

LF-TEEC 2017
**Living the Future: International Conference on Technology,
Engineering, Education & Computer**

**RISK MANAGEMENT IN THE HUMAN RESOURCES
DEPARTMENT OF A ROMANIAN ELECTRICITY COMPANY**

Dana Corina Deselnicu (a)*, Gheorghe Militaru (b)

*Corresponding author

(a) University Politehnica of Bucharest, 313 Splaiul Independentei, sector 6, Bucharest, Romania,
d_deselnicu@yahoo.com

(b) University Politehnica of Bucharest, 313 Splaiul Independentei, sector 6, Bucharest, Romania,
ghmilitaru.militaru@gmail.com

Abstract

The present paper presents the risk management process conducted in the biggest Romanian electricity company, Enel Distribution Muntenia S.A. Following a thorough analysis, eleven main risks were identified in the Human Resources (HR) Management Department. For the evaluation of the identified risks, the risk index method was employed, and the experts from the HR department of the company assessed their probability and impact. The evaluated risks were then plotted on the risk matrix in order to determine their generic mitigating strategies. The findings show that most of the risks that the company is facing have both a low probability and low impact, making them tolerable for the company. Still, there are some risks that are critical, asking for urgent and efficient mitigation methods. In addition to the generic risk mitigation strategies, the paper advanced specific mitigation solutions for each assessed risk.

© 2017 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Risk management, risk assessment, risk index, risk matrix, risk strategy.



1. Introduction

The risk generally refers to conditions or circumstances that affect all organizations and which, if they materialize, have an unfavourable impact on the company's activity. At present, there is no generally accepted definition for risk (Kaplan, R. S. & Mikes, A., 2012). From the literature, we find that the concept of risk is used as an expected value, a probabilistic distribution, an uncertainty or event with potential negative effects (McNeil, Frey, Embrechts, 2015). According to ISO Standard 31000, risk can be defined as the effect of uncertainty on objectives (International Organization for Standardization, 2017). The effect may be positive, negative, or a deviation from the expected. The Institute of Risk Management defines the risk as the combination of the probability of an event and its consequence (Institute for Risk Management, 2015). Consequences can range from positive to negative. The Institute of Internal Auditors defines risk as the uncertainty of an event occurring that could have an impact on the achievement of the objectives (IIA, 2016). The risk is measured in terms of consequences and likelihood.

Risk is inherent for almost all activities of every company, with direct and strong effects on the company's results (Colson, 1995). Therefore, risk management is of major importance for companies operating on global markets (David, 2011). Taking into account that nowadays the companies have to perform more and more varied activities, thus involving more or less controllable risks, the risk management has to take multidimensional valences and responsibilities, becoming increasingly complex (Becker, & Smidt, 2016).

Risk identification and assessment is a current significant problem any company, an important step toward its stable development by critically evaluating its environment, its development strategy, and choosing the best solutions to manage its resources, opportunities and threats (Ivascu, Cioca, 2014). The risk is not just an academic subject that has attracted increasing interest (Aven, & Renn, 2010); it has a direct economic impact (Deselnicu, 2005, 2014). Companies are experiencing significant losses or even go bankrupt because they ignore or misjudge risks (Moraru, Babut, G. B., Cioca, L. I., 2014), calculate uncertainties incorrectly (Deselnicu, Swiger, Albu, Doman, 2010) or put too much confidence in their ability to master risky situations (Deselnicu, Matveev, 2014).

Risk management is the process of identifying, analysing and reporting risk factors, in order to treat/ mitigate/ avoid them (Deselnicu, 2014). This process focuses on all possible scenarios of risk management, i.e. on "maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events that may occur" (Project Management Institute, 2016). The present paper is aiming at conducting a risk management assessment process in one of the most important Romanian electricity companies.

2. Company description

Enel is Italy's largest energy company and Europe's second-largest utility company, and has been listed since 1999 at the Milan Stock Exchange. Enel produces and distributes electricity in Europe, North America and Latin America. After the acquisition of Endesa, together with Acciona, Enel is present in 22 countries, having about 52 million consumers of electricity and natural gas.

Enel is the Italian company with the largest number of shareholders (1.7 million) and the second natural gas distributor in Italy, with over 2.5 million consumers and a market share of 10%. The company

has 76,760 employees worldwide and owns hydropower, thermoelectric, nuclear, geothermal, wind and photovoltaic power plants.

S.C. Enel Distribution Muntenia S.A. is the distribution company that supplies over 1194000 users. In Romania, at present, the distribution license is granted for three administrative areas: Bucharest, Ilfov County and Giurgiu County (Enel Energie Muntenia S.A., 2017). All three companies have the same leadership, the same organization, and the same processes and activities.

3. Problem Statement

In order to conduct the risk management process within the Human Resources Department of S.C. Enel Distribution Muntenia S.A., it is necessary to establish structures and designate the responsible persons to ensure the carrying out of the specific activities. For this, each head of an organizational technical structure has to designate a person within the structure that he / she is in charge of, namely the Risk Officer.

All those responsible for the risks at the level of the technical organizational structures are assembled at the level of S.C. Enel Distribution Muntenia S.A. in a risk management team (EGR) that analyses and monitors the major risks of the company. Identifying risks is a responsibility of all staff within the HR Department; every employee who identifies a potential risk has to fill in a Risk alert form, and handle it to the Risk Officer, who further analyses the form together with the head of the organizational structure the risks reported, identifies the preventive activities which are necessary in order to mitigate the risk, decides which actions will be taken and appoints the responsible persons for the implementation. At the same time, the deployment of the proposed preventive actions is monitored and recorded in the Risk monitoring form.

Through this process, the following eleven main risks were identified in the Human Resources Department of Enel Distribution Muntenia S.A.:

R1. Insufficient knowledge of HR legislation: insufficient documentation, ignorance of legislative changes.

R2. Lack of staff and salary documents: inappropriate archiving of personnel files, inoperative back-up procedure, heavy search process.

R3. Delays in reporting deadlines, or reporting errors: There are some errors in the HR reports, or the reports are submitted after the deadlines have passed. Some of the causes include separated HR databases, non-centralization of all information, cumbersome processing of information.

R4. Slow updating of system data regarding personnel: The personnel information is not regularly updated in the HR system and the copies of documents are not submitted to the human resources inspector (new employees, new positions after promotion / appointment, salary indexing, change of grades/ professional steps, passage in another seniority trance)

R5. Misrepresentation of presence and leaves: The presence and leaves of employees are not monitored accurately. Causes include: deficiencies in completing the attendance sheets; not submitting the attendance sheets in time; incomplete filling in of the presence lists; missing information about the periods of absenteeism; incorrect recording of periods of rest or holiday leave; the documents for the holiday leave is incomplete or wrongly filled in.

R6. Misrepresentation of suspension periods or individual labour contracts: The suspension periods and the labour contracts are not registered and monitored accurately. The causes include: the documents on the suspensions or individual labour contracts are incomplete or are submitted late; the suspension of the individual labour contract documents (decisions, additional acts) are prepared incorrectly or late by the human resources inspector.

R7. Incorrect filling and recording of the social contributions / income taxes / insurance statements: Such official tax statements and forms are sometimes incorrectly processed and submitted. The causes include changes in labour legislation which are not timely known by HR employees.

R8. Lack of documents in the personnel file: The personal documents of the employees are missing from their file. Possible causes include the absence of table of contents for each file, and the inefficient filing system.

R9. Failure to establish the responsible persons for different errors: The HR manager cannot always identify the persons responsible for work errors. Causes include deficiencies in the work descriptions for different positions and the defective work division in the HR department.

R10. Employees' failure to properly fulfil the attributions: The employees of the HR department sometimes do not fulfil their work attribution properly. The possible causes include deficiencies in the recruitment and selection processes and the lack of a professional training program.

R11. The job title list (staff establishment) is not regularly updated: The HR department does not have an up-to-date staff establishment according to the latest changes (based on the outcomes of the recruitment/ promotion/ organizational change processes) in the organization. One of the causes is the lack of an IT system for correlating the job title list (staff establishment) with the changes in the payroll system, as well as changes regarding the personal data, function, salary, bonuses etc.

4. Research Questions

The paper aims to answer the following research questions: what are the risks that affect the Human Resources Department of Enel Distribution Muntenia S.A., how can they be quantified, what are the most critical ones, and how can they be addressed in order to be mitigated?

5. Purpose of the Study

The present paper intends to conduct a thorough risk management process in the Human Resources Department of the electricity company Enel Distribution Muntenia S.A. operating in Romania in order to advance appropriate mitigation actions for each of the identified risks.

6. Research Methods

For the evaluation of the identified risks, the risk index method (McNeil, Frey, & Embrechts, 2015) was chosen. The risk index provides a clear illustration of the severity of any risk based on its probability of materialization, and on its impact in case the risk materializes. The risk index was calculated as:

$$R_i = P \times I \tag{1}$$

where: R_i = Risk index;
 P = Probability that the risk materializes;
 I = Impact (consequence) if the risk materializes
 with P, I taking integer values between [1...10].

In order to conduct this evaluation, six experts from the HR department, including the manager of the department were asked to assess the probability and impact of the previously identified risks. The results of their evaluation are presented in Table 01:

Table 01. Risk evaluation

No. crt.	Risk title	Probability	Impact	Risk index
1	R1. Insufficient knowledge of HR legislation	5	3	15
2	R2. Lack of staff and salary documents	4	3	12
3	R3. Delays in reporting deadlines, or reporting errors	4	4	16
4	R4. Slow updating of system data regarding personnel	6	4	24
5	R5. Misrepresentation of presence and leaves	3	3	9
6	R6. Misrepresentation of suspension periods or individual labour contracts	4	2	8
7	R7. Incorrect filling and recording of the social contributions / income taxes/ insurance statements.	4	4	16
8	R8. Lack of documents in the personnel file	5	3	15
9	R9. Failure to establish the responsible persons for different errors	6	6	36
10	R10. Employees' failure to properly fulfil the attributions	4	2	8
11	R11. The job title list (staff establishment) is not regularly updated	4	6	24

As it can be observed, the calculated Risk index for the identified risks ranges between 8 to 36, showing that the Human Department is generally facing low to medium risks.

In order to be able to assess more precisely the identified and previously quantified risks (Doherty, 2000), they can be plotted to the risk matrix (Figure 1):

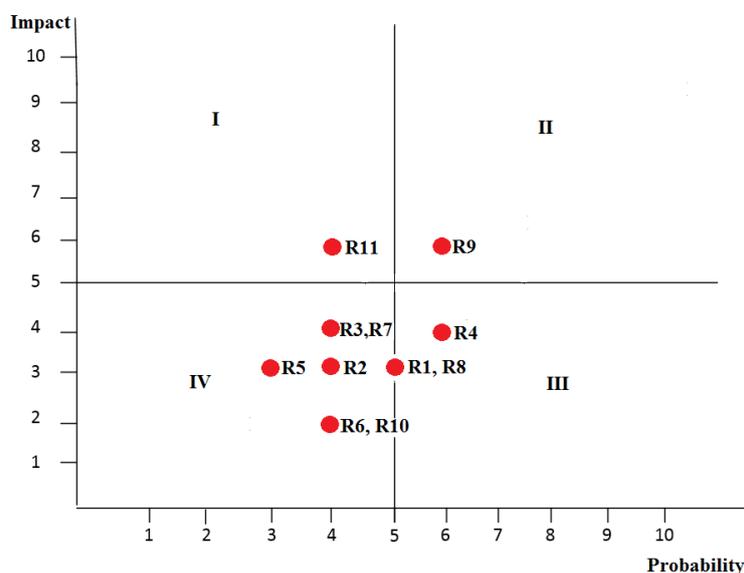


Figure 01. Risk matrix

Most of the identified risks (R2, R3, R5, R6, R7, R10) fall into the fourth quadrant of the matrix, while the other risks fall into the third quadrant (R1, R4, R8), the second quadrant (R9) and the first quadrant (R11). This shows that most of the risks that the company is facing have both a low to medium probability and impact, making them easy tolerable for the company.

7. Findings

The analysis of the risk index indicate that the most threatening risks are the failure to establish the responsible persons for different errors, the slow updating of the job title list (staff establishment) and of the system data regarding personnel. These risks would severely affect the company’s operations and cannot be tolerated. The least significant risks that the company faces are the misrepresentation of suspension periods and individual labour contracts, and the employees’ failure to properly fulfil the attributions.

The risk management literature recommends four risk mitigation strategies for the management of all types of risks (Hopkin, 2010), in close connection with their position on the risk matrix (Figure 1): the transfer of risks to a third party (quadrant I), the termination (elimination) of risks (quadrant II), the treatment of risks (quadrant III) and the toleration of risks (quadrant IV). According to these recommendations, the management of the identified risks in the HR department of Enel Muntenia Distribution S.A. should encompass the following generic risk strategies (Table 02):

Table 02. Risks management strategies

Risk no.	Risk title	Risk management strategy
R1.	Insufficient knowledge of HR legislation	Treat
R2.	Lack of staff and salary documents	Tolerate
R3.	Delays in reporting deadlines, or reporting errors	Tolerate
R4.	Slow updating of system data regarding personnel	Treat
R5.	Misrepresentation of presence and leaves	Tolerate
R6.	Misrepresentation of suspension periods or individual labour contracts	Tolerate
R7.	Incorrect filling and recording of the social contributions / income taxes / insurance statements.	Tolerate
R8.	Lack of documents in the personnel file	Treat
R9.	Failure to establish the responsible persons for different errors	Terminate
R10.	Failure to properly fulfil the attributions	Tolerate
R11.	The job title list (staff establishment) is not regularly updated	Transfer

The critical risk (R9), namely the failure to establish the responsible persons for different errors in the HR department should be addressed first, and the activities generating it should be terminated to the extent possible, because it poses a significant threat to the company.

In addition to the generic risk mitigation strategies discussed above, the company must take specific actions, adjusted to each risk situation, in order to contain and manage the identified risks (Table 03):

Table 03. Risks mitigating actions

Risk	Mitigation actions
R1. Insufficient knowledge of HR legislation	<ul style="list-style-type: none"> • Constantly informing the employees on newly issued legislative acts; • Analysing the flow of information.
R2. Lack of staff and salary documents	<ul style="list-style-type: none"> • Reanalysing the archiving procedure; • Reviewing the back-up strategy; • Updating the work files of the archivers.
R3. Delays in reporting deadlines, or reporting errors	<ul style="list-style-type: none"> • Acquisition of a specific IT program; • Optimizing the current databases.
R4. Slow updating of system data regarding personnel	<ul style="list-style-type: none"> • Verifying the correlation between the job title list (staff establishment) and the salary system; • Immediate transmission of the documents that modify the payroll system (individual labour contracts, additional acts etc.).
R5. Incorrect record of presence and leaves	<ul style="list-style-type: none"> • Elaborating a procedure for the preparation, recording and handing over of collective attendance sheets; • Developing a procedure for granting the holidays leave, sick leave, study leave, unpaid leave; • Modifying the payroll IT system to compute, record, manage and monitor the vacation periods by employee/ department.
R6. Incorrect record of suspension periods or individual labour contracts	<ul style="list-style-type: none"> • Elaborating a procedure for the efficient recording of suspension periods and labour contracts.
R7. Incorrect filling and recording of the social contributions/ income taxes/ insurance statements.	<ul style="list-style-type: none"> • Continuous monitoring of the specific legislation.
R8. Lack of documents in the personnel file	<ul style="list-style-type: none"> • Table of Contents for each personnel file; • Paging the documents
R9. Failure to establish the responsible persons for different errors	<ul style="list-style-type: none"> Elaborating a procedure for identifying work duties per employee; Updating the work specifications.
R10. Failure to properly fulfil the work attributions	<ul style="list-style-type: none"> • Updating the job specifications and presenting them to the employees upon hiring.
R11. The job title list (staff establishment) is not regularly updated	<ul style="list-style-type: none"> • Establishing and updating the organizational structure of the company (organigram) and the job title list.

It can be observed that the company has a lot of risk mitigation actions that can decrease the probability, the impact or both these criteria of risks, in order to contain and reduce them.

8. Conclusion

The paper presented the risk management assessment conducted in the most important Romanian electricity company. S.C. Enel Distribution Muntenia S.A. is the largest energy distribution company in Romania. Following a thorough analysis, eleven main risks were identified in its Human Resources Department. For the evaluation of the identified risks, the risk index method was employed, and the experts of the department assessed their probability and impact. The evaluated risks were then figured on the risk matrix in order to determine their generic mitigating strategies.

Most of the risks that the company is facing have both a low probability and impact, making them tolerable for the operations of the company. The most threatening risk are the failure to establish the responsible persons for different errors, the slow updating of the job title list (staff establishment) and of the system data regarding personnel. These risks would severely affect the company's operations and cannot be tolerated, making it imperative to be addressed with effective counteracting measures.

In addition to the generic risk mitigation strategies, specific mitigation solutions were proposed for each assessed risk. By implementing the risk management strategies proposed in the paper, S.C. Enel Distribution Muntenia S.A. will be able to perform the ongoing supervision of its Human Resources department risks, in order to maintain them at an acceptable level that does not threaten its operational performance, its employees and shareholders.

Acknowledgments

This work has been funded by University Politehnica of Bucharest, through the “Excellence Research Grants” Program, UPB – GEX. Identifier: UPB–EXCELENTA–2016; research project title: Improving the performance of small and medium – size enterprises in Romania by implementing the integrated risk management (Acronym: PERFORM), contract no. 55/2016..

References

- Aven, T., Renn, O. (2010). Risk management and governance: Concepts, Guidelines and Applications. Springer – Verlag, Berlin.
- Becker, K., Smidt, M. (2016). A Risk Perspective on Human Resource Management: A Review and Directions for Future Research, *Human Resource Management Review*, 26(2), 149-165.
- Colson G. (1995). *Gestion du Risque*, E.A.A., Lille.
- David, F. R. (2011). *Strategic Management: Concepts and Cases*, 13th ed., Prentice Hall, New Jersey.
- Deselnicu D. C., Swiger J., Albu L., Doman C. (2010). Leadership Performance in Romanian Companies. Case Study, *Proceedings of The 3rd International Conference on Advanced Materials and Systems*, 1, 509-514, Certex Press, Bucharest.
- Deselnicu, D. C. (2005). Practical tools for change: A Software Support for Self-assessment of the Business Excellence Implementation Process in Romanian Enterprises, *Proceedings of the 4th International Conference on Management of Technological Changes*, 2, 17-23, Democritus University of Thrace Press, Chania.
- Deselnicu, D. C. (2014). *Risk Management*, Niculescu Publishing House, Bucharest.
- Deselnicu, D. C., Matveev, A. (2014). The Emergence of Quality Culture, *FAIMA Business & Management Journal*, 2(2), 51-59.
- Doherty, N. A. (2000). *Integrated Risk Management: Techniques and Strategies for Reducing Risk*, McGraw – Hill, New York.
- Enel Energie Muntenia S.A. (2017). Website, available from: <https://www.enel.ro/enel-muntenia/en.html>, accessed: 5 April, 2017.
- Hopkin, P. (2010). *Fundamentals of Risk Management: Understanding, Evaluating, and Implementing Effective Risk Management*, Kogan Page, London.
- Institute for Internal Auditors (2016). Retrieved from IIA website, available from: <https://na.theiia.org/>, accessed: 5 April, 2017.
- Institute for Risk Management (2016). Retrieved from IRM website, available from: <https://www.theirm.org/>, accessed: 5 April, 2017.
- International Organization for Standardization (2017). *ISO 31000: 2009 Risk management – Principles and guidelines*.
- Ivascu, L., Cioca, L. I. (2014). Opportunity Risk: Integrated Approach to Risk Management for Creating Enterprise Opportunities, *Advances in Education Research*, 49, 77-80.
- Kaplan, R. S., Mikes, A. (2012). Managing Risks: A New Framework, *Harvard Business Review*, 90(6).
- McNeil, A. J., Frey, R., Embrechts, P. (2015). *Quantitative Risk Management: Concepts, Techniques and Tools*, Princeton University Press, Princeton.

Moraru, R. I., Babut, G. B., Cioca, L. I. (2014). Rationale and Criteria Development for Risk Assessment Tool Selection in Work Environments, *Environmental Engineering and Management Journal*, 13(6), 1371-1376.

Project Management Institute (2016). Retrieved from PMI website, available from: <https://www.pmi.org/>, accessed: 5 April, 2017.