appoints a data protection officer.

7.3.6. Conditions that should be fulfilled by a cloud-computing provider storing e-receipts

a. Data protection requirements in the cloud

Data of the e-receipt scheme might be gathered in the cloud. Storing such a big amount of data is usually outsourced to a cloud-computing provider. Accordingly, the requirements of the cloud computing should be described.

The shop (cloud client) determines the ultimate purpose of the processing and decides on the outsourcing of the processing and the delegation of all or part of the processing activities to an external organisation. The cloud client, therefore, acts as the data controller. The cloud provider is the entity that provides the cloud-computing services in the various forms discussed above. When the cloud provider supplies the means and the platform, acting on behalf of the cloud client, the cloud provider is considered as the data processor. According to Article 29 of the Data Protection Working Party, the lawfulness of the personal data processing the cloud depends on the adherence to the basic principles of the EU data protection law. Namely, transparency towards the data subject is to be guaranteed, the principle of specifying and limiting the purpose must be complied with, and the personal data must be erased as soon as its retention is not necessary any more. Moreover, appropriate technical and organisational measures must be implemented to ensure an adequate level of data protection and data security. The following rules should be binding for the provider of the e-receipt (cloud-computing provider) and the shop:

- Transparency: cloud providers should inform the cloud clients (shops) about all (data protection) relevant aspects of their services during contract negotiations. In particular, the clients should be informed about all subcontractors contributing to the provision of the respective cloud service and all the locations where data may be stored.

89 Opinion 05/2012 on Cloud Computing of Art. 29 Data Protection Working Party adopted on 1 July 2012, pp. 7-8
stored or processed by the cloud provider and/or its subcontractors (notably, if some or all of the locations are outside of the European Economic Area (EEA)). The client should be provided with meaningful information about the technical and organisational measures implemented by the provider, whereas the client should, as a matter of good practice, inform the data subjects about the cloud provider and any subcontractors, as well as about locations in which data may be stored or processed by the cloud provider and/or its subcontractors.

- Specification and limitation of the purpose: the client should ensure compliance with principles of specifying and limiting the purpose (data is processed by the cloud provider only for the purpose stipulated in the agreement between the provider and the client) and should ensure that no data is processed for further purposes by the provider or subcontractors.

- Data retention: the client is responsible for ensuring that personal data is erased (by the provider and subcontractors) from wherever it is stored, as soon as it is no longer necessary for the specific purposes.

- The contract: the contract with the provider (and the ones to be stipulated between the provider and the sub-contractors) should afford sufficient guarantees in terms of technical security and organisational measures (under Article 17(2) of Directive 95/46/EC) and should be in writing or in another equivalent form.90

- Other obligations mentioned by Article 29 Data Protection Working Party, such as limitation of access to data to specified individuals, limitation of the disclosure to third parties by the specified contract, an obligation to cooperate with the data controller (cloud client) and allowing a data controller for data audits, implementing appropriate technical and organisational measures.

b. **International transfers**

Directive 95/46/EC provides for a free flow of personal data to countries located inside the EEA. A free flow outside the EEA is allowed only if the country or the recipient provides an adequate level of data protection. In all other cases, specific safeguards must be put in place by the controller and its co-controllers and/or processors. However, cloud computing is most frequently based on a complete lack of any stable location of data within the cloud provider’s network. Data can be in one data centre at 2pm, and on the other side of the world by 4pm. In this context, the traditional legal instruments providing a framework to regulate data transfers to non-EU third countries not providing adequate protection, have limitations.91

On the basis of Article 25 (6) of Directive 95/46/EC, the European Commission may find that a third country ensures the adequate level of protection by reason of its domestic law or of the international commitments it has entered into. Under this provision, the US government and EU Commission concluded an agreement on the transborder data flow: Safe Harbour. Transfers to US organisations adhering to the principles of Safe Harbour could take place lawfully under EU law since the recipient organisations were deemed to provide the adequate level of protection to the transferred data. On 6 October 2015, the Court of Justice of the European Union published its ruling on the case of Maximillian Schrems v Data Protection Commissioner, declaring the decision by the European Commission on the adequacy of US Safe Harbour to be invalid.[REF] The Court has consistently stated that the massive and indiscriminate surveillance by US authorities is incompatible with the EU legal framework, and that existing transfer tools are not the solution to this issue.

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90 Ibidem, pp. 20-21
91 Ibidem, p. 17
On 29 February 2016, a new "adequacy decision" for EU-US personal data transfers, drafted by the EU Commission was published, as well as the texts that will constitute the EU-US Privacy Shield. The EU Commission concluded that the United States ensures an adequate level of protection of personal data transferred under the EU-US Privacy Shield. The text will now be evaluated by the EU Data Protection Authorities and the European Data Protection Supervisor before it can be formally adopted by the College of EU Commissioners. EU Data Protection Authorities are expected to give their view by the end of March 2016. 92 The new EU-US Privacy Shield creates the legal ground for cloud computing services where the provider of cloud computing has its office in the US.

Article 29 of the Data protection Working Party also describes another legal basis for international transfers within cloud computing services. This basis comes from the Standard Contractual Clauses and Binding Corporate Rules. The Standard Contractual Clauses were adopted by the EU Commission for the purpose of framing international data transfers between two controllers, or one controller and a processor, and are based on a bilateral approach. When the cloud provider is considered to be the processor, model Standard Contractual Clauses are an instrument that can be used between the processor and the controller as a basis for the cloud computing environment to offer adequate safeguards in the context of international transfers. 93 Binding Corporate Rules constitute a code of conduct for companies that transfer data within their group. This solution will be provided also for the context of cloud computing when the provider is the processor.

7.4. Relation to the eIDAS Regulation

The impact of a potential European digital guarantee scheme on the eIDAS Regulation would most certainly depend whether such a scheme would be operated using e-IDs. So far, none of the private or public digital guarantee schemes operate using exclusively e-IDs. Should any such system be created in the future, the legislation would have to ensure that the e-ID is used in a non-discriminatory way (i.e. not in a way that only e-ID holders of one country have access).

7.4.1. Overview of the existing e-ID systems

Before analysing the e-ID requirement for the possibility to access an e-receipt or guarantee scheme, the e-ID systems already existing in some Member States will briefly be presented. Firstly, it has to be underlined that there are both public and private e-ID systems. The map below presents the Member States in which such systems already operate. The basis for the mutual recognition of e-IDs issued by public bodies is established by the eIDAS Regulation adopted on 23 July 2014. The Member States will be obliged to recognise e-IDs issued by another Member States starting from September 2018. The national e-ID systems serve for online identification both in the public and private sector. The private sector usage includes, for example, eBanking, real estate, insurance and pension fund services.

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92 http://www.privacylaws.com/Int_enews_29_2_16
93 Opinion 05/2012 on Cloud Computing of Art. 29 Data Protection Working Party adopted on 1 July 2012, p. 18
Map 2: eID national schemes

Public, private or both eID-means in the national eID scheme

Overview of the studied countries with public, private or both eID means in the national eID system:

- Red dots: No public means at level QAA3 or higher
- Blue dots: no private means at level QAA3 or higher
- Blue: private mean(s)
- Red: public mean(s)
- Green: both eID-means


7.4.2. eIDAS Regulation


The obligation to mutually recognise means of electronic identification, which will enter into force in 2018, is limited to services provided by the public sector, according to Article 6 of the eIDAS Regulation.

Nevertheless, in order to facilitate the use of such electronic identification means across borders by the private sector, the authentication possibility provided by any Member State should be available to parties relying on the private sector established outside of that Member State under the same conditions as applied to parties relying on the private sector established within that Member State. There is no provision that would establish the obligation of recognition also in the private sector. However, according to recital (17) of the eIDAS Regulation, the Member States should encourage the private sector to voluntarily use electronic identification means when needed for online services or electronic transactions. The possibility to use such electronic identification means would enable the private sector to rely on electronic identification and authentication already largely used in many Member States, at least for public services, and to make it easier for businesses and citizens to access their online services across borders. Therefore, the eIDAS regulation also has the goal of promoting electronic identification schemes in the private sector. Furthermore, Estonia was the first Member State to introduce a possibility for non-residents to obtain Estonian e-ID. Should the principle of mutual recognition be expanded into the private sector in the future, it would constitute an additional tool to fight against discrimination on the grounds of nationality due to the lack of an electronic identity document.
7.5. Cybersecurity issues

Another important area of legislation that will be affected by the establishment of a European digital guarantee scheme would be the cybersecurity sector. Depending on the exact design of such a scheme, it could include a lot of personal data and also commercially valuable data, for which unauthorised usage could distort competition on the internal market. Therefore, such a scheme should be generally qualified as a “network or information system” in the understanding of the Directive on the security of network and information systems (the NIS Directive – adopted by the European Parliament on 6 July 2016). The Directive entered into force in August 2016. Member States will have 21 months to transpose the Directive into their national laws and six more months to identify operators of essential services. The NIS Directive covers both publicly- and privately-operated networks, and regulates networks and information systems in the following sectors: Energy, Transport, Banking, Financial market infrastructures, Health, Water and Digital infrastructure. All the operators of these essential services will be obliged to take security measures, including the prevention of risks, ensuring security of the network and information systems and handling incidents. In the case of a European digital guarantee scheme being established, it should most certainly be included under the scope of the NIS Directive.

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8. CONCLUSIONS AND RECOMMENDATIONS

KEY FINDINGS

- Missing or illegible receipts and guarantee documents pose a hurdle for consumers who want to enforce their rights. Even though their popularity is growing, private and public e-receipt schemes are still not very well developed in the EU.
- E-receipt schemes can contribute to consumer rights being exercised more frequently and in a more efficient and effective manner (as a means of convenience). Any possible solution chosen for regulating e-receipt schemes should solve the problems that consumers have with paper documents that are lost or fade away. At the same time, it should constitute a proportional burden for traders, and not exert a negative impact on their commercial activity. The standardisation of e-receipt schemes at the EU level, including anti-discriminatory regulation of identification requirements, could help avoid potential discrimination in the future.
- A straightforward solution would be to introduce an obligation on all traders to offer consumers the possibility of obtaining a digital receipt. This solution, however, can only be recommended after having investigated whether it would constitute a proportionate burden for the traders, considering all technical and financial factors. A less invasive alternative would be an obligation on all traders either to offer consumers a digital receipt or to provide them with a paper receipt that can easily be digitalised and processed using e-receipt software. Both options would enable consumers to store and manage all their e-receipts electronically.
- The potential regulation of e-receipt schemes and the choice between the various options should be preceded by empirical research concerning, in particular, the reasons why consumers refrain from enforcing their rights, the structure of cash transactions and the potential financial and technological consequences of such a regulation. The research should also concern consumers’ attitude towards e-receipt schemes. Establishing these would also make it possible to choose a proper technical solution for the EU regulation and the scope of such a measure.

8.1. Conclusions

- The effective and frequent enforcement of consumer rights is necessary for guaranteeing market standards, achieving which laid the foundations for adopting EU consumer legislation.
- There is no empirical data available that would substantiate how often consumers decide not to enforce their rights, and what are the reasons for making such a decision. At the moment, answers in this regards can only be intuitive, based on common sense.
- Missing or illegible receipts and guarantee documents pose a hurdle for consumers who want to enforce their rights. Consumers may be unable to prove the fact or time of purchase. They might also be discouraged from taking legal action even when they possess other evidence of the transaction, due to the uncertainty of the outcome of the legal dispute, the costs of the dispute and the length of the court proceedings.
- Private and public e-receipt schemes are still not very well developed in the EU, even though their popularity is growing. Some schemes contain terms of use that could be qualified as discriminatory. This relates in particular to requirements of possession of a certain e-ID or nationality. The use of some schemes is limited by geoblocking to
certain countries. The standardisation of e-receipt schemes at an EU level, including anti-discriminatory regulations on identification requirements, would help avoid potential discrimination in the future.

- E-receipt schemes can contribute to consumer rights being exercised more frequently and in a more efficient and effective manner (as a means of convenience). Depending on the scale, e-receipts might be cheaper and more convenient also for traders, freeing them from the need to provide every customer with paper receipts and store a copy. Digitalisation is also environment friendly, as it reduces use and waste of paper.

- The possible technical solution chosen for regulating e-receipt schemes should resolve the problems that consumers have with paper documents that are lost or fade away. At the same time, it should constitute a proportional burden for traders, and not exert a negative impact on their commercial activity.

- There are two possible solutions for e-receipt regulation. The first one is introducing an obligation to issue digital receipts in transactions with consumers for all traders. Such a solution should be limited to certain groups of transactions, as it could constitute a disproportionate burden for traders, especially SMEs. The second is the standardisation of paper receipts to allow consumers (and traders) to digitalise them using e-receipt software. This solution appears, at first glance, to be less burdensome for traders. Therefore, it could perhaps cover a wider range of transactions. Nevertheless, the choice between these two solutions should be taken after investigating which constitutes a proportionate burden for traders, taking into account technical and financial factors.

- E-receipt schemes also offer the potential for linking them with a wide range of other types of services, concerning customer services, product recalls, product information and instructions, but also information on consumer rights.

- The system of personal data protection is fairly developed in the EU. Any advancement in the area of e-receipt schemes must therefore not only observe the principles already established for personal data protection, but also carefully identify potential new challenges arising in this regards. The same applies to the recent EU legislation on cybersecurity.

### 8.2. Recommendations

- Gathering empirical data on how often consumers decide not to enforce their rights and what are the reasons behind such decisions.

- Empirical research on the nature of cash transactions in the EU, as the data available at the moment focuses mostly on non-cash payments. This would give a proper foundation for proposing targeted actions to increase consumer activity and effectiveness with respect to enforcing consumer rights.

- In particular, it would be advisable to investigate whether consumers are deterred from enforcing their rights as a result of (1) losing the receipt or the receipt fading away; (2) not knowing the rights to which consumers are entitled, especially the content of the conformity regime and the relation between conformity and guarantees.

- Investigating whether consumers (1) would be willing to more often enforce their rights when having access to e-receipts or digital guarantee schemes; (2) see e-receipts or digital guarantees as useful schemes of convenience, especially when combined with other services; and (3) would be willing to give even further access to their personal data in order to receive benefits from e-receipt schemes.
On the basis of the empirical data, analysing the possible scope of a European regulation of e-receipt systems, and investigating technical solutions that could form the basis for such a regulation.

The general information duties under the Consumer Rights Directive, in particular the duty to inform, in addition to a reminder of the existence of a legal warranty, on the existence and the conditions of commercial guarantees, could be supplemented by a duty to link this information to e-receipts. In sectors where full harmonisation applies, the trader could be obliged to provide a harmonised form on legal warranties and to link it to any e-receipt.

Determining which types of products consumers typically have problems with when enforcing their non-conformity and guarantee rights, and consequently the possible scope of products to which a digital guarantee scheme might apply.
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