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## Information Obligation as a Balancing Tool in the Context of Active and Assisted Living

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**Abstract.** This contribution aims to present information obligation as an important balancing tool in the context of Active and Assisted Living (AAL). The importance of being informed is emphasised in economics, social life, and law. In the context of AAL, there is a potential informational imbalance, which has three aspects: 1. The market position of the consumer. 2. Processing of personal data. 3. Understanding of technologies. Those imbalances may influence the perception of AAL and its acceptance by people. An information obligation may be a proper tool to solve the problem of informational imbalance. Therefore, two key European legal acts, the General Data Protection Regulation and the AI Act, proposed in 2021, establish various information obligations. Those obligations must be carried out effectively. The three most crucial consequences of the acts are as follows: 1. In case of a legal dispute concerning the information obligation, the burden of proof is on the provider of the product. 2. Providers of the AAL systems should deliver information in an intelligible way. 3. The form in which information is given shall be harmonised to enhance the comparability of products. This does not have to be done by legal regulation, but can be implemented by the industry itself (in a form of technical standards or a code of best practices). Experiences from the field of European banking and investment law may be used to effectively fulfil information obligation in the context of AAL. In the conclusions, practical consequences of the role of information obligation will be discussed. The reflection takes stock of three aspects of information obligation as a balancing tool: 1. Its importance. 2. Its sufficiency. 3. The most needed improvements.

**Keywords:** Active and Assisted Living, information obligation, data protection, EU law

### 1 Introduction

Access to the proper information in the context of Active and Assisted Living (AAL) is not only a matter of ethics and values, but also a crucial requirement of users, guaranteed by law. Potential users of AAL need to have access to information allowing them to understand the system, and how it can impact them. Lack of such information

may make them feel vulnerable in relation to providers of AAL. One of the possible tools to answer that problem is information obligation.

The current contribution aims, firstly, to highlight the importance of information obligation in the fields of law, society, and economics. Secondly, potential informational imbalances in the context of AAL will be identified. In the third step, information obligation in General Data Protection Regulation (GDPR) [1] and the Artificial Intelligence Act (AI Act), [2] two European legal acts crucial for the AAL, will be described. Special attention will be given to the requirement of effectiveness and its consequences. In the following step, possible inspirations from European banking law will be presented.

While it is widely recognised that information obligation is an essential facet of consumer protection, information obligation has not been analysed as a balancing tool. The proposed perspective aims to present providers and users of AAL as partners whose relationship should be balanced. Such a balance has multiple dimensions, but the informational dimension is a vital one. The conclusions of this paper should allow us to answer whether information obligation is an important balancing tool, if it is sufficient as a mechanism, and what the most needed amendments are in that regard.

## **2 The Relevance of Information Obligation in Economics, Society, and Law**

Information obligation is paramount not only because of its position in the law but also because of its vital economic and social role. Before analysing the legal significance and framework of information obligation, it is beneficial to consider it from the perspective of economic theories, as well as that of social life.

One of the main foundations of classic economics, especially its liberal stream, is the notion of a well-informed and reasonable buyer. [3] That buyer is aware of different prices, features of products, and how they will benefit from choices, so they buy the best quality for the lowest price. Liberal market theories are based on the idea of such a rational consumer and consequently represent idealised models of reality. One way to support the well-functioning of the whole market is to provide proper information to buyers (information paradigm). [4] For those reasons, information obligation is crucial from an economic point of view, as it allows clients to make informed decisions. [5]

Social and user acceptance of technology requires accurate information, which is supported by information obligation. When people do not understand how a system works, they are less willing to accept and use it. [6] As the potential risk is unknown, one cannot accurately assess if the benefits outweigh the risks, or at least balance them out. [7] Those risks may take various forms, such as an improperly functioning system or the stress associated with it, damage to the property, or physical harm. As AAL systems process personal data, many people express their privacy concerns, and consider it a serious risk. [8] People are not aware of their liability, legal rights, and obligations, because many technologies are new. All those sources of distrust towards innovations may be mitigated and even answered by proper information.

A crucial legal principle is that people make decisions, and they bear responsibility for them. In civil law, a lack of information may make an act void. In criminal law, insufficient or incorrect information, when justifiable, may absolve a person of guilt. In consumer protection law, one of the main obligations of a seller is to provide proper information, and to mislead a consumer through false, incomplete, or improperly given information is one of the most common offences. In the field of EU data protection and IT law, information obligation is one of the cornerstones of user protection. Data and information are more and more often recognised as assets, which shall be legally protected, and towards which multiple rights apply. [9] If law develops in that direction, more attention will have to be paid to the problem of distribution of control over data, and access to information.

### **3 Information Imbalance in the Context of AAL**

The problem of informational imbalance occurs in the context of AAL. This problem was not researched yet, and further investigation is needed to provide a comprehensive analysis. For this paper, three aspects of the relationship between providers and users of AAL will be considered. Firstly, it is a classic relationship between consumers and providers. Secondly, the personal data of users is processed, so in their relations with providers they are data subjects, and providers are data controllers. [10] Thirdly, it may be argued that to some extent users of AAL are caretakers or at least people whose life quality depends significantly on the solutions they are using. [11]

AAL providers offer products that aim to support the quality of life. [12] Users may be considered consumers, as they are natural persons who acquire AAL solutions for purposes that are outside of their professional life. Therefore, all informational imbalances between consumers and sellers, well researched in the scholarship, occurs. [13,14] Providers of AAL have significantly more information about the market situation as a whole, than particular users. One of the reasons is that providers are companies that employ multiple people whose work may be diversified. Some employees may work exclusively on market analysis. Users, who are individuals, often senior ones, do not have access to that much market information, nor the ability to process that data. Moreover, providers obtain data on their own by analysing incoming inquiries, consumer preferences, and sells. Depending on applied technologies, providers may have access also to data about users' behaviour.

All AAL solutions largely deal with personal data. [11] Very often it is sensitive data, related to one's health condition and family life. Processing that data is considered by many people as privacy intrusive. [15] AAL users do not process any personal data of the providers, except for some contact details. The imbalance of knowledge results in the imbalance of power, and makes data subjects vulnerable. [16]

Support for the quality of life is the main goal of AAL systems, which may be perceived by many as caregiving. Indeed, if some products increase the level of independence or help to maintain health, it means that without it the user will be in a worse situation. The logic of the functioning of the AAL and applied technologies are quite advanced and sophisticated. [17] It is safe to assume that a significant majority of

potential users will not be able to understand the products offered to them. That makes them less willing to use AAL, as their information needs are not answered. [18] At the same time, providers, as collectives with various experts on board, have a full understanding of their products.

All mentioned imbalances impact users' position, perception of AAL, and its acceptance by people. Providers have significantly more market information, they process the personal data of users, and know how the technology works. That unbalanced power raises the risk of abuse. That is especially vital from the perspective of the EU competition and single market regulations. [19] Many ethical questions may be asked as well. [11] For the further development of AAL, and its acceptance by the users, it is necessary to identify and implement effective balancing tools.

## **4 Information Obligation as a Balancing Tool in the EU Law**

Information obligation is one of the possible tools to answer the problem of informational imbalance. The imbalance between users and providers of AAL systems comes from the different amounts of information each party has, especially when it comes to market data, processing of personal data, and the understanding of technology. In two relevant EU legal acts, GDPR and AI Act, there are multiple information obligations. While GDPR is focused mostly on the context of personal data, and AI Act on the understanding of technology by users, they both address all three mentioned aspects of informational imbalance.

### **4.1 GDPR**

General Data Protection Regulation applies to those computer systems which process personal data. Processing is defined in the GDPR as any operation or set of operations that are performed on personal data, in a particular collection, recording, structuring, storage (art. 4(2)). All AAL technologies are potentially covered by this regulation. [11]

Under the GDPR, the information obligation may be summarised as a duty to inform users that their data will be processed, how and for how long, and what rights they have in that regard (art. 13 and 14). They address mostly the problem of imbalance that arises from the processing of personal data by empowering data subjects in knowledge about what is happening with their data. GDPR grants rights that allow data subjects to keep some control over their data: access to data, rectification or erasure, or restriction of processing of personal data. It is worth noticing that also the imbalance connected with an understanding of technology is addressed by the obligation to disclose whether automated decision-making is involved, what is the logic of the process and its relevance for users (art. 13-14).

Informed consent is one of the legal provisions for the lawful processing of personal data (art. 4(11), 6(1)(a)). The provider must deliver all information needed to make a decision. The content of this rule in the law is not precise but can be deducted from the aim of this norm. The aim is to enable a consumer to understand what they are deciding

and what are the consequences. In the context of AAL, it means not only the processing of personal data but also the functioning of the technology.

#### **4.2 AI Act**

The proposed AI Act set up two similar obligations: transparency of the AI system, and information obligation. The obligation of transparency requires that users can interpret the system's output and use it appropriately (art. 13(1)). Users shall be also informed that they are dealing with the AI system (art. 52), who is the provider of the system and their contact details, and about the basics characteristic of the system, including human oversight measures (art. 13(3)). The conformity of the AI system with the EU rules shall be communicated by the CE marking (art. 49).

Information obligation under the AI Act is focused on the characteristic of a product. The purpose of that is to provide users with data essential for understanding the system. Informational requirements were designed to answer the most common concerns expressed by the people in the research used during the preparatory works. [20] The content of the information obligation under the AI Act addresses partially the imbalance connected with the market position of consumers by implementing well-known CE marking.

### **5 The Requirement of Effectiveness**

It may be argued that information obligation must be carried out effectively. Firstly, it is a consequence of the teleological analysis of information obligation, which aim is to make consumers informed. Secondly, it is expressed in the law that information obligation requires communication to be comprehensive and understandable. For that reason, both GDPR and AI Act establish requirements for content, form, and language. The clear goal of that rules is to ensure that information obligation will be effective. Out of many theoretical and practical consequences of the requirement of effectiveness, three which are the most vital for providing informational balance will be pointed out.

#### **5.1 Burden of Proof**

In a case of a legal dispute concerning the information obligation in the context of consent, the burden of proof is on the provider of the product. Consent, which is one of the central concepts of GDPR, [21] is void if it is not informed. The explicit consent for processing for specified purposes is one of just a few conditions that derogate the general prohibition of processing special categories of personal data, which include data concerning health, genetic and biometric data, racial or ethnic origin (art. 9(1) and 9(2)(a)). All those types of data may be crucial for the effective work of AAL systems. The burden of proof in the matter of consent is extended to prove that the information obligation was fulfilled. [22]

Putting the burden of proof on the provider may contribute to informational balance. [23] Firstly, it can be an additional incentive for providers of AAL systems to comply

with information obligation rules. Secondly, it strengthens consumer protection and gives users a better procedural position in a potential trial.

### **5.2 Intelligibility**

Providers of AAL systems should take care not only to deliver proper information but also to deliver it in an intelligible way. That intelligibility has three aspects: language, lengths, and structure. Simplification and avoidance of technical terms can make the document more understandable for an average consumer, but it goes with the lack of some information, and using somehow metaphorical language. [24] Consumers prefer shorter documents, and they tend to lose focus after a few lines if they know that the document is long. [25] A clear structure, similar for various products, makes information easier to be processed and used by consumers. [26] Moreover, it may be of great benefit to provide some information in a form of graphics or numeral labels. Consumers point out them as the easiest to understand, and they stated that they almost always “read” graphic or numeric labels, while many parts of text are skipped. [24] However, there is a risk that too simplified information will be no longer accurate. [24]

### **5.3 Harmonised Forms**

The form in which information is given shall be harmonised to enhance the comparability of products. To compare things, it is necessary to have their analogous features known. In mathematics and natural sciences, it is also a matter of units. Comparison of two values expressed in different units is possible but requires knowing what the relationship between units is. In the context of the information obligation, it is vital to deliver users information presented in the form that makes it easier to compare two products. It can be achieved by the standardisation of forms by providers. In that endeavour, they may seek the support of scientists, and draw inspiration from other industries, with a long tradition of information obligation regulations.

## **6 Possible Inspirations from EU Banking Law**

Still evolving regulations of information obligation in the financial sector may be a source of inspiration for regulating similar matters in the area of computer systems, including AAL. The first European act regulating that issue was the Prospectus Directive of 1989. [27] The main aim of the prospectus is to deliver a potential investor “necessary information” to make “an informed assessment” (art. 6(1)), and, in conclusion, an informed decision. A prospectus contains information about assets and liabilities, profits and losses, rights attached to the securities, and disclosure of the financial situation of the issuer. That rich and detailed content was criticised, as it provides more information than the consumer expects and can read, resulting in a rational ignorance – a person decides that reading the document is more costly than a potential benefit. [28] To answer those problems, a simplified prospectus was introduced. [29] It accompanies a full prospectus and is a kind of a summary. However, the simplified prospectus has

been criticised because it was often too lengthy, [30] and hardly comparable due to the different format. [31]

A simplified prospectus was replaced with Key Investor Information Document (KIID). [32] While the content is like the previous document, KIID has three important novelties. Firstly, all KIIDs must have the same structure, which should help consumers to compare products. Secondly, it is required to use “clear, succinct and comprehensible”, and “non-technical language” (art. 78(5)). Thirdly, it introduces a synthetic risk and reward indicator, that expresses the riskiness, given on a numeric scale from 1 to 7, and is supplemented by a narrative explanation (art. 8-9).

In 2014, one type of informational document for the whole group of products was introduced Key Information Document (KID), [33] to improve the quality of investor information, [34] and by that to improve the comparability of financial products. [33] The Regulation covers multiple types of “packaged”, complex, financial products based on their features, regardless of their form of construction. The focus is not on the legal or economic similarities, but on the perception of consumers, whether they consider products as similar or not. [35] KID should be drawn up as a short document of a maximum of three sides of A4-sized paper when printed, written in a way that promotes comparability (art. 6 (4)). The order of information is also regulated (art. 8 (3)). Moreover, KID shall be “be clearly expressed and written in a language and a style that communicates in a way that facilitates the understanding of the information” (art. 6 (4)(c)). Those rules have been inspired by the research over KIID, [36] and elaborate consumer testing studies. [24] Rules regulating KID reflect consumers’ preference for short documents with clearly divided sections that include narrative explanations, and examples of potential benefits and loss.

It is hardly possible to already evaluate the effectiveness of KID as it fully replaced KIID only on the 1<sup>st</sup> of January 2022. However, KID illustrates three key factors of the effectiveness of information obligation:

1. Products that may be considered by consumers as similar, substitutional, shall be regulated together, regardless of their technical specification (horizontal approach).
2. An informational document shall be brief, and should have clear, standardised order.
3. Employed language must be understandable for consumers by avoiding technical jargon, and providing examples.

## 7 Conclusions

Information obligation is a valuable tool for consumer protection and supporting informational balance. Because of rules established in the GDPR, providers of AAL that process personal data have to provide users with comprehensive information. It is safe to assume that not all producers would do that without that regulation. Because the information has to be provided effectively, it is in the interest of producers to find the best forms and tools to deliver information.

Information obligation in its existing form is not a sufficient balancing mechanism. The main reason behind this insufficiency is the inability of individuals to use the delivered information. It may be accompanied by rational ignorance when an individual

is overwhelmed by the amount of information presented in an unintelligible way. One potential solution to this problem is to focus more on the form of informational documents. Experience from the field of European financial law suggests paying more attention to the language and structure, as well as to the harmonisation of documents, which facilitates comparability. Numerical labels and graphical information are preferred by consumers, as they are easier to read and understand. However, this approach may lead to oversimplification, raising the question of a trade-off between comprehensiveness and intelligibility.

Further research is required into the content and form of the information obligation. Interdisciplinary studies may help us propose labels or graphic forms that will be accompanied by text documents. Such innovations do not require changes in the law but can be introduced by the industry itself. Cooperation between providers of AAL systems and scientists can produce effective solutions, introduced in the form of guidelines, codes of best practices, or technical standards. Nevertheless, research on information obligation and its effectiveness also ought to be considered by lawmakers. Regulations inspired by the aforementioned research should be included not only in the proposed AI Act but also in future amendments to the GDPR, and other relevant acts.

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