

# Adoption of GDPR – In the Intermunicipal Community of Terras de Trás-os-Montes, Portugal

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Abstract. In the face of rapid globalization and rapid technological evolution, new challenges have emerged in terms of personal data protection, demanding a solid and more coherent protection framework in the European Union (EU). Thus, the European Union created a Regulation, in 2016, with the aim of protecting the privacy of personal data of citizens of the European Union. Thus, in May 2018, Regulation (EU) 2016/679 - General Data Protection Regulation (GDPR) entered into force. Thus, after 6 years since its creation and four since its entry into force, with this research work, we intend, through a survey, to assess the state of implementation and adoption of the GDPR in Local Public Administration in Portugal, focusing on Municipalities inserted in the Intermunicipal Community of Lands of Trás-os-Montes (CIM-TTM). The results are discussed in the light of the literature and future work is identified with the aim of evaluating the implementation of such an important regulation with regard to secrecy, privacy and preservation of personal data.

**Keywords:** General Data Protection Regulation · Municipalities · Data Protection Officer · Information Systems · Security

## 1 Introduction

According to Jornal Económico, "the protection of natural persons regarding the processing of Personal Data is a fundamental right. Rapid technological evolution and globalization have created new challenges in terms of Personal Data protection, demanding a solid and more coherent protection framework in the European Union. Thus, arises the need for a Regulation that introduces important changes on the protection of natural persons regarding the processing of Personal Data, imposing new obligations on citizens, companies and other private and public organizations" [1].

During the entry into force of the GDPR, the Local Public Administration was obliged, in the same way as other companies and organizations, to implement the said regulation, given that the GDPR is a legal imperative of the EU. This represents a real revolution in the rules applicable to the processing of information relating to identified or identifiable natural persons, as such and due to the fact that the Local Public Administration exercises a great proximity relationship with the citizens, it is essential that it prioritizes the privacy of the data from citizens, hence this investigation focuses on the implementation of the GDPR in Portuguese municipalities.

As the universe of study for the 308 Portuguese municipalities would become too time-consuming, we limited our investigation to the municipalities belonging to the Intermunicipal Community of Terras de Trás-os-Montes (CIM-TTM), and in the future it is intended to cover all Portuguese municipalities.

This article, in terms of structure, begins with this brief introduction to the topic that the research work addresses, followed by a review of the literature on the general data protection regulation, as well as its implementation. Section 3 addresses the research methodology, identifying the research universe and the research structure. Section 4 presents the results of the questionnaire, followed by the conclusions of this research work. In this same Sect. 5, the limitations encountered in the course of this work are presented and, therefore, future works are presented.

## 2 General Data Protection Regulation

The GDPR entered into force on May 25, 2018. That date marked a turning point in all European Union member states with regard to data protection. Since then, the GDPR has been the applicable personal data protection legislation in all 27 EU member states, replacing the 1995 Data Protection Directive (95/46/CE of October 24 1995).

The implementation of the GDPR made it possible to unify data protection in the European Union, creating a clear and unique regulation that, in addition to strengthening individual rights, also establishes clear responsibilities for the organizations that collect, that have this data in their possession and that, in addition, also process this data. It reflects the growing concern for privacy and the need for stricter regulations in the face of the increasingly evolving digital landscape.

Since the GDPR deals with personal data, it is important to know first how it defines it. The GDPR defines personal data as "any information relating to an identified or identifiable natural person [2].

This includes any information that can directly or indirectly identify a specific person. Some examples of personal data include names, addresses, identification numbers, contact details, financial information, medical records, photographs, IP addresses, among others" [3].

The GDPR also includes a special category of personal data called "sensitive personal data" or "sensitive data". This data refers to information such as racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data, biometric data for unique identification of a person, health data or data relating to sex life or sexual orientation. It should be noted that this type of "sensitive data" requires different treatment.

As of May 25, 2018, companies are required to demonstrate that they have taken appropriate steps to ensure GDPR compliance. Among these measures, the following stand out [4]:

- "Adopt personal data security mechanisms;
- Clarify and provide training to employees on GDPR rules;
- Assess the need/mandatory appointment of a Data Protection Officer (DPO) or Data Protection Officer, who should be responsible for managing the compliance process within the company;
- Evaluate the need to prepare a Privacy Impact Assessment (PIA), that is, a document that assesses the impact on the processing of personal data, and respective monitoring. This document should contain a risk assessment on the technology and on the processes that support the processing of personal information in the organization, as well as the identification of measures to be adopted to minimize possible risks;
- Mapping and categorization of personal data collected and processed;
- Creation of automatisms that simplify compliance with the Regulation;
- Communicate to the regulatory authorities and the respective data subjects the occurrence of data breach incidents, within 72 h, after a security breach is known".

It is important that all companies, regardless of their size, are fully informed about the requirements of the GDPR and are ready to apply them, as sanctions and the protection of this data are increasingly pervasive [5].

## 3 Research Strategy

The term "research method" or "research strategy" is used when you want to address "a set of procedures, techniques and systematic approaches used to research data in a given study. The research method describes the general strategy that a researcher adopts to answer a series of questions that lead him to reach the proposed objective with the research work [6].

The research method adopted in this study involved the application of a survey and document analysis. The survey was developed with the objective of collecting data directly from the participants, while the document analysis was carried out to examine and extract relevant information from important and pertinent documents that were against the subject under study. This combined approach allowed a comprehensive understanding of the investigated aspects, providing quantitative data through the questionnaire and additional and contextualized information through the analysis of the documents [7, 8].

The survey involved the municipalities under study, that is, the 9 Municipal Councils that make up the CIM-TTM: Bragança, Vimioso, Mirandela, Macedo de Cavaleiros, Miranda do Douro, Vila Flor, Alfândega da Fé and Mogadouro.

The survey's main objective was to provide a clear and direct knowledge of the municipalities belonging to this intermunicipal community, regarding the acceptance and implementation of the RGPD.

As for the document analysis, it was very important as a complement and basis for all the research work, having been transversal to the entire study.

The survey was carried out in two months: August and September 2022. As for the response rate, 8 of the 9 possible responses were obtained, which corresponds to a response rate of 84%.

#### 4 Results

After collecting and processing the surveys, it was possible for us to draw up the final graphs, carrying out the quantitative analysis of the responses, and presenting the results obtained.

Always bearing in mind the fact that the GDPR entered into force four years ago, more precisely on May 25, 2018, and its implementation being mandatory in both the public and private sectors, the municipalities surveyed at the CIM- TTM of the total of 8 municipalities that responded to the questionnaire, only one of them has not yet implemented the GDPR, which corresponds to only 11% (see Fig. 1).

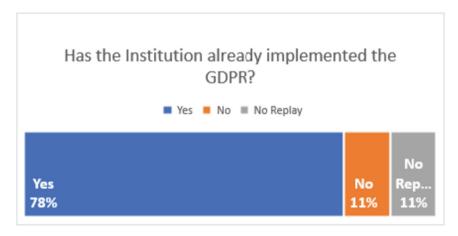


Fig. 1. Adoption of GDPR.

Regarding the CIM-TTM, most of the municipalities that implemented the GDPR did so in an initial phase (see Fig. 2) and 22% did so in the last year, due to the fact that the implementation in the first phase went wrong.

Directly related to the previous data are the data shown in Fig. 3, as we found that the processes triggered by external entities were implemented at an early stage, while those triggered by the municipalities themselves were only implemented this last year.

The reason for adopting the GDPR was another question raised. In this way, there would be three possible reasons, namely through a Legal Imperative, for reasons of Institution Certification or initiative of the municipality itself. As you can see below in Fig. 4, of those who responded, they all implemented the GDPR.

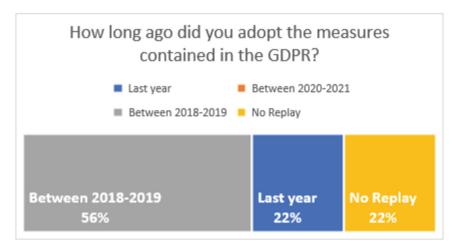


Fig. 2. Time in compliance with the regulation.

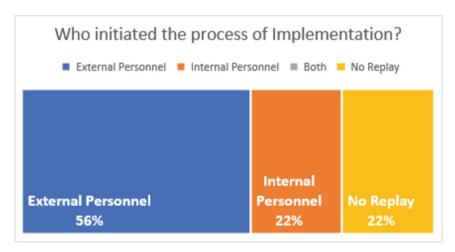


Fig. 3. Who initiated the process of Implementation.

Figure 5 that follows tells us whether there was adequate training or not, so that in most municipalities there was no adequate training, which leads us to deduce that when implementing the GDPR, the municipalities lacked the preparation of an adequate training plan.



Fig. 4. Why was the implementation process developed.

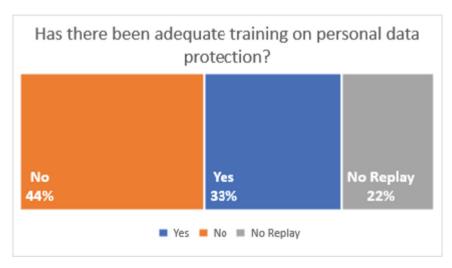


Fig. 5. Training on the adoption of the regulation.

The existing correlation between GDPR and Security is very evident in Fig. 6, as the majority of respondents consider that with the adoption of the GDPR, the data in their institution became more secure, demonstrating the importance that the GDPR attaches to the security of personal data.

This study demonstrated that the Municipalities belonging to the CIM-TTM are concerned with the security of personal data, as the GDPR is implemented in large numbers. It is an excellent finding, but it should be noted that it is not enough to implement the regulation, this was the first step, other aspects must deserve the attention of this CIM from now on, which are:

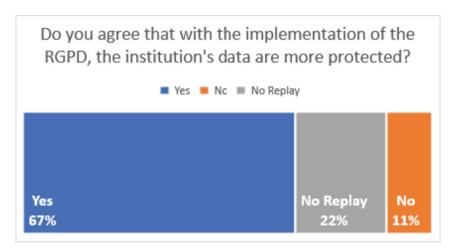


Fig. 6. With the adoption of GDPR, data is more protected.

- Update security and privacy policies;
- Adapt data collection and processing processes;
- Identify the personal data held by the organization;
- Implement security policies;
- Detect data breach incidents;
- Prepare processes to respond to requests from data subjects;
- Validate compliance of existing IT applications with the GDPR;
- Assess the impact of data protection;
- Monitoring;
- Audits.

### 5 Conclusions

The Public Administration must be aware that it needs to fully implement the GDPR.

With regard to the security and protection of personal data, the Public Administration has the obligation to ensure compliance with technical and organizational measures in order to protect these same data, however, for this purpose, it may subcontract an external organization designated as subcontractor, although he has to give guarantees that he applies and complies with the rules set out in the GDPR.

When the topic is personal data, everyone without exception must comply with the provisions of the GDPR. The sanctions for non-compliance with the regulation are high and it is personal and often sensitive data that we are talking about. It is true that the personal data that Municipalities collect from citizens are necessary for the necessary processing that must be carried out within their competences, but it is also true that more and more citizens have or are starting to fall into reality in relation to the disclosure of your data in the most diverse sectors and that this starts to be worrying. Thus, the Local Public Administration and other companies and organizations must have direct support, in order to be able to properly implement the RGPD and thus manage to protect the data of their citizens as best as possible.

According to Oliveira as cited in Lambelho & Mendes, 20019), "In addition, it is important to bear in mind that Local Authorities must combine the obligations arising from the GDPR, with the positions of Commission for Access to Administrative Documents and the National Data Protection Commission, without losing sight of the Code of Administrative Procedure" [9].

It should be noted that one of the positive impacts that the GDPR added was undoubtedly greater legal uniformity, as well as new rights were granted to the holder, namely the right to be forgotten and portability.

After completing this investigation, we concluded that most municipalities have already implemented the GDPR, despite the fact that there are still municipalities that have not done so.

Given the sample size limit of 9 municipalities, we can consider this to be a limitation of this study, but given that the responses to the survey were 84%, this limitation is thus more diluted and not as impactful.

However, and as is evident in these research works, there is always more to be achieved and the whole is never studied, so, as future work and since this study focused on the implementation of the RGPD, it was interesting to know if these municipalities had already had to communicate to the competent authorities any violation of the stipulations in the regulation.

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### References

- Jornal Económico. A importância do regulamento geral de proteção de dados, May 4 2017. https://jornaleconomico.pt/noticias/a-importancia-do-regulamento-geral-de-protecaode-dados-154198
- European Parliament and Council. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, Official Journal of the European Union 2016 (2016)
- 3. Ryz, L., Grest, L.: A new era in data protection. Comput. Fraud Secur. 2016(3), 18-20 (2016)
- Primavera. Regulamento Geral de Proteção de Dados, Saiba como adaptar a sua empresa! (2022). https://pt.primaverabss.com/pt/tudo-que-precisa-saber-sobre-o-rgpd/. Accessed 14 Nov 2022
- Lopes, I.M., Oliveira, P.: Implementation of the general data protection regulation: a survey in health clinics. In: 13<sup>a</sup> Iberian Conference on Information Systems and Technologies, vol. 2018-June, pp. 1–6 (2018)
- Hudson, L., Ozanne, J.: Alternative ways of seeking knowledge in consumer research. J. Consum. Res. 14(4), 508–521 (1988)
- Martins Junior, J.: Trabalhos de conclusão de curso: instruções para planejar e montar, desenvolver e concluir, redigir e apresentar trabalhos monográficos e artigos (2008)
- 8. Stake, R.: The Art of Case Study Research. Sage Publications, Thousand Oaks (1995)
- Lambelho, A., Mendes, J.B.: O RGPD e o impacto nas organizações: 6 meses depois. Atas (IPL, Ed.; pp. 1–154). X Congresso Internacional de Ciências Jurídico-Empresariais (2019). www.cicje.ipleiria.pt