

# **GDPR** Implementation in Local Government **Administration in Poland and Republic** of Lithuania

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**Abstract.** The year 2018 was a breakthrough year for all European Union countries due to the need to adapt the organization to the management of personal data in accordance with the General Data Protection Requirements (GDPR). The Regulation specified some important obligations that should be implemented in all entities processing personal data in all sectors, including public administration offices. The aim of the article was an analysis and evaluation the degree of preparation for the implementation of this Regulation in the offices of local government administration in Poland and Republic of Lithuania. As part of the work on the article, a research was conducted using the Computer Aided Web Interview (CAWI) method and data from 472 offices of selfgovernment administration was collected. The results of the research were subjected to statistical analysis using the Mann-Whitney U Test. On the basis of the data the process of implementing changes resulting from the GDPR was assessed and some significant problems in the implementation of these changes were identified.

**Keywords:** Personal data protection · General Data Protection Regulation (GDPR) · Local government administration

### **Introduction and Literature Review**

The Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation, GDPR) has been in force since the 25th of May, 2018 [26, 29, 35]. The Regulation has changed the approach to the personal data

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protection system, introduced a number of significant changes and unified the rules on the protection of personal data in all EU countries [7, 10, 16, 19]. The GDPR specified some important obligations that should be implemented in all entities processing personal data. The process of adapting the organization to changes resulting from the Regulation certainly required appropriate preparation and enough time to implement these changes [30].

The implementation of GDPR in various European countries has become the subject of a number of studies (e.g. [4, 6, 14, 21, 25]), especially comparative law research [20]. A number of recommendations and - more or less formalized - good practices regarding GDPR awareness, readiness and preparation for implementation in various organizations, in particular commercial companies, were also developed (see e.g. [1, 12, 13, 25, 35]). The issues of the GDPR's maturity are also being considered, including different commercial GDPR maturity models (e.g. KPMG GDPR Discovery and Maturity Assessment - see [15], GDPR Maturity Framework - see [27], The Forrester Privacy And GDPR Maturity Model - see [11] etc.). The concept of maturity is understood in the same way as process maturity in software engineering or management sciences (see e.g. [2, 22, 28]).

#### 1.1 Local Government Administration in Poland

The local government administration in Poland has been based on three levels of subdivision since 1999 [31]. The area of Poland is divided into voivodeships (wo-jewództwa in Polish), which are further divided into districts (powiaty in Polish), which in turn are divided into municipalities (gminy in Polish). Major cities have the status of both the municipality and the district.

There are currently 16 voivodships in Poland, 380 districts (including 66 cities with district rights) and 2,478 municipalities in Poland [9]. The Constitution of the Republic of Poland specifies in art. 169 s. 1 that units of local self-government shall perform their duties through constitutive and executive organs. In municipalities there are an elected council as well as a directly elected mayor (known as "prezydent" in large towns, "burmistrz" in most urban and urban-rural municipalities, and "wójt" in rural municipalities). In districts - an elected council ("rada powiatu"), which elects an executive board ("zarząd powiatu") headed by the "starosta". In voivodship - an elected assembly called the "sejmik", and an executive board ("zarząd województwa") with the leader that is called "marszałek". Organizational units whose purpose is to help the heads in the tasks defined by the law of the state are as follows: municipal offices, districts offices and marshal's offices [18, 32–34].

### 1.2 Local Government Administration in the Republic of Lithuania

Lithuania is a unitary state with two levels of government – the central government and local governments. Lithuania has one tier of local self-government composed of 60 municipalities (savivaldybė in Lithuanian), which have the right to self-rule exercised through their municipal councils and mayors.

Members of municipal councils and mayors (since 1st March 2015) are elected by direct universal suffrage for four years term. As the municipal council and mayor are representative institutions, the director of a municipal administration plays an executive role. Since the director is appointed by the municipal council upon the mayor's proposal, this position has the status of a civil servant of political (personal) confidence.

The sixty municipalities vary in size from 3,224 to 547,484 citizens, with an average of 47,000 and in area from 40 km<sup>2</sup> to 2,218 km<sup>2</sup>, with an average of 1,088,3 km<sup>2</sup> [24].

The country used to have another administrative tier between the central government and local authorities – county (apskritis in Lithuanian) administrations. In 2010, all ten county administrations were abolished. Currently, counties serve as territorial and statistical units. The territory of the Republic of Lithuania currently comprises 10 counties: Alytus, Kaunas, Klaipeda, Marijampole, Panevezys, Saulai, Taurage, Telsai, Utena, Vilnius [5, 23, 24].

## 2 Research Questions, the Aim and Method

Prior to the entry into force of the GDPR regulations, doubts were raised as to whether all EU countries would be able to prepare national legislation and implementing acts on time (see e.g. [8, 17]). We decided to investigate the situation in local government administration offices because it can be expected that such specific type of organizations are commitment to complying with the law, so their readiness for GDPR should be relatively high and, to some extent, reflect the situation in the whole country.

The research questions for this study were:

- 1. What are the differences in preparation for the implementation of GDPR between Polish and the Lithuanian offices of local government administration?
- 2. How the maturity of processes of the implementation of GDPR were assessed by the employees of particular offices responsible for it in both countries?
- 3. What were the main issues and weaknesses identified in the process in both countries?

The aim of the article was an analysis and evaluation the degree of preparation for the implementation of this Regulation in the offices of local government administration in Poland and Republic of Lithuania. As indicators of this degree, self-assessment declared by officials and formal procedures/strategies and metrics known from various maturity models were adopted.

The survey was conducted using Computer Aided Web Interview (CAWI) method between March and April 2018 in Poland and June and July in Republic of Lithuania. The survey invitation was sent by email to all local government administration offices in both countries. It was explained that the obtained data would be used in an aggregated form only for the statistical summaries and analyses in scientific publications. The questionnaire was anonymous. The survey questionnaire in Polish and Lithuanian has been available for several weeks on the webankieta.pl website [17].

### 3 Results

Obtained 462 responses from offices of local government administration in Poland: 6 offices at the voivodeship level (marshal offices), 66 at the districts level (district offices) and 390 at the municipalities level (municipal offices). Only 10 responses from local government administration of Republic of Lithuania were obtained (see Table 1). Table 2 presents the numbers of employees in the surveyed offices.

	Population	Sample
Poland – total offices	2874	462 (16%)
Voivodeships	16	6 (38%)
Districts	380	66 (17%)
Municipalities	2478	390 (16%)
Republic of Lithuania - municipalities	60	10 (17%)

Table 1. Types and sources of support. Source: own survey, [9] and [24].

**Table 2.** Numbers of employees in the offices. Source: own survey.

Numbers of employees	Number of responses	
	Poland	Republic of Lithuania
Up to 50 people	279	0
51 to 100 people	104	0
101 to 500 people	59	10
501 to 1,000 people	7	0
1,001 to 2,000 people	7	0
2,001 to 3,000 people	4	0
Over 3,000 people	2	0

Among 462 offices of local government administration in Poland, only 96 formally defined implementation strategy for the GDPR (objectives, deadlines, responsible persons, procedures), 12 of them provided a link or attached a file that includes strategy specification, while among 10 offices of local government administration in the Republic of Lithuania only two offices had the subject strategy developed and one of the respondents attached a file with the ordinance (see Fig. 1a).

For the above data, the Mann-Whitney U Test [3] value was calculated. The asymptotic significance value was 0.952, which means that there are no statistically significant differences between the two groups (Polish offices and Lithuanian offices) in assessing the readiness to introduce changes resulting from the GDPR.

Only 32 offices in Poland (less than 7%) defined the indicators of readiness/maturity of the GDPR implementation. Two of the surveyed Lithuanian offices defined such measures, but did not specify the types of measures (see Fig. 1b).

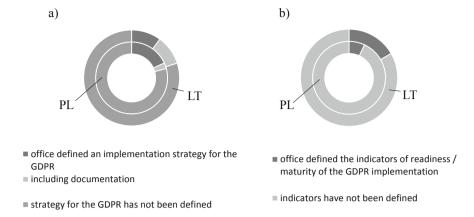
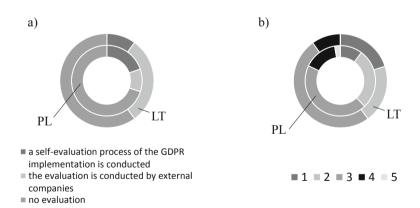


Fig. 1. (a) Implementation strategies for the GDPR, (b) Indicators of readiness/maturity of the GDPR. Source: own survey.

Respondents were also asked if the evaluation process of the GDPR implementation is conducted at the office? In Polish offices, there were 139 affirmative answers, including 92 in self-evaluation (in addition, 32 offices indicated that they had evaluation tools). In other units, the assessment is conducted by external companies. In the case of offices from Lithuania, the evaluation is conducted in 4 units (in one office evaluation is conducted independently, but the office does not have any evaluation tools, and in three cases through an external company), (see Fig. 2a).



**Fig. 2.** (a) Evaluation process of the GDPR implementation, (b) Degrees of office readiness for implementing changes resulting from the GDPR. Source: own survey.

Similarly to the previous question, there are no statistically significant differences in the assessment of the readiness to introduce changes resulting from the GDPR (the significance value of the asymptotic the Mann-Whitney U Test was 0.5).

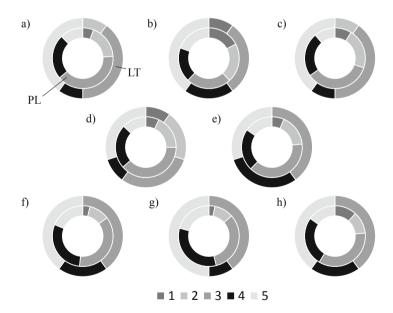
Next question concerned the assessment degree of office readiness for implementing changes resulting from the GDPR? (on a scale of 1 to 5, where 1 - no readiness, 5 - all GDPR requirements have been already implemented). Results are shown on Fig. 2b.

The significance value of the asymptotic the Mann-Whitney U Test in this case was 0.548, which means that also in this case there are no statistically significant differences between the two surveyed groups.

In the next question respondents were asked to specify the level of difficulty in implementing changes resulting from the GDPR to the office on a scale of 1 to 5 (1 - very easy, 5 - very difficult):

- Extended rights of the data subject,
- Data Protection Officer position,
- Information obligation and consent to data processing,
- Notification of a personal data breach obligation,
- Records of processing activities,
- Data protection by design and by default,
- Data protection impact assessment,
- Limitations on profiling.

Results for offices from Poland and Republic of Lithuania are shown on Figs. 3a-h.



**Fig. 3.** The assessment of difficulty in implementing changes resulting from the GDPR: (a) Extended rights of the data subject, (b) Data Protection Officer position, (c) Information obligation and consent to data processing, (d) Notification of a personal data breach obligation, (e) Records of processing activities, (f) Data protection by design and by default, (g) Data protection impact assessment, (h) Limitations on profiling. Source: own survey.

On the other hand, the use of external companies' services was significantly different: among Polish offices, only 47% declared using such support, and 80% from Lithuanian ones (see Fig. 4a). The significance value of the asymptotic the Mann-Whitney U Test in this case was 0.037, which means that there are statistically significant differences between the two surveyed groups.

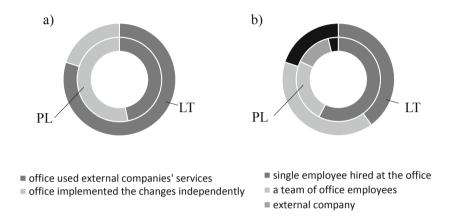


Fig. 4. (a) The way of implementing changes, (b) Responsibility for ensuring the security of personal data. Source: own survey.

In more than half of the surveyed offices in Poland, one person is responsible for ensuring the security of personal data, a special team of employees is set up in approximately 25% of offices, about 15% – external data security. In the Lithuanian responses from offices were spread evenly between the "single employee" and "a team of office employees" options. In two cases, the respondents indicated that no one is responsible for such duties (see Fig. 4b).

In Polish offices, only 5% declared that in the last year (before the implementation of the GDPR) there were cases of personal data breaches, while in 21 cases the number of instances of such cases ranged from 1 to 5, and in 3 offices from 6–20. On the other hand, in almost half of the surveyed offices in Lithuania there were breaches of personal data protection. In all cases, 1–5 incidents were reported (see Fig. 5a). Also in this respect, the difference measured by the Mann-Whitney U Test between the two groups was statistically significant (p < 0.05).

The next questions concerned information about the support received from higher organizations in implementing the GDPR (e.g. training, information materials). In Poland, about 1/3 of the surveyed offices received such assistance, mainly in the form

of training, information materials, materials from websites, brochures, support in interpreting regulations, participation in conferences, webinars, using publications and consultations. Half of the surveyed offices in Lithuania received such support in the form of: trainings, seminars and workshops, as well as in financial form (see Fig. 5b).

The next question concerned training for employees in the scope of changes resulting from the GDPR. In the Polish offices: 16% of offices have trained all employees, 44% have conducted such training, but not all employees have been trained yet and 40% of offices did not conduct any training on this subject. In Lithuania, the majority of offices indicated the option that "not all employees were trained yet". One third of the offices did not conduct any training (see Fig. 5c).

Respondents were asked to indicate the biggest concern (in their opinions) in preparing the office for the GDPR implementation. They mentioned the following problems (grouped in legal, financial, organizational, essential and human aspects), see Table 3.

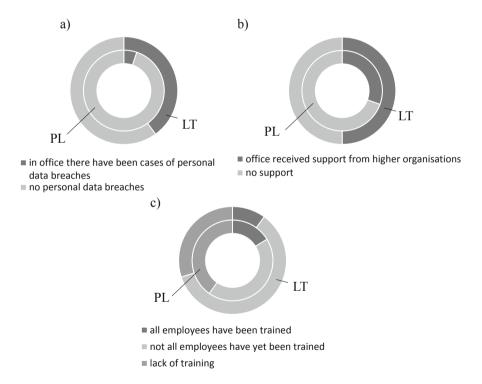


Fig. 5. (a) Personal data breaches, (b) Support from higher organizations, (c) Training for employees. Source: own survey.

Types of problems	Poland	Republic of Lithuania
Legal	The Polish Personal Data Protection Act has not been adopted yet (during the research), the rules are unclear, the absence of specific legal acts, implementing regulations and specific guidelines	Many ambiguities in the regulations
Financial	The lack of sufficient financial resources for the GDPR implementation	The lack of sufficient financial resources
Organizational	The lack of time, excess of duties, lack of support from superior authorities, problem in finding qualified staff, very few trainings	Lack of qualified trainers who could lead trainings, lack of an advisory institution, failure of the management to pay attention to serious processes and serious infringements, insufficient management commitment, lack of interest on the part of the Government
Essential	Problems with the procedures implementation, preparation of documentation, risk analysis and assessment, implementation of tasks resulting from changes introduced in the GDPR, technical barriers, lack of tested solutions	Inappropriate assessment of GDPR
Human	Resistance and reluctance against changes, lack of awareness of employees and management staff, lack of sufficient knowledge about GDPR	Dissatisfaction with additional work, lack of understanding of the importance of personal data security

Table 3. Types of problems indicated by offices. Source: own survey.

### 4 Discussion and Conclusion

The survey covered slightly more than 16% of offices both in Poland and Republic of Lithuania. Since the offices agreed to participate voluntarily, due to the fact that the method of representation was not met, the results cannot be generalized to the entire population, so as to statistically estimate the amount of the error. Accordingly, the Mann-Whitney U Test values calculated above should also be regarded as indicative. On the other hand, the relatively high percentage of the sample combined with the relatively high repeatability of the results obtained allows for the formulation of some general conclusions.

First of all, in both countries the way of implementing changes resulting from the GDPR seems to be – from the point of view of management sciences – not enough

mature. A vast minority of offices in both countries did not conduct this process based on a formalized strategy and did not define measures to determine the degree of readiness for the GDPR implementation.

The self-assessment of the degree of preparation of offices to introduce changes resulting from the GDPR was also similar in both countries: on the five-point Likert scale, the central value was chosen the most, the average answer for Poland was 2.73 and for Lithuania – 2.5 which can be interpreted as very moderate optimism.

Similar problems were also found in the implementation of the GDPR identified by respondents in both countries. The difference was evident in the answers in two questions: for support from external companies (significantly higher in Lithuania) and the number of incidents (significantly fewer incidents in Poland). Because it is difficult to expect fewer attacks against information security in offices in Poland (a large part of the attacks on the Internet is non-directional), it can be expected that this phenomenon is largely due to poorer identification or classification of events related to information security in Poland, not actually a lower number of attacks.

The research indicated that both among the surveyed offices in Lithuania and in Poland, the readiness to implement changes resulting from the GDPR on the eve of its introduction was low, and the manner of its introduction was not enough mature. Employees of offices in both countries similarly identified the reasons for this state and problems occurring during implementation.

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