

WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY  
FACULTY OF ELECTRONICS

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FIELD: Computer science (INF)  
SPECIALIZATION: Internet Engineering (INE)

## MASTER OF SCIENCE THESIS

Personal Data Processing Support System for  
the Company in the Face of New RODO  
Regulation Requirements

System wsparcia przetwarzania danych  
osobowych w firmie wobec nowych wymagań  
wynikających z rozporządzenia RODO

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GRADE:



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# Chapter 1

## Purpose and scope of work

This work presents issues related to personal data processing in the face of General Data Protection Regulation (GDPR/RODO). Upcoming changes in regulations oblige any entity that processes data to meet certain requirements. This entity is related to, among others, enterprises and companies. The more data is being processed in such entity, the more complex structure is required to manage this data. For medium and large enterprises, amount of data being processed requires the use of advanced IT systems. In the face of RODO, such IT system should also support meeting new standard of personal data protection.

In this work will be described the value which personal data represents, origins of personal data protection, legal state in Poland before RODO, what is RODO, what it stands for and scope of changes in regulations. The available solutions will be analyzed and there will be also described proposed prototype of RODO supporting module for existing GRC system.

### 1.1 Description of the problem

On the 25th of May 2018, RODO will take effect. Introduced changes can be divided in two ways, these more revolutionary, and these less revolutionary. These less revolutionary are basis legal concepts or rules of personal data processing which didn't actually change since current state. These more revolutionary are connected with rules to practical application [3]. These rules assumes increasing self-reliance, but also responsibility of data administrators.

New regulation determines way of approaching to data processing called *risk based approach*. It assumes that first thing that we do during gathering and using personal data is to analyze risk that could be caused for people which data concern. Another thing is *accountability rule*. It assumes that any data administrator has a duty to introduce appropriate technical and organizational measures applying compliance with regulation requirements, but at the same time it does not describe neither any best practices nor minimal technical standards. When RODO will take effect, every administrator will have to independently decide which securities should be implemented. New regulation indicate instruments which may support administrator in making decision. This instruments are codes of conduct and certification mechanisms approved by GIODO, guidelines from European Data Protection Board or data protection officer. Besides, the ISO norms could be used as a source of practical knowledge [3].

*Accountability rule* also assumes demonstration by the administrator of compliance with the law. It could be realized, for example, by documentation of implemented legal instruments described in regulation or by usage of approved codes of conduct mentioned above.

# Chapter 2

## Personal data protection

The emergence of new technologies, over time, totally replaced traditional, manual methods of data processing. The changes have come so far that they have caused a threat to the individual. This threat was difficulties to control the flow of information about this individual and its content. It led to the occurring a problem with entering to the scope of human privacy and dilemma how to protect a man against interference in his life.

### 2.1 Personal data as a value

In accordance with applicable regulations, personal data are *any information regarding natural person, allowing to determine the identity of this person* [2]. The new RODO regulation is defining personal data more detailed, as *any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person* [1]. The second definition is much more specific, because it lists more exactly core characteristics of every natural person, considering also his virtual identity. What changed the most, over time, between these two legal acts is consideration of transferring a significant part of human life to the network and creating a copy of your real identity there.

### 2.2 Genesis of personal data protection

### 2.3 Historical acts of international law

### 2.4 Status in Poland before RODO comes into force







## Chapter 3

# RODO

- 3.1 Zakres przetwarzanych informacji
- 3.2 Nowe obowiązki informacyjne
- 3.3 Uprawnienia osób, których dane dotyczą
- 3.4 Zgoda na przetwarzanie danych osobowych
- 3.5 Zabezpieczenia
- 3.6 Dokumentacja przetwarzania danych
- 3.7 Privacy by design i privacy by default
- 3.8 Ocena skutków dla ochrony danych
- 3.9 Dane osobowe dzieci
- 3.10 Automatyczne przetwarzanie danych oparte na profilowaniu
- 3.11 Naruszenia ochrony danych
- 3.12 Inspektor danych osobowych
- 3.13 Transgraniczne przetwarzanie danych
- 3.14 Powierzenie danych
- 3.15 Podnoszenie wiedzy na temat ogólnego rozporządzenia

# Chapter 4

## Analiza komercyjnych rozwiązań z zakresu przetwarzania danych osobowych

4.1 RSA Archer

4.2 Microsoft GDPR

4.3 SAP



## Chapter 5

# Prototyp modulu smartGDPR wspierający zgodność z RODO

5.1 Rejestr danych przetwarzania

5.2 ...



# Chapter 6

## Wnioski





# Chapter 7

## Podsumowanie



# Bibliography

- [1] Art.4 rozporządzenia parlamentu europejskiego i rady (ue) z dnia 27 kwietnia 2016 r. w sprawie ochrony osób fizycznych w związku z przetwarzaniem danych osobowych i w sprawie swobodnego przepływu takich danych oraz uchylenia dyrektywy 95/46/we (ogólne rozporządzenia o ochronie danych)[...] (Dz.Urz. UE, L 119/1).
- [2] Art.6 ustawy z dnia 29 sierpnia 1997 r. o ochronie danych osobowych (Dz.U. nr 133, poz.882 i 883).
- [3] GIODO: Reforma przepisów - aktualne prace. <https://www.giodo.gov.pl/pl/1520281/10255>. Dostęp: 2018-22-03.