Special Economic Zone «Astana -New City»

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The term globalization has only become commonplace in the last two decades, and academic commentators who employed the term as late as the 1970s accurately recognized the novelty of doing so (Modelski 1972). At least since the advent of industrial capitalism, however, intellectual discourse has been replete with allusions to phenomena strikingly akin to those that have garnered the attention of recent theorists of globalization. Nineteenth and twentieth-century philosophy, literature, and social commentary include numerous references to an inchoate yet widely shared awareness that experiences of distance and space are inevitably transformed by the emergence of high-speed forms of transportation (for example, rail and air travel) and communication (the telegraph or telephone) that dramatically heighten possibilities for human interaction across existing geographical and political divides (Harvey 1989; Kern 1983). Long before the introduction of the term globalization into recent popular and scholarly debate, the appearance of novel high-speed forms of social activity generated extensive commentary about the compression of space.

The unabated proliferation of high-speed technologies is probably the main source of the numerous references in intellectual life since 1950 to the annihilation of distance. The Canadian cultural critic Marshall McLuhan made the theme of a technologically based “global village,” generated by social “acceleration at all levels of human organization,” the centerpiece of an anxiety-ridden analysis of new media technologies in the 1960s (McLuhan 1964, 103). Arguing in the 1970s and ‘80s that recent shifts in the spatial and temporal contours of social life exacerbated authoritarian political trends, the French social critic Paul Virilio seemed to confirm many of Dewey's darkest worries about the decay of democracy. According to his analysis, the high-speed imperatives of modern warfare and weapons systems strengthened the executive and debilitated representative legislatures. The compression of territory thereby paved the way for executive-centered emergency government (Virilio 1986).

The very important pattern of Globalization is the creation of the **Special Economic Zones (SEZ).** The term **Special Economic Zone** (**SEZ**) is commonly used as a generic term to refer to any modern economic zone. In these zones business and trade laws differ from the rest of the country. Broadly, SEZs are located within a country's national borders. The aims of the zones include increased trade, increased investment, job creation and effective administration. To encourage businesses to set up in the zone, liberal policies are introduced. There policies typically regard investing, taxation, trading, quotas, customs and labor regulations.

A **Special Economic Zone** (**SEZ**) is a geographical region that has economic and other laws that are more free-market-oriented than a country's typical or national laws. "Nationwide" laws may be suspended inside a special economic zone. The category 'SEZ' covers a broad range of more specific zone types, including Free Trade Zones (FTZ), Export Processing Zones (EPZ), Free Zones (FZ), Industrial Estates (IE), Free Ports, Urban Enterprise Zones and others. Usually the goal of a structure is to increase foreign direct investment by foreign investors, typically an international business or a multinational corporation (MNC). Following the Chinese examples, Special Economic Zones have been established in several countries, including Brazil, India, Iran, Jordan, Kazakhstan, Pakistan, the Philippines, Poland, and South Korea, Russia, Ukraine, United Arab Emirates, Cambodia, North Korea. Currently, Puno, Peru has been slated to become a "Zona Economica" by its president Alan Garcia.

Astana has been the capital of Kazakhstan since 1997, and is the country's second largest city (after Almaty, the former capital) with an officially estimated population of 814,401 as of 1 January 2014. It is located in the north part of Kazakhstan, within Akmola Province, though it's administrated separately from the province as a federal city area. Politics and government are the main economic activities in the capital, which also forms a Special Economic Zone. Since the move, Astana has seen one of the world's greatest building projects, as oil money has been spent on government buildings, a massive home for the president, a mosque, and numerous parks and monuments. The project is designed to make the city the center not only of Kazakhstan but of all Central Asia.

The main goals of the paper are to identify and analyze

- the economic condition of Astana
  the creation of the Special Economic Zone
- priority activities in the territory of the Special Economic Zone.

Since the early days of moving the capital from Almaty to Astana Head of state of Kazakhstan N. Nazarbaev clearly identified the major tasks for the accelerated development of new capital and the improvement its appearance and infrastructure. Construction of the new capital of Kazakhstan has become one of the most grandiose scale projects in the former Soviet Union republic. One of the basic regulations, ushered in the arrangement of the young capital wasthe Presidential Decree "On the establishment of a special economic zone in Astana - New City" dated 29 June 2001.

1. The main goals of SEZ "Astana - new city" were defined as the following: accelerated development of Astana by attracting investment and use of advanced technologies in the construction, as well as modern infrastructure.
2. development of highly efficient, including high-tech and competitive industries,
3. development of new products.

However, the Decree identified priority activities in the territory of SEZ which include the following:

- manufacture of other non-metallic mineral products
- manufacture of machinery and equipment
- manufacture of railway locomotives and rolling stock
- construction and commissioning of infrastructure, administrative and residential complexes in accordance with the design and estimate documentation
- construction and commissioning of hospitals, schools, kindergartens, museums, theaters, universities and secondary schools, libraries, palaces schoolchildren, sports complexes.

According to the customs legislation of the Customs Union under a free economic zone (hereinafter - SEZ) there are the limitations of the territory with a special legal status in relation to the rest of the territory and favorable economic conditions for domestic and foreign entrepreneurs. Within the framework of the Customs Union, the SEZ is regulated by the agreement on free (special, particular) economic zones in the customs union territory and free customs zone procedure dated June 18, 2010.

The customs procedure of the SEZ provides placement and use of goods within the SEZ or part without payment of customs duties and taxes, and without application of non-tariff regulation on foreign goods, and without application of prohibitions and restrictions in respect of goods going through the customs union.

The Law of the Republic of Kazakhstan "On special economic zones" dated July 21, 2011 № 469-IV SEZ is defined as part of the territory of the Republic of Kazakhstan with precisely defined boundaries, in which a special regime of special economic zones for priority activities, regulates relations arising in establishment, operation and management of special economic zones in the Republic of Kazakhstan. Since its creation the territory of SEZ "Astana - new city" has repeatedly expanded and today is 7634.71 hectares. The territory includes the SEZ Industrial Park №1 with an area of 598.1 hectares. Industrial Park №2 with an area 2 433.1 hectares and the urban light rail line with an area 72.41 hectares.

The new administrative and business center located mainly on the left bank of the Ishim is 6 530.8 hectares.

The Industrial Park was established to develop and manufacture high-tech and competitive products, machinery and equipment, household electrical appliances, rubber and plastic products, electrical equipment of pulp, paper and paperboard, motor vehicles, trailers and semi-trailers, railway locomotives and rolling stock, electronic parts, etc. The active work of the state to attract investors led occupancy of Industrial Park №1 by 90%. Therefore, in 2012 the boundaries were extended and developed by SEZ Industrial Park area № 2 with an area of 433.1 hectares. In order to implement the objectives of SEZ, there was the creation of a favorable investment climate. The establishment of SEZ "Astana - new city" provided a positive economic effect for the state and for potential investors.

It should be noted that the customs authorities in the first days of SEZ "Astana - new city" actively participated in and contributed to the common cause of building facilities in the SEZ by taking the necessary measures to create favorable conditions for traders in the customs clearance of goods imported for production in the SEZ site, by rapidly addressing issues related to customs procedures, and by to ensuring strict compliance with the control of customs and other legislation SEZ residents. In order to ensure effective customs control on SEZ at the Department of Customs Control of Astana city, a special customs post "SEZ" Astana – zhana kala" was implemented. Statistics shows only 3848 customs declarations, and more than 140 tons of goods, including machinery, building materials were formalized by customs post "SEZ" Astana – zhana kala" in 2013.

Around 159.8 million tons of goods worth a total of 83.7 billion tenge were formalized for the period of SEZ.

The first issue of concern to the residents of SEZ – is the fast and efficient customs clearance of imported goods. Previously, customs clearance took at least one day, and when there were various technical problem or discrepancies documents and declarations were delayed - up to 10 days.

As a result of teamwork of employees of the customs post, active and effective cooperation with state bodies, SEZ residents worked out all the issues that "impeded" the process of customs clearance. Today, this process at the customs post of "Astana - zhana kala" takes only two hours.

It should be noted, that imported goods passing through the customs post of "Astana - zhana kala " are not subject to customs and taxation, nor to other taxes.

Provided benefits significantly affect the final cost of the completed projects and manufactured goods.

Astana today is a symbol of modern Kazakhstan, its overall success, prosperity and sustainable future. SEZ to attract foreign investment, development of foreign economic relations and economy as a whole was created drawing on international best practices in our country.

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SOVEREIGN BOND SPREADS AND CREDIT DEFAULT SWAP PREMIA IN THE EUROZONE: COINTEGRATION AND CAUSALITY

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This article presents an analysis of the possible relationship existing between the spreads of sovereign bonds and the premia of Credit Default Swaps (CDS), in order to determine if they are useful tools for measuring the sovereign risk either separately or taking into account the joint evolution of their values. Data corresponding to nine countries belonging to the Eurozone, in the period 2008-2013, have been used. The empirical methodology applied in the paper is related to the degree of cointegration and tests of causality. In general, a relationship of cointegration between the two measures is found for almost all of the countries analyzed. When we study the causality, according to Granger, for these variables, the CDS premia are found to be the cause of the risk spreads in the majority of cases. In the light of the data and their corresponding interpretation, we can conclude that dealings in the CDS market contain clear and fairly useful information on the sovereign risk of a country, and that CDS trading has become a leading rather than a lagging market with respect to the determination of the prices of Public Debt bonds.

Key Words: Sovereign debt, spread, Credit Default Swap, cointegration, causality.

JEL: H63 G24 E49 F37

1. Introduction

Our objective in this study has been to estimate the relationships of equilibrium that may exist between the spreads of sovereign bonds and the premia of Credit Default Swaps or CDS. In particular, the questions to be answered are: Do these two parameters converge in spite of the numerous frictions that arise in the market? and Which is the better measure of sovereign risk?

The determining factors of the differentials of sovereign bonds are:

Liquidity premium: the liquidity of a bond depends, to a large extent, on the circumstances of the market, and they change over the course of time; the greater the liquidity of a bond, the lower will be its return and the higher its price. In situations of economic uncertainty, investors tend to focus their portfolios towards

safer and more liquid assets; the effect of this is to reduce the liquidity of those assets considered higher risk (sovereign bonds of countries in difficulties), thus increasing their profitability. Thus they become, in turn, even more unsafe.

Credit risk spreads: compensation demanded by investors given the perceived possibility of default of the issuer. The differentials of Public Debt can be approximated to the premia of the CDS.

Therefore, the principal objective of this study is to analyze the degree of relationship that exists between the spreads of the Public Debt and the premia of the CDS, in order to determine if they are useful tools for measuring the sovereign risk either separately or taking into account the joint evolution of their values. Data of nine European countries have been used. In particular, those listed in the S&P/ISDA Eurozone Developed Nation Sovereign CDS Index (See table 1). Given the ten countries, nine are analyzed using as benchmark the bonds and CDS of Germany.

This study is organized as follows:

- Previous literature
- Analysis of correlation
- Empirical methodology and results:
    - Degree of cointegration
    - Tests of causality
- Conclusions

2. Previous literature

There have been many econometric studies conducted to determine statistically the relationships of equilibrium between the spreads of sovereign bonds and the premia of Credit Default Swaps or CDS, considering whether or not the frictions in the market prevent their convergence.

Hull, Predescu and White (2004) examined firstly the relationship between the differential of credit default swaps and the yield of bonds; and secondly performed a series of tests to analyze how the announcement of the Moody´s rating affected the changes in the CDS premia.

Blanco, Brennan and Marsh (2005) studied the relationship between the CDS and the risk spreads at the corporate level, and determined that the prices of the CDS are substantially higher than the credit differentials if the study period is long.

Alexopoulou, Andersson and Georgescu (2009) analyzed the price of credit risk in CDS and in corporate bonds, taking the European markets as reference; they reached the conclusion that a relationship existed between these two markets in the long term.

Attinasi, Checherita and Nickel (2009) focused their study on the determinants of the increase of the risk spreads in Europe from the start of the crisis in 2007. They put special emphasis on the fiscal changes and on the new government measures for the reduction of fiscal deficits.

Fontana and Scheicher. (2010), studied the relation between CDS premiums and spreads of sovereign bonds for ten countries of the Eurozone.

Broto, Pérez-Quirós and Sebestyén (2011) analyzed the same relation between CDS and bonds for ten countries including some of the Eurozone and the United States, United Kingdom and Japan.

Arce, Mayordomo and Peña (2011) continued the previously-cited investigations, and studied whether the markets for bonds and CDS reflect the same information, in the Eurozone.

For a good approach to the sector of sovereign CDS is very interesting the Global Financial Stability Report (2013) of the International Monetary Fund.

In general it can be said that, with the increasing turbulence in the sovereign debt markets, and as the risk spreads and CDS premia rise rapidly, interest in studies of this subject will also increase. We are, however, still in the early stages in respect of the published scientific literature on these matters, and we may suppose that this literature will be developed much further with time.

3. Analysis of correlation

Before starting the empirical study, a graphical analysis will be made of the variables with a view to finding a possible correlation between the two. The countries to be considered are: France, Italy, Spain, Belgium, the Netherlands, Austria, Finland, Ireland and Portugal, as already stated in table 1.

Constituents	Weights	S&P Ratings
France	23	AA
Germany	22	AAA
Italy	22	BBB
Spain	11	BBB-
Belgium	7	AA
Netherlands	6	AA+
Austria	4	AA+
Finland	2	AAA
Ireland	2	BBB+
Portugal	1	BB

Table 1. S&P/ISDA Eurozone Developed Nation Sovereign CDS Index
Source: ISDA and S&P. Index Weights data (March 2012), S&P data (March 2014).

The CDS premiums are obtained of daily data, from January 2008 to December 2013, using the Thomson Reuters Datastream database. The maturity term of these contracts is 10 years and, although the market for 5 year CDS is more active and therefore more liquid and efficient, this term is taken in order to match with the

spreads. The data obtained are not continuous: there are some periods for which there is no information. This discontinuity is a consequence of the lack of transparency of this market which is not organized or OTC (Over The Counter).

We use two methods for calculating the spread of the bonds. In relative terms, i.e., taking the difference between the yield of the bonds and that of the German bond or bund and in absolute terms where the premium of the CDS of the German bond is added to the spread of the bond in question, with the object of approximating the price of a notional risk-free asset, in accordance with the following formula:

Spread of the bond of country A = (the interest rate of the 10-year bond of country A, minus the interest rate of the 10-year German bond), plus the 10-year German CDS.

Other authors use different alternatives when calculating the bond spreads and the CDS premia. At this respect, Arce et al. (2011) employ the differential between the 5-year bond yields and that of the German bond of the same maturity. Accordingly they estimate the premiums of the 5-year CDS.

Fontana and Scheicher (2010) use the spread between the 10-year bond yields and the 10-year swap rate because the swap curve is a good measure of the risk-free rates in opinion of many market participants. As for the CDS they utilize the 10 year horizon but with the contracts in dollars.

Broto et al. (2011) make use, when calculating the spreads, of the 10-year bonds and the German bond of the same maturity. As for the CDS they employ the 10-year contracts but also nominated in dollars.

The use of CDS nominated in dollars is a common practice in the Eurozone because, in case of a sovereign default, a depreciation of the euro could be possible. In our study we also use CDS nominated in dollars.

The different ways of calculating the bond spreads and the CDS premia make difficult a comparison among the results of the studies about the risk of sovereign bonds.

Figures 1A to 9A shows the evolution of the CDS premia and the spreads of the 10-year bonds of Public Debt of the nine countries studied using the classical or relative approach. The degree of positive correlation existing between these two markets can be deduced from these graphs; that is, the two variables grow in the same direction.

Figures 1B to 9B also show the evolution of the CDS premia and the spreads of the 10-year bonds of Public Debt using the absolute approach, i.e, adding the CDS premia on the German bond.

In the figures 1A to 9A we can see that, in general, the CDS premia are above the bond spreads, such are the cases of France, Italy, Spain, Belgium, the Netherlands, Austria and Finland. The exceptions are Ireland and Portugal. Given that the basis is defined as the difference between the CDS premia and the bond spreads, a positive basis is found in the Eurozone, between sovereign bonds and their CDS.

This coincides with the results of other authors as Fontana and Scheicher (2010), Arce et al (2011) and Broto et al (2011).

In figures 1B to 9B we can observe as the basic change because we are adding the German CDS premia to the differences between the yields of the bonds. As a result, the basis are negative for the nine countries analyzed, i.e, the bond spreads are greater than the CDS premia because we are now intending to measure the yield differentials against a truly risk-free asset.

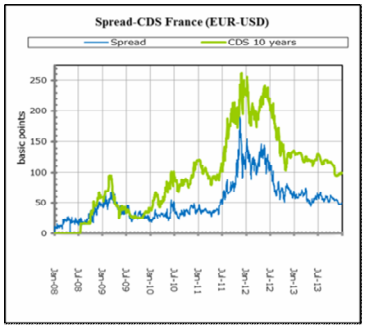
As can be observed in the above mentioned figures, both instruments of measurement of credit risk move in the same direction and, up to the year 2008, remained at very low levels and with a base close to zero; after this date, coinciding with the start of the financial crisis, both values began to increase, causing the cost of financing the debt of these European countries to increase.

The coefficients of determination (R^2), according to figures 1A to 9A are fairly high in almost all countries, except for the Netherlands and Finland. But according to figures 1B to 9B, the cofficients are all high and enhanced with respect to those in the first set of figures. This may be due to the fact that using the absolute approach, for calculating the bond spreads, captures better the credit risk of the bonds bringing it near to the CDS premia. But the existence of correlation does not imply causality nor cointegration. These are aspects that will be analyzed in the next part.

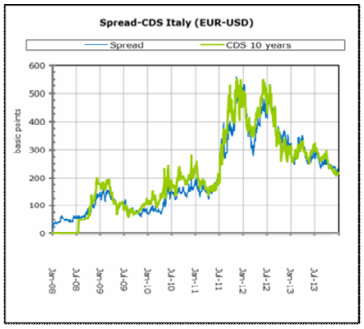
The spreads or differentials of the bonds with respect to the risk-free assets and the CDS premia are variables that indicate the risk of default of the same debt of reference; therefore, it would be logical to think that a close correlation must exist between them. From the empirical models proposed on this subject, it can be deduced that these indicators are closely linked, especially when their behavior is analyzed over an extended time horizon[1]. It should not be forgotten that, in an environment without frictions, the two measurements should tend to coincide, although the dynamics of the markets demonstrate that such a situation is very far from reality[2]. As already stated, designating the difference as the base, if the CDS premium is greater than the spread, the base is considered positive and, in the contrary case, negative.

[1] Duffie and Darrell (1999), Hull and White (2004), Blanco et al. (2005), Zhu (2006) and Alexopoulou et al. (2009).

[2] Mayordomo et al. (2009) studied the persistent deviations between the CDS premia and the bond spreads between 2005-2009.



CC: 0.91
R2: 0,82



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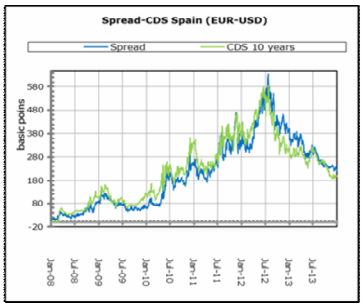
R2: 0,95



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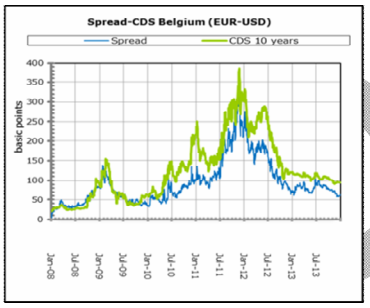

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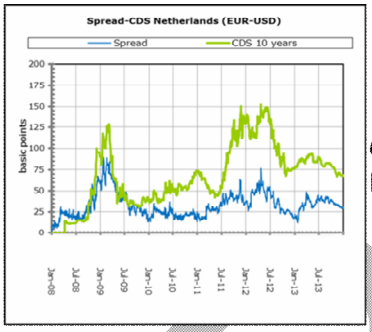

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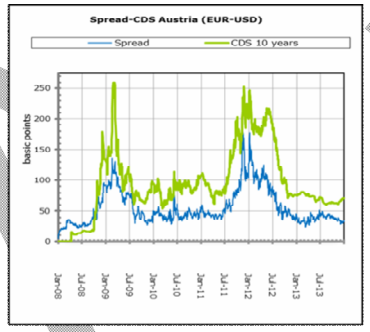
R2: 0,38



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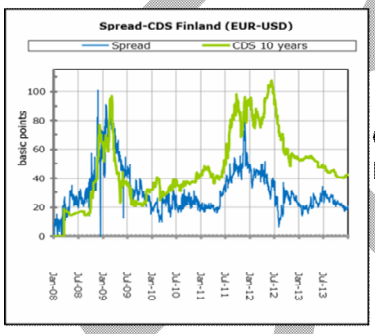
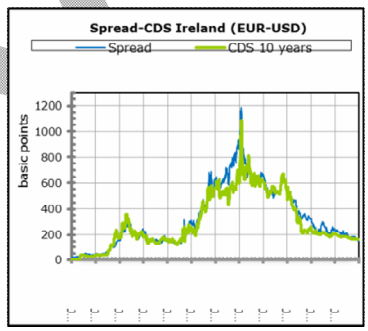
R2: 0,81



CC: 0.46
R2: 0,21



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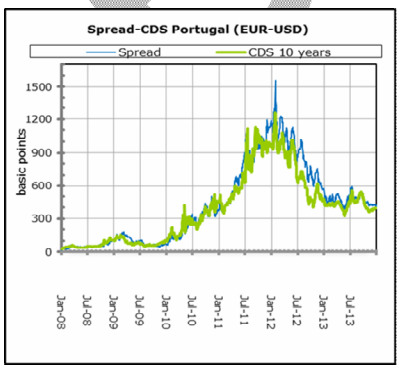
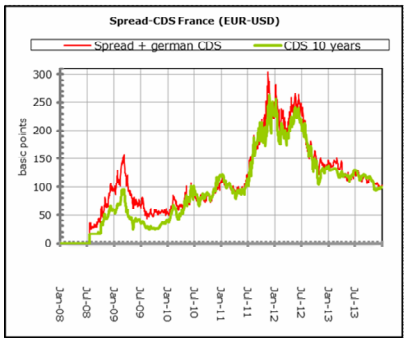


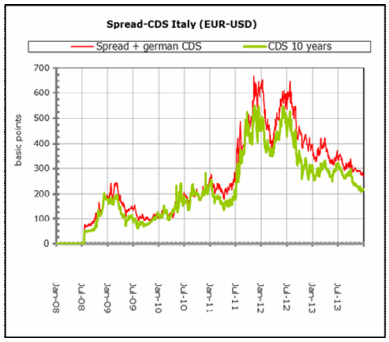
CC: 0.98
R2: 0,97

Figures A. Relative Approach.

Figure 1. Spread of Public Debt and CDS premia in France.
Figure 2. Spread of Public Debt and CDS premia in Italy.
Figure 3. Spread of Public Debt and CDS premia in Spain.
Figure 4. Spread of Public Debt and CDS premia in Belgium.
Figure5. Spreads of Public Debt and CDS premia in the Netherlands.
Figure 6. Spreads of Public Debt and CDS premia in Austria.
Figure 7. Spreads of Public Debt and CDS premia in Finland.
Figure 8. Spreads of Public Debt and CDS premia in Ireland.
Figure 9. Spreads of Public Debt and CDS premia in Portugal.
Source: Datastream (2014)



CC: 0.96
R2: 0,93



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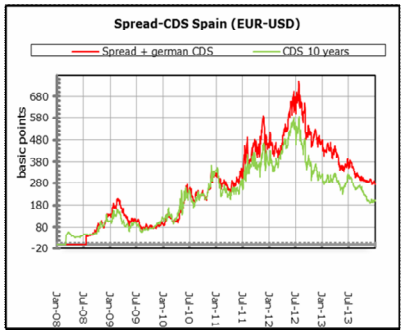
R2: 0,96



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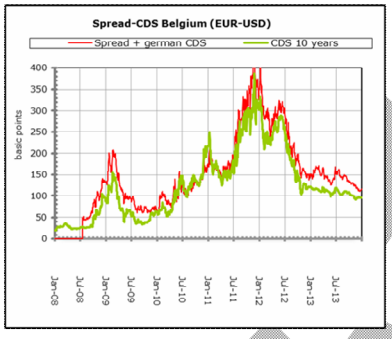

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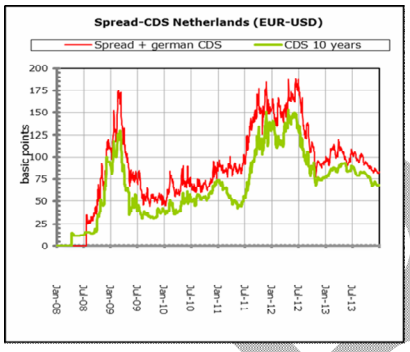
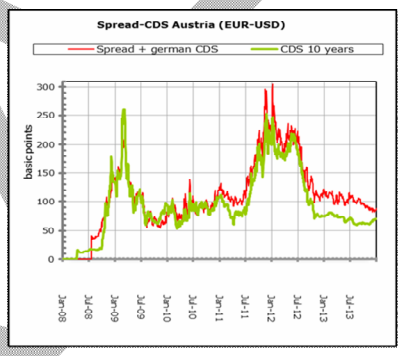


CC: 0.95
R2: 0,91



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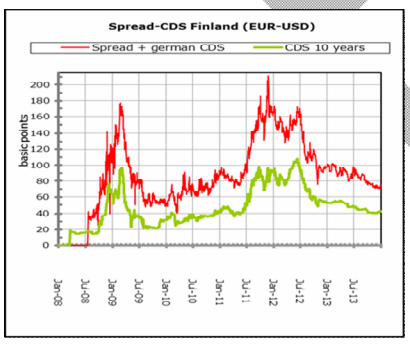

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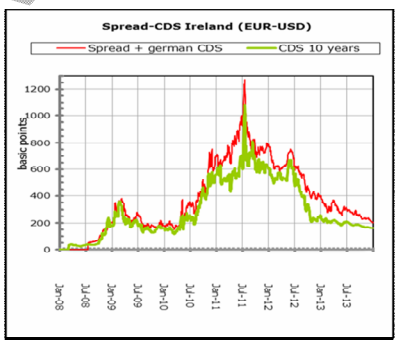
R2: 0,91



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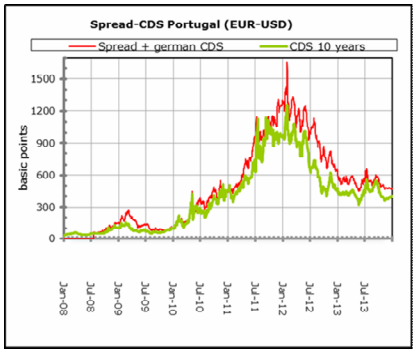

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Figures B. Absolute Approach.

Figure 1. Spread of Public Debt and CDS premia in France.
Figure 2. Spread of Public Debt and CDS premia in Italy.
Figure 3. Spread of Public Debt and CDS premia in Spain.
Figure 4. Spread of Public Debt and CDS premia in Belgium.
Figure5. Spreads of Public Debt and CDS premia in the Netherlands.
Figure 6. Spreads of Public Debt and CDS premia in Austria.
Figure 7. Spreads of Public Debt and CDS premia in Finland.
Figure 8. Spreads of Public Debt and CDS premia in Ireland.
Figure 9. Spreads of Public Debt and CDS premia in Portugal.
Source: Datastream (2014)

In fact, the basis should tend to zero but the frictions in the market and the difficulty of making arbitrages drive its value away from the point of equilibrium.

If the basis is positive, that is premium CDS greater than bond spread it is possible to arbitrate selling CDS protection and short-selling the bond. This is the case of most sovereigns in the market but to implement such arbitrage is rather difficult. If the basis is negative, that is premium CDS lesser than bond spread, it is feasible to arbitrate buying CDS protection and the bond. This is the case for most corporate bonds since the crisis and the arbitrage is relatively easier to implement (Fontana and Scheicher, 2010).

4. Empirical methodology and results

From the correlation models of the preceding part, it can be deduced, as already stated, that the CDS premia and the bond spreads are closely related, but this does not mean that a relationship of dependence exists between them. The trend over the longer term, in the same direction, may lead one to think that the variables are significantly associated with each other in a regression, leading to erroneous conclusions.

To demonstrate the possible real relationship between the spread and the CDS premia, the analysis of cointegration and the causality tests of Granger[3] are used. The object is to determine whether, in the long term, the series of data move together in a similar way and whether the differences between them are stable; i.e. whether there exists a cause-effect relationship between these financial variables.

This empirical study has been carried out in two stages:

In the first stage, the existence of relationships of dependence between the values of the two variables under study has been checked; for this, cointegration analysis is used as proposed by Johansen (1991).

In the second stage, Granger's measures of causality are analyzed. The problem with this test is that the correlation does not necessarily imply causality in the sense in which this is usually understood. The test of causality of Granger uses an enlarged concept of correlations to find causalities. Therefore, despite obtaining a

[3] This part of the analysis is based on the study of Chan-Lau and Sook (2004) and on that of Schuster (2005).

positive result from Granger's test, it must never be concluded that, if X causes Y, then the variable Y is necessarily the effect of variable X.

On the basis of the foregoing argument, and with the object of demonstrating the relationships existing between the variables analyzed, the following steps constitute the methodology adopted:

- Determination of the degree of cointegration
- Causality tests

A. Determination of the degree of cointegration

In econometric terms, it is said that two or more series are cointegrated if over the long term they move together, jointly, and the differences between them are stable, even though each series individually may be non-stationary and may follow a stochastic or non-deterministic trend.

In statistical terms, two or more time series that may not be stationary, of order I(1), are cointegrated if a linear combination of those series exists that is stationary, or of order I(0). The vector of coefficients that this new series creates is the cointegrating vector. Put another way, when the two series are combined linearly, values are obtained that fall above and below the mean, and with constant variance.

The next step is to study if the risk spreads and the CDS premia are significantly associated with each other in a regression. When two series have been characterized as having unit roots, the existence is demonstrated of a relationship of equilibrium between them, by applying the degree of cointegration test proposed by Johansen[4].

Decision criteria:
- H_0: r=0 Vectors of cointegration do not exist.
- H_1: r=1 A vector of cointegration does exist.

Decision rules:
- Reject H_0 when the value of the Trace statistic or the Maximum Eigenvalue is greater than the critical value selected, normally that of 5%.
- Accept H_0 when the value of the Trace statistic or the Maximum Eigenvalue is less than the critical value selected, normally that of 5%.

If the null hypothesis (H_0: the matrix of coefficients has a complete range equal to 2, a vector of cointegration does not exist) is rejected, the two series are cointegrated and it can be stated that a relationship of equilibrium exists between them.

What is presented in the figures 1 to 9 are the results of the degree of cointegration test of Johansen; it can be deduced from the test that the differentials of the bonds and the CDS premia are cointegrated in most of the countries studied, practically all at the 99% level. The existence of equilibrium between the markets for CDS and for

[4] The test of cointegration of Johansen is calculated for all the countries, with exception of Germany, since the German bonds are taken as risk-free assets for the calculation of the differential.

bonds provides evidence that the premia of the contracts and the differentials of the bonds tend to converge, despite the pressures deriving from the frictions in the respective markets and from other technical factors.

For example, according to table 2, the null hypothesis is rejected for Spain, since the ratio of likelihood 23.20 is greater than the critical values, 15.41 and 20.04.

B. Causality tests

The objective of causality theory is to describe dynamic interactions between time series and to reveal their dependent movements.

As already argued, the cointegration of two variables does not necessarily imply causality; for this reason the test of Granger is applied to find the direction of the possible causal relationship between them. This test incorporates an enlarged concept of correlation to find causalities, but despite a positive result from the test of Granger, it must never be concluded that, if X causes Y, the variable Y is necessarily the effect of variable X. In this part of our work the objective is to explain the relationships of causality between the risk spreads and the CDS premia of the countries already mentioned of the Eurozone[5].

In statistical terms, this test involves ascertaining if the results of a variable serve to predict another variable, and if this relationship is unidirectional or bidirectional in character. To do this, it must be analyzed if the current and past behavior of a time series A predicts the behavior of a time series B. If this prediction is confirmed, it is said that “result A” causes, in the sense of Wiener-Granger, “result B”; the behavior is unidirectional. If the preceding prediction is confirmed, and equally “result B” is found to predict “result A”, the behavior is bidirectional; in this case “result A” causes “result B”, and “result B” causes “result A”. With this type of test, results in the previous analysis of a regression procedure can be anticipated.

Decision criteria:

- H_0: Variable X is not the cause of Y. Causality does not exist.
- H_1: Variable X is the cause of Y. Causality exists.

Statistics for the test:
Eviews calculates the F Statistic like that of Wald, with the object of testing the null hypothesis and the probability associated with this statistic.

Decision rules:

- Reject H_0 if the probability associated with the F statistic is <0.05 (probability of 95%) or if the probability associated with the F Statistic is <0.01 (probability of 99%).
- Accept H_0 if the probability associated with the F statistic is >0.05 (probability of 95%) or if the probability associated with the F statistic is >0.01 (probability of 99%).

Cases:

[5] This part of the study is based also on that carried out by Chan-Lau and Sook (2004).

1. Unidirectional causality: spread causes CDS premium.
2. Unidirectional causality: CDS premium causes spread.
3. Bidirectional causality: feedback between spread and CDS premium.
4. Causal independence: Causality between spread and CDS premium does not exist.

In the light of table 2, it can be deduced that the premia of the CDS cause the spreads for almost all the countries; in general the lagged values of the CDS premiums have a significant impact, at 99%, on the spreads and the null hypothesis "CDS premia do not cause the spreads" is rejected.

Country	Eigenvalue	Likelihood ratio	5 % critical value	1 % critical value	Hypothesized No.	
France Rel	0.014750	24.58345	15.41	20.04	None **	Cointegrated at 99%
France Abs	0.011489	19.82797	15.41	20.04	None *	Cointegrated at 95%
Italy Rel	0.019061	30.74583	15.41	20.04	None **	Cointegrated at 99%
Italy Abs	0.022837	36.11475	15.41	20.04	None **	Cointegrated at 99%
Spain Rel	0.012584	23.20728	15.41	20.04	None **	Cointegrated at 99%
Spain Abs	0.014400	24.35790	15.41	20.04	None **	Cointegrated at 99%
Belgium Rel	0.014062	25.66643	15.41	20.04	None **	Cointegrated at 99%
Belgium Abs	0.011386	20.15102	15.41	20.04	None **	Cointegrated at 99%
Netherlands Rel	0.010701	20.35371	15.41	20.04	None **	Cointegrated at 99%
Netherlands Abs	0.010444	19.86027	15.41	20.04	None **	Cointegrated at 99%
Austria Rel	0.023618	41.27652	15.41	20.04	None **	Cointegrated at 99%
Austria Abs	0.018179	31.87401	15.41	20.04	None **	Cointegrated at 99%
Finland Rel	0.012366	22.08375	15.41	20.04	None **	Cointegrated at 99%
Finland Abs	0.030073	47.95639	15.41	20.04	None **	Cointegrated at 99%
Irland Rel	0.014741	25.07337	15.41	20.04	None **	Cointegrated at 99%
Irland Abs	0.017476	27.78040	15.41	20.04	None **	Cointegrated at 99%
Portugal Rel	0.021421	36.08623	15.41	20.04	None **	Cointegrated at 99%
Portugal Abs	0.021007	32.50866	15.41	20.04	None **	Cointegrated at 99%

Table 2. Cointegration and causality.

Although the causal relationship runs in both directions, it is manifested especially in favor of the CDS premia. If the CDS premia precede the risk spreads of bonds, the conclusion can be drawn that the use of these insurance contracts is the better form of measuring the sovereign risk, since if the CDS premia move before the spreads, it must be because they react more rapidly to changes in the market variables of the country in question.

5. Conclusions

In this research study an assessment has been made of the relationship between the differentials of sovereign bonds (spreads) and the market for CDS, for nine countries of the Eurozone and for the period 2008-2013.

It is necessary to determine if the CDS premia represent an alternative means for estimating changes in sovereign risks, and if these premia might serve to estimate the probability of non-compliance of a country.

Before this present crisis, the risks of default by the developed economies could not be measured using the CDS since this market lacked liquidity. After the start of the crisis of Public Debt, in May 2010, there was an increase in both the trading volumes and the premia quoted; the largest increases were in respect of Ireland, Greece and Portugal, and those of France and Germany were less. Therefore, in the sovereign CDS markets, a discrimination of assets has been recorded that was not occurring before the financial crisis. According to data of the BIS, the proportion of the total CDS market accounted for by sovereign debt CDS was 13% in 2010, compared with 6% in 2007.

The two principal reasons why CDS should be considered as measures of sovereign risk, in times of crisis, are:

1. With the differentials of debt we are not analyzing, in absolute terms, the evolution of a particular sovereign issue, since this depends on the asset of reference chosen as risk-free. For this reason we have added to the spread the premium of the CDS of Germany. But we also have used the differentials as usual, in a relative way.

2. The yields on bonds may be an inadequate measure of sovereign risk in times of crisis because they may be "contaminated" by effects such as the investors' "flight to quality", which bias the risk premiums of the most solvent countries towards lower values.

The scope of this last argument is analyzed by submitting the debt differentials of the nine countries selected for study and their corresponding CDS premia to a cointegration test (the test proposed by Johansen). The results of this analysis suggest that a relationship over the longer term between the two measures of sovereign risk is found in almost all the countries studied.

On analyzing the causality in general, the conclusion is reached that this is manifested more in favor of the CDS; that is, the CDS contracts constitute better instruments of measurement of sovereign risk because their prices (i.e. premia) react more rapidly to changes in the market. However it should be borne in mind that the econometric results suggest a certain bidirectional relationship of causality.

If the CDS precede the risk spreads, the conclusion we can draw is that the use of credit contracts is the better way of measuring the sovereign risk, since they react more rapidly when there are changes in the market variables of the country in question.

One of the disadvantages of using the CDS premia as a measure of sovereign risk is the relatively small size of this market; however, the evolution of the CDS market in recent years is reducing this disadvantage.

In summary, a certain relationship of cointegration exists between the spreads of sovereign bonds and the premia of CDS; it has also been demonstrated that the CDS premia act to cause the sovereign risk spreads in the majority of cases. In the light of the data and their corresponding interpretation, we can conclude that trading in the CDS market contains clear and fairly useful information on the sovereign risk

of a country and CDS trading have become a leading rather than a lagging market with respect to the determination of the prices of Public Debt bonds.

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Consumer attitudes towards private label products: An empirical investigation

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During the last decades, private label products evolution has radically changed the retail industry in manifold ways. Nowadays, private label products are constantly gaining market shares and penetrate in new product categories. Numerous studies have identified several factors affecting consumers' attitudes towards private label products. This paper examines consumers' perception on private label products, as compared with the branded products, under the spectrum of five basic dimensions: (a) quality, (b) price, (c) packaging, (d) status and (e) innovation. Moreover, it attempts to identify changes in Greek consumers' attitudes towards private label products within the last three years, and thus investigate the impact of the current economic recession. Finally, differences in consumers' attitudes across specific private label product categories (ie. food, home care and personal care) are examined. Primary empirical research was conducted, focusing on Greek consumers shopping attitudes. The findings of the research, confirmed the existence of differences in consumers' evaluations between private label and branded products under all dimensions examined. Branded products were favoured as far as it concerns their quality, packaging, status and innovation. On the other hand, as it was expected, private label products were favoured for their price. In addition, statistically significant differences were found in consumers' attitudes towards private label products within the last three years. It seems that consumers have become more price sensitive, thus their attitudes towards private label products has changed in a positive way compared with three years ago. Finally, differences were also found in consumers' attitudes towards private label products across the three product categories examined. Specifically, it was found that consumers, as regards private label products, tend to have a positive attitude towards home care products and negative attitude towards food and especially personal care products. Several managerial implications for marketers were also identified.

Keywords: private label products; branded products; retail industry; consumers' attitudes; economic recession.

1. Introduction

The advent of private label products, during the last years, has affected the bargaining power between retailers and manufacturers and altered consumers purchasing habits. Private labels are products which are produced or manufactured by one company, for selling under other companies' brand. Initially, private labels were generic products with low quality, offered at low prices. At a second stage, the

image of private label products changed, since retailers started to increase the quality of their products and also invested in packaging, innovation, as well as advertising. As a result, private label products managed to compete successfully with branded products and started to gain considerable market shares (Laaksonen & Reynolds, 1993). Nevertheless, private label products' penetration appears not to be the same in all product categories. Market data demonstrate that goods which require a high level of consumer confidence (e.g. baby food, health and beauty products) generally exhibit low rates of private label penetration (Bergès-Sennou et al., 2004).

The objective of this study is to investigate, through empirical research, the consumers' attitudes towards private labels across product categories and observe changes over time. More specifically the research aims to:

- examine consumer's evaluation between private label versus branded products.
- compare current consumers' attitudes towards private label products with these of three years ago.
- investigate consumer's sensitivity towards private label products across different product categories.

This study is organized as follows: Chapter 2 reviews the previously published works and covers all issues related to the current study. Chapter 3 examines the research methodology, including data collection method, sampling procedures and fieldwork. Chapter 4 presents the findings of the study. Chapter 5 presents the discussion of the findings and a series of managerial and research implications arising from this analysis, while, discusses the limitations of the current study and makes recommendations for further research.

2. Literature Review

This section presents previous studies that address the private label phenomenon. Initially, the basic concepts are explained and then the factors affecting consumers' attitudes towards private label brands are presented.

2.1. Basic concepts

There is a great number of studies attempting to explain how and why consumers choose particular products (see Jacoby et al., 1971; Simonson, 1989; Richardson et al., 1994; Blair & Innis, 1996; Grohmann et al., 2007). This study attempts to elucidate consumers attribute preferences of products from two different brand types: manufacturer brands (also referred as national or branded) and private label brands (also referred as store, distributor's or own brands). In this respect, it is essential to elaborate what a brand in general is, and then provide definitions of the manufacturer and private label brand types.

The most common definition of the term "brand" comes from the American Marketing Association (AMA): "A name, term, sign, symbol or design, or a combination of these, intended to identify the goods or services of one seller or group of sellers, and to differentiate them from those of a competitor." (De Pelsmacker et al., 2007). Similar definitions are also provided by Aaker (1996), Wheeler (2000) and Kotler & Armstrong (2008). All manufacturers' brand definitions, in literature, have in common that this type of brand is owned by producers (see

Ostrow & Smith, 1988; De Chernatony and McWilliam, 1989; Baker, 1990; Kotler et al., 2008). On the other hand, private label products are defined as retailer brands (see Ostrow & Smith, 1988; Sampson, 2006; Lincoln & Thomassen, 2008).

2.2 Factors affecting consumers' attitudes towards private label products

Some of the most commonly studied factors affecting consumers' attitudes to private label products are presented in Table 1.

Factor	Key points	Selected literature
Quality	- Private label products suffer from low-quality image & high perceived risk. - However, consumers perception over private labels is improving over time & in some cases overcomes branded products.	Hoch & Banerji, 1993; Richardson et al., 1994; Dick et al., 1995; Narasimhan & Wilcox, 1998; Batra & Sinha, 2000; Zielke & Dobbelstein, 2007.
Price	- Private label products offer around 26% to 48% lower price. - Price-conscious consumers focus on low prices (positive effect on private labels).	Lichtenstein et al., 1993; Hoch, 1996; Dhar & Hoch, 1997; Ashley, 1998; Burton et al., 1998; Méndez et al., 2008.
Packaging	- Low investment on consumer insights. - Private label products suffer in the area of exclusivity & attractiveness, though some improvements have been made over time.	Silayoi & Speece, 2004; Meyers & Gertsman, 2005; Suarez, 2005; Ampuero & Vila, 2006; Schiffman & Kanuk, 2010; Nair, 2011.
Status	- Private label products suffer from low-prestige image due to their low price. - Consumers with high status sensitivity avoid private labels.	Bearden & Etzel, 1982; Lichtenstein et al., 1993.
Innovation	- Companies that develop new innovative products cultivate a favorable perception of both their product & company image. - Private label products mostly act as followers due to lack of investment & expertise.	Hoch & Banerji, 1993; Keller, 2003; Alegre et al., 2005; Conn, 2005; Schiffman & Kanuk, 2010; Amue & Kenneth, 2012.

Table 1: Factors affecting consumers' attitudes towards private label products.

One of the principal features of the private-label market is that while market share of private label brands has been growing worldwide, the difference of the market shares remains highly uneven across product categories. Private-label market is heavily prevalent in some categories while hardly being present in others (Hoch & Banerji, 1993). It seems that private label products are most popular: (i) in commodity-type categories, (ii) in large categories which offer high margins, (iii) where they compete against few national brands who invest less on advertising & promotion, (iv) when category's benefits does not require trial or experimentation, (v) where the perceived functional, financial or social risk is low and (vi) in categories which engage high price sensitivity (Dhar & Hoch, 1997; Burton et al., 1998; Batra & Sinha, 2000; Ailawadi et al., 2001; Erdem et al., 2004; Semeijn et al., 2004).

The economic environment constitutes another factor that affects consumer purchasing power (Perreault et al., 2006). In economic downturn, where consumers'

income drops, they must shift their spending patterns. So, it is expected for consumers to save more money by purchasing private label products, which are relatively cheaper (see Lamey et al., 2007).

3 Methodology

As presented in the literature review, there is a number of factors that may affect consumers' attitudes towards private label products. This study focuses on five factors that may influence consumers' perception, i.e. quality, price, packaging, status and innovation. In addition, previous studies concluded that economic environment and especially periods of economic downturns, like the one Greece is facing intensely the last three years, may as well affect consumers' attitudes towards private label products. Finally, other studies have shown that consumers' attitudes towards private label product differ across categories. This study will investigate the phenomenon by examining three main product categories, i.e. food, home care and personal care. The selection of the categories was made intentionally since they cover most of the products the consumers purchase in a supermarket and they engage different levels of consumer's perceived risk. This study therefore proposes to test the following Hypotheses:

- Hypothesis 1: There is difference in consumer's evaluation between private label and branded products.
- Hypothesis 2: There is difference in consumers' attitudes towards private label products today compared with 3 years ago.
- Hypothesis 3: There is difference in consumer's attitudes towards private label products among different product categories.

A quantitative research was employed for this study. The data were collected by using a structured questionnaire that was administered during face-to-face interviews. The questionnaire in this study was based on the use of a five-point Likert Scale. A pilot-test was also conducted to detect weaknesses in design and instrumentation. In this study the target population was specified as "Greek retail consumers" and a sample size of 140 respondents was used. The respondents were selected in a systematic way, more specifically, every third consumer entering a selected super market was asked to participate in the survey.

4 Data Analysis

This section presents the main findings obtained from the survey. Initially, the respondents' demographic characteristics are presented and then the testing of the research hypotheses is taking place.

4.1. Analysis of demographic profile

As far as it concerns the respondents' sex, the majority were males (53,57%). Moreover, in the age distribution, it appears that half of respondents belonged to the 19-35 age range followed by the 35-50 age range (28,57%). In addition, the level of education of respondents was quite high since almost 82% of them had a Bachelors degree or higher level of education. As far as the income level is concerned, the majority earns 15.000-35.000 per year. Furthermore, 57.14% of respondents were married, while, 60% had no family member under 18 years old living in their household, followed by 30,71% that had one such a family member.

4.2. Hypotheses Testing

A paired difference test was employed to test all the hypotheses, and specifically the non-parametric Wilcoxon Signed Rank test was selected, since the assumptions of parametric tests could not be met.

Test of Hypothesis 1:

Hypothesis 1 aims to investigate whether there is difference in consumer's evaluation between private label and branded products. In order to investigate the issue in more depth, it was decided to run a test of paired difference for each dimension (Quality, Packaging, Price, Status & Innovation) separately. The results are presented in Figure 1.

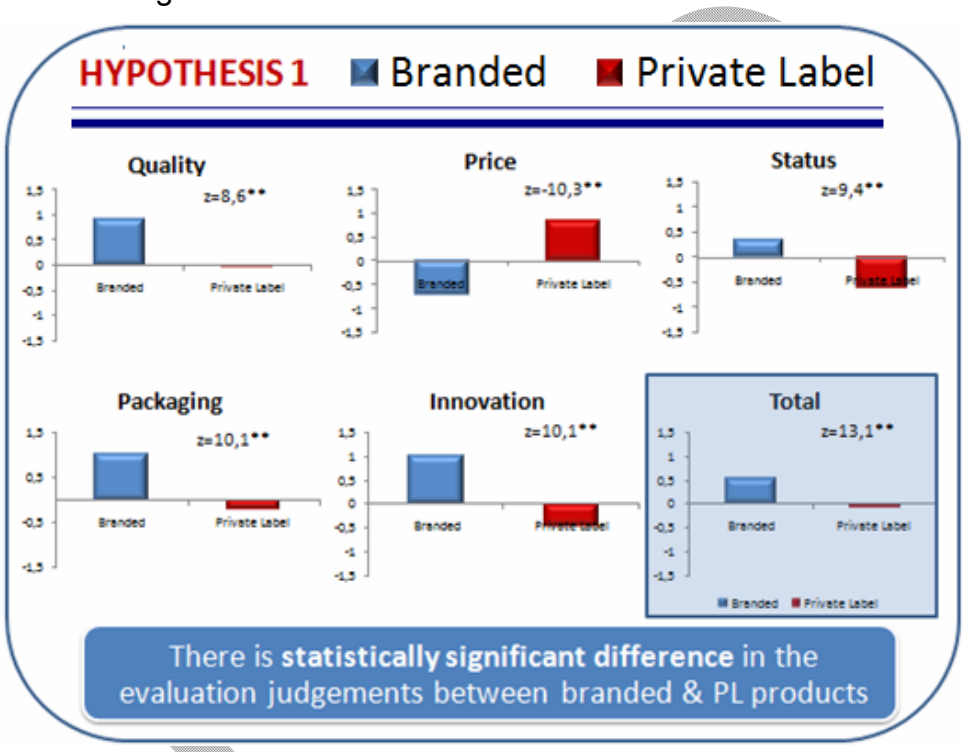

Figure 1: Differences in consumer's evaluation between private label and branded products for each selected dimension.

As it can be seen in the Figure 1, all z values are significant (at 99% level) for all dimensions: Quality, Packaging, Price, Status & Innovation. This means that there is statistically significant difference in consumer's evaluation between private label and branded products in all dimensions examined. Specifically, branded products were favoured as far as it concerns their quality, packaging, status and innovation. On the other hand, as it was expected, private label products demonstrated more positive evaluation judgments as far as it concerns the price dimension. These results are consistent with the findings of several previews studies, which conclude that branded products are perceived to exceed private label products in many areas but are considered highly priced (Lichtenstein et al., 1993; Alegre et al., 2005; Nair, 2011).

Test of Hypothesis 2:

Hypothesis 2 aims to investigate whether the consumers' attitudes towards private label has changed compared with 3 years ago. The survey results indicate that there is a statistically significant difference ($z=8.68$, $p<0.01$) and the consumers'

attitude has changed in a positive way compared with three years ago. This result can be explained by the effect of recession in consumers' attitude towards private label products. As literature suggests, during economic downturns consumers become more price sensitive in their attempt to decrease expenses and deal with reduced incomes. As a result, private label products are favoured during recessions due to their lower prices (see Lamey et al., 2007). Thus, the customers now seem more willing to purchase private label products, they consider that they offer a better bargain and find them more attractive than three years ago, where the consequences of the economic recession in Greece were not so intense.

Test of Hypothesis 3:

Hypothesis 3 aims to investigate whether there is difference in consumer's attitudes towards private label products among different product categories. The hypothesis is accepted, for all categories examined, i.e.:

- Food vs Personal Care ($z=4.07$, $p<0.01$)
- Food vs Home Care ($z=-5.23$, $p<0.01$)
- Personal Care vs Home Care ($z=-6.19$, $p<0.01$)

Thus, products' category seems to affect consumer's attitudes towards private label products. This can be explained by differences in the perceived risk of each product category. As demonstrated by their mean scores consumers' tend to have a positive attitude towards Home Care private label products ($\mu=0.56$) while negative attitude towards Food ($\mu=-0.49$) and especially for Personal Care private label products ($\mu=-1.12$).

1. Discussion and Conclusions

The results of this paper can be used in order to derive meaningful managerial implications for both private label branded products and manufacturer branded products. As it was demonstrated, manufacturer branded products rank higher in consumers evaluation judgments besides tremendous evolution of private label branded products. Manufacturers should capitalize on the fact that their products are consider to be better as far as it concerns their quality, packaging, innovation and status and highlight those differences between their national brands and private labels. To do so they should keep on investing on research and development of high quality innovative products with creative design. Moreover, manufacturers should invest on communicating those attributes to their consumers. Communication vehicles may be advertising through television and radio, press inserts, in-store events and printed material that emphasize on product superior features and create high status connotations. In addition, manufacturers should use their product packaging so as to communicate their product quality characteristics since product packaging acts as a silent salesman and consists of an inexpensive vehicle of communication with consumers. On the other hand, price appears to be the major disadvantage of manufacturer brands especially when dealing with price-conscious consumers. Manufacturers can run periodic sales promotions so as to draw price-conscious consumers and encourage product trial, though they should be quite cautious not to harm their brand image.

On the contrary, retailers should maintain their pricing strategy and keep the price of private label brands in lower levels than national brands. However, they should increase the quality of private label brands, to the point of not being significantly

different from the quality of national brands. They should also emphasize on the value-for-money perception following their products, by offering advanced quality products in competitive prices. In addition, retailers need to work on reducing consumer perceived risk that is commonly associated with private label products (see Dick et al., 1995, Narasimhan & Wilcox, 1998). A way to achieve this, would be to adopt a consistent positioning about the quality of their private labels products and ensure that consumer experience of private label quality is consistent over time (see Hoch & Banerji, 1993; Erdem et al., 2004). Moreover, warranties of quality may be offered by retailers in order to reduce consumers' perceived risk of consuming an unfamiliar brand/product.

Retailers should also take advantage of the current economic recession that accelerates the trend towards private label products so as to augment their consumer base and gain consumers' confidence. On the other hand, manufacturers should build strategies that secure their market share. They should discourage private label trial by cultivating the undesirable consequences of making the wrong brand/product choice. Moreover, manufacturers should avoid "milking" strategies since maintaining market shares in times of economic downturns is a more sustainable strategy than focusing on high profits. Finally, manufactures should emphasize on strategies that justify the premium price over private label products.

Furthermore, it was found that private label products have greater potential in the Home Care product category probably because this category inhales lower functional, psychological and financial risk than Food and Personal Care product categories. Thus, retailers can take the lead and develop more Home Care category products. On the contrary retailers should be more skeptical in developing Food private label products and especially when creating Personal Care product. As far as manufacturers are concerned, once again they are suggested to emphasize on strategies that communicate the quality of their products, justify their premium price and discourage private label trial.

The interpretation of the results should be tempered by recognizing the limitations of the preceding study. The first limitation is that the study focuses on the consumer fast moving goods industry and thus findings cannot be generalized to other industries such as durable goods. In addition, consumer's evaluation on brands was based on five dimensions: Quality, Packaging, Price, Status and Innovation; however more dimensions could be used. Moreover, some more product categories could be used so as to investigate the private label phenomenon across categories. Furthermore, the study was based on private label brand products in general and did not use specific products as a point of investigation.

There is a number of further research recommendations that can be made on the subject of private label products. First, further research can investigate the issue in greater depth by examining wider geographic areas. This would provide retailers and manufactures with a clearer insight of the phenomenon and its implications and with the ability to capitalize the results more effectively. Furthermore, as mentioned above, the findings of this study cannot be generalized to other industries, such as durable goods. Thus, further research in other industries is suggested. Moreover, more evaluation attributes that effect consumers perception should be examined like store atmosphere, cultural differences and product familiarity. Finally, the use of actual products per product category may lead to useful consumer's insights and better understanding of the private label phenomenon.

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Call center technology management: Theory and managerial implications

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In the last few decades, the world has witnessed rapid change, most noticeably the emergence of a "new communication society". The adoption of technology is an impressive global phenomenon, in terms of its intensity and usage. It is obvious that new technology has enabled the development of new services from which firms are called upon to create value. This shifting technology environment raises serious questions for executives about how to help their companies capitalize on the ongoing transformation. Being technology-driven, call centers are presently the primary source of contact for customers in many industries. This paper aims to present several best practices found in the literature, concerning call center management, especially in the area of technology management. Available resources related to the research topic have been used to develop a body of theory and its managerial implications. The analysis is not limited only to tactical or operational level but also extends its scope to a whole array of business strategic capabilities, as it is an integral part of a firm's strategy and also an important agent of change. It also gives reference to a few important technologies applicable to call centers, like the social media, CRM systems, the Web, and self-services. Final conclusions are drawn from the theoretical findings of the paper.

Keywords: call centers; technology management; CRM systems; customer service.

1. Introduction

Call centers are increasingly becoming a part of our lives today as much as ATMs, self-service machines and internet shopping does, all of which are ways to deliver service to customers. Call centers are used by organizations in a wide range of contexts, and they are presently the primary source of contact for customers in many industries, from banking and insurance to government services and health. It is a fact that many organizations clearly recognize customer service as the way to differentiate their offers and be distinguished from their competitors. Various empirical studies have found that customers who are treated well tend to perceive the service provider positively, complain less, be more loyal, and pay a higher price (for an in-depth discussion see Abu-ELSamen et al., 2011).

This study aims to build a body of theory found in the literature which reveals several best practices concerning call center management, with a focus on the area of technology management. This study is organized as follows: Chapter 2 presents the history of call centers and their transition from mostly telephone calls to all forms of customer access, including, inter alia, mobile technology. Chapter 3 examines, in a theoretical aspect, the issue of technology management as applied to call centers and Chapter 4 gives some related practical managerial implications. In Chapter 5, the main conclusions of this study are presented.

2. Call Center Fundamentals

This section presents call centers in both historic and contemporary perspective. The major types of call centers are also recognized.

2.1 History

Call centers have been existed since 1900, when telephone operators would connect callers to the party there were trying to reach (Abbott, 2008). Since those early days, call centers have radically changed. Customers contacts have been managed via a variety of communication channels that have evolved logically through the following phases: (i) face-to-face customer contacts; (ii) correspondence delivered by the Post Office; (iii) the telephone with toll costs; (iv) the telephone with toll-free calls; (v) facsimile transmission of correspondence (fax); (vi) email correspondence; and (vii) the internet and corporate web sites (Anton, 2000).

The basic characteristics of a modern call center can be found since the mid-1960s. Private Automated Business Exchanges (PABX) were used to handle substantial numbers of customer contacts. The invention of Automatic Call Distribution technology which allowed calls to be filtered and assigned to the next available agent at a time, made the concept of a call center possible. The first ACD systems possibly emerged in the 1950s to manage enquiries at the biggest telephone companies (Helper.com, 2011). Strandberg & Dalin (2010) argue that call centers nowadays are increasingly important for customer relationship management, and that employees in call centers have become a critical link between companies and customers.

2.2 Today's call centers

Today, call centers constitute the most potent weapon for maintaining long-term customer relationships, as they are compounded by extraordinary advances in the integration of telephone and computer technologies (Feinberg et al., 2000). A variety of organizations in many countries have developed call centers in an effort to become relevant in the modern business environment (Pan et al., 2007). The use of CRM technology turn call centers into world class access centers, that constitute a single point of contact for customers (Anton, 2000).

Innovation and speed have reached levels unimaginable in the past; however there are some undisputable similarities in the challenges and opportunities call center practitioners still face, i.e. the potential to create value. Value can be created on three levels: (i) efficiency, (ii) customer satisfaction and loyalty and (iii) strategic value. This means that more organizations now are transforming their centers from a fanatic focus on efficiency to better tapping into their strategic potential (Cleveland, 2012). Strandberg & Dalin (2010) argue that in the future, companies will choose to integrate call centers with other functions in their organization - such as marketing analysis, customer care, service/product development, and market communication. Furthermore, companies in most industries are shifting their existing low-tech call centers from back office to the front-line of the organization. During this process, the whole enterprise is being equipped with the latest high-tech hardware and software in both voice and data applications. Focus is transitioned from mostly telephone calls to all forms of customer access, including, inter alia, mobile technology (Anton, 2000). The available channels for customers to reach out

and contact companies include the following (Anton, 2000; Cleveland 2012): mail delivered by the Post Office; telephone both toll and toll-free; electronic mail; facsimile transmission (fax); fax-back (self-service fax); voice response unit (VRU); interactive voice response (IVR); electronic data interchange (EDI); automatic teller machine (ATM); kiosk; internet (corporate web sites, social media, search engines, co-browse, online forums); voice over IP (cyber video calls); chat; loyalty cards; voice mail.

2.3 Types of call centers

According to Abbott (2008), call centers can be classified into five types. These types are, routing, notification, call management, processing, and content dissemination. The routing call center connects the caller to the correct party; the notification center notifies the receiver of the call and any message; call management handles calls from the start to its final resolution, in that it tracks and documents every step in the process; processing is where a service acts on request, for example processes like sales, order taking, billing, computer setup etc.; and content dissemination gives advice and shares information via any medium, i.e. phone, fax web, email etc. (Abbott, 2008; Hingst, 2004).

Moreover, call centers can be classified on the basis of who is initiating the contact. This orientation-based distinction has been broadly categorized into “inbound”, “outbound” and “combination” types of call centers. Inbound call centers provide information, services and access to products in response to caller inquires. Outbound call centers produce calls to customers in the process of sales activity or telemarketing on behalf of parent organization or contract basis for client businesses. In other cases, outbound call centers correspond to public information campaigns on behalf of private and public sector organizations. Combination call centers focus most of the time on answering inbound calls, but may, for short periods of time and at a short notice, generate outbound calls when there is available capacity or they respond to a specific campaign. Help desks are an example of this call center category (Hingst, 2004).

In addition, call centers can be classified according to the management strategy they follow. Strategies lie on a continuum between two extremes: (i) a transaction model; and (ii) a relationship model. The transaction model is characterized by mass production, mass service, mass encounters, and a “production line” approach to dealing with callers. In this type of call center, the goal is to maximize volume and minimize costs by answering as many calls as possible in the shortest possible time. On the contrary, the relationship model, exemplifies high commitment and the delivery of quality service. According to this model, employees are empowered, their level of discretion is high, and their work is more flexible. Between those two extremes lies the hybrid model, which is typified by a customer service, a moderate level of automation, some degree of commitment to service quality, and a moderate level of customer loyalty (Strandberg & Dalin, 2010).

3. Technology Management Theory

In the last few decades the world has witnessed rapid change most noticeably the emergence of a “new communication society”. The adoption of technology is an impressive global phenomenon, in terms of its intensity and usage. It is obvious that new technology has enabled the development of new services from which firms are

called upon to create value. This shifting technology environment raises serious questions for executives about how to help their companies capitalize on the ongoing transformation, which is the objective of technology management. The main reason for implementing technology in services is cost reduction. The market imposes this aim, as firms are forced to follow technologically advanced competitors. In addition, these advances offer flexibility and convenience and availability to technology-savvy companies (Schumann et al., 2012). Some critical issues as regards technology management are presented below:

3.1 Incremental technology management

There are strategies which aim to improve efficiencies through processes of reuse of existing components of technology. These continuous improvements in an organization can be called incremental dynamic capabilities. Such capabilities show the organization's strategic ability to adapt and strengthen the core areas of business (Ravishankar & Shan, 2013).

3.2 Technology-based capabilities

Research has focused on determining capabilities of top edge companies in respect to technology management. Bharadwaj et al. (1999) presents 30 capabilities organized into six categories:

- Technology business partnerships: This category refers to the firm's ability to nurture rich partnerships between technology providers.
- External technology linkages: It refers to technology based linkages between the firm and its key business partners, like customers and suppliers etc.
- Business technology strategic thinking: This capability category refers to the management's ability to envision how technology contributes to business value and the ability to integrate technology planning with the company's business strategies.
- Technology business process integration: This one is ascribed to the ability of adaptations of the existing business and technology processes, to continually enhance their effectiveness and efficiency, as well as to leverage new technology.
- Technology management: This dimension taps into the activities related to the management of the IT function, such as, systems planning and design, application delivery and project management, controlling etc.
- Technology infrastructure: This refers to the foundation for enterprise application and services, and it is comprised of data, network, and processing architectures. It influences the range of business opportunities available to firms in applying technology.

The above shows that technology management is not limited only to tactical or operational level but also extends its scope to a whole array of business strategic capabilities.

3.3 Important technologies

Some critical technologies, especially for the call centers' operation, are as follows:

CRM systems

CRM systems generally carry significant cost in terms of acquisition and maintenance. The cost per user can vary from as little as $1,000 to in excess of $10,000. Businesses with greater technological maturity, that is, a set of technological skills, IT sophistication, and resources, are more able to achieve actual benefits from CRM technology (Love et al., 2009).

The Web

The rise of enterprise application integration technology and the emergence of Internet middleware technologies such as Web-services have allowed companies to engineer sophisticated networks across the globe that link a multitude of partners- i.e. suppliers, shippers, buyers, and third-party service providers, to a single company network (Aron et al., 2007). Moreover, the Web has opened the boundaries for organizations to tap into a world of talent by allowing non-employees to offer their expertise in novel ways (Bughin et al., 2010).

Social media

The exploding expansion of social media has put the pressure on executives to embrace social media and exploit the benefits this new technology-enabled channel offers. Companies are concerned about ROI goal, monitoring employee's social media use and mitigating the associated risks of negative brand exposure. Still, there is solid evidence that social media significantly reduce costs due to call deflection, increase sales due to product or service recommendations, as well as increased customer loyalty and market share due to brand differentiation of service offered (Baird & Parasnis, 2011).

Self-services

Self-services are increasingly used in various industries, such as financial services, insurance, tourism, and telecommunication, seldom in conjunction with e-commerce transactions (Schumann et al., 2012).

4. Managerial Implications

In this chapter some managerial implications for call centers operation are provided, driven by the body of theory presented in the previous chapter.

4.1 Strategic thinking

The pace of technology and business change is continuously accelerating with broad and deep impacts. Dealing with what technological change brings, as well as unlocking attendant competitive advantages is a major challenge for call center organizations. Firms that incorporate an understanding of these trends into their strategic thinking gain an insight of new market opportunities and new ways of doing business, and thus compete with an ever-growing number of innovative rivals (Bughin et al., 2010). To that end, firms can require senior business managers to articulate technology's role within their business unit and to devise strategic business plans to address specific technology-related issues. Control strategies are also important in order to ensure operational efficiency as well as consistency of technology policies throughout the enterprise that reduce duplication and redundancies in systems (Bharadwaj et al., 1999).

4.2 Introducing new technologies in a piece-meal manner

Through incremental technology management it is possible to achieve improved efficiencies by introducing new technologies in a piece-meal manner. The reap-off effects are avoided and time is given to the call center organization to adapt to change (Ravishankar & Shan, 2013).

4.3 Technology management as change management

Customers and employees alike can develop negative attitudes towards the call center organization when induced to use new technology-based services. In response, management should make procedures as transparent as possible. It is essential that users of technology feel capable of wielding such services and thus develop trust in the technology; a good start might be to provide clear instructions, privacy, and security information. An important handicap of technology-mediated interaction, such as a self-service, is the reduction of personal contact, which is a key factor for developing trust. One solution might be to provide the service through a video communication media platform, by exploiting Web 2.0 technology (social media, video VoIP etc.) (Schumann et al., 2012).

4.4 Technological implementations are not always measured by profitability alone

Profitability is one of the main reasons why management should scrutinize technology spending. The amounts of financial resources invested in technological applications are essential and they are very likely to replace other capital spending. Furthermore, technology investment are often tied to the revenue-generating or profit-making aspect of the business and consequently management need to be convinced of technology's value, contribution and performance. So, technology investments are seldom been perceived as high risk compared with other traditional capital investments. Still, technological implementations cannot always be measured by profitability alone. Profitability can be used as an alternative to net benefit. Increase of overall profitability mainly comes from the increase of new customers, reselling or upselling and decrease of customers' churn (Yazdanpanah & Gazor, 2012).

4.5 Address the challenges of social media

With regards to social media, call center organizations are indeed experiencing several challenges, and consequently they need to: (i) determine if it makes fiscal sense to engage in social media, (ii) rally employees to use social media responsibly and convey the brand promise appropriately and (iii) come to terms with the potential for negative brand exposure. Only a minority of organizations monitor their brand through social media (Bughin et al., 2010). The companies need to mitigate the risk of negative brand exposure by working with brand monitoring software vendors so as to quickly respond to possible threats, as well as to actively engage customers (Baird & Parasnis, 2011).

4.6 Get management support

As with the case of any redesign of work processes and functional activities, management support is critical for success in implementing new technology or upgrading existing systems (Love et al., 2009).

4.7 Vision

As a final remark, it should be noted that a firm's vision can sustain an innovation momentum; a key insight here is that the dynamic character of technology can be stressed in the vision, in terms of its evolution and progress so that interest and attention to technology are retained (Wang & Swanson, 2008).

5. Conclusion

The pace of technology and business change for call centers is continuously accelerating with broad and deep impacts. Firms that incorporate an understanding of these trends into their strategic thinking gain an insight of new market opportunities and new ways of doing business, and thus compete with an ever-growing number of innovative rivals. Through incremental technology management it is possible to achieve improved efficiencies by introducing new technologies in a piece-meal manner. The first-hand experience of this study's authors, provides the strength of reliability of this research in terms of its insights of the theoretical backgrounds and practices and their applicability to a call center environment. Nonetheless, it was not possible to cover the whole array of theory related to call center management and the specific subject areas. Further research might entail structured interviews with managers and team leaders in order to gain further insights about the issues discussed. It could also be useful to survey the managers as well as agents of various call centers, to determine whether their disposition towards social media is related to the successful, or not, outcome of the adoption of this Web 2.0 technology into call center operations.

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Intellectual Capital management and reporting in the context of (Post) New Public Management

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1. Introduction

European universities have been immersed during the last decades in important transformation processes aiming to make them more autonomous, economically efficient and competitive. They have to demonstrate professional resource management and accountability in support of clearly defined and feasible goals, even more important during periods of financial crisis and budget cuts.
From a managerial perspective, Intellectual Capital (IC) management and reporting can contribute to making the best use of available resources. In the realm of practice, an increasing number of universities and research centres in Europe have developed IC management and reporting models. However, their application has been, so far, based on voluntary basis.

6. Definitions of terms used

New Public Management is a term coined in the late 1980s to denote a new (or renewed) stress on the importance of management and 'production engineering' in public service delivery, often linked to doctrines of economic rationalism (see Hood 1989, Pollitt 1993). The apparent emergence of a more managerial 'mood' in several (mainly but not exclusively English-speaking) countries at that time created a need for a new label.
The new term was intended to denote public service reform programs that were not confined to the 'new right' in a narrow sense, but also came from labor and social-democratic parties and in that sense could be considered as part of what was later labeled a 'third way' agenda.
New Public Management is sometimes (understandably) confused with the 'New Public Administration' movement in the USA of the late 1960s and early 1970s (cf. Marini 1971).
But though there may have been some common features, the central themes of the two movements were different.

The main thrust of the New Public Administration movement was to bring academic public administration into line with a radical egalitarian agenda that was influential in US university campuses at that time.

By contrast, the emphasis of the New Public Management movement a decade or so later was firmly managerial in the sense that it stressed the difference management could and should make to the quality and efficiency of public services. Its focus on public service production functions and operational issues contrasted with the focus on public accountability, 'model employer' public service values, 'due process,' and what happens inside public organizations in conventional public administration.

Ferlie et al (1996) describe 'New Public Management in Action' as involving the introduction into public services of the 'three Ms': Markets, managers and measurement. Jonathan Boston, one of the early proponents of NPM, identified several ways in which public organisations differ from the private sector:

- degree of market exposure—reliance on appropriations
- legal, formal constraints—courts, legislature, hierarchy
- subject to political influences
- coerciveness—many state activities unavoidable, monopolistic
- breadth of impact
- subject to public scrutiny
- complexity of objectives, evaluation and decision criteria
- authority relations and the role of managers
- organizational performance and effectiveness
- incentives and incentive structures
- personal characteristics of employees

IC Management and Reporting becomes a promising tool in times of reforming and transitions of national university systems. In the least years in many European countries new university laws and reforms have been conducted with the aim to increase their autonomy and increase the quality of its outputs.

IC management and reporting can support universities in their transformation and management process and to improve the quality of the higher education system. IC management and reporting thereby focuses on intangible resources and thus complements rankings, evaluations and quality management.

Universities are not only governed by new national universities laws but increasingly also addressed by European science, research, and innovation and education policies. Universities and Higher Educations institutes are part of the European Higher Education Area (EHEA) and European Research Area (ERA).

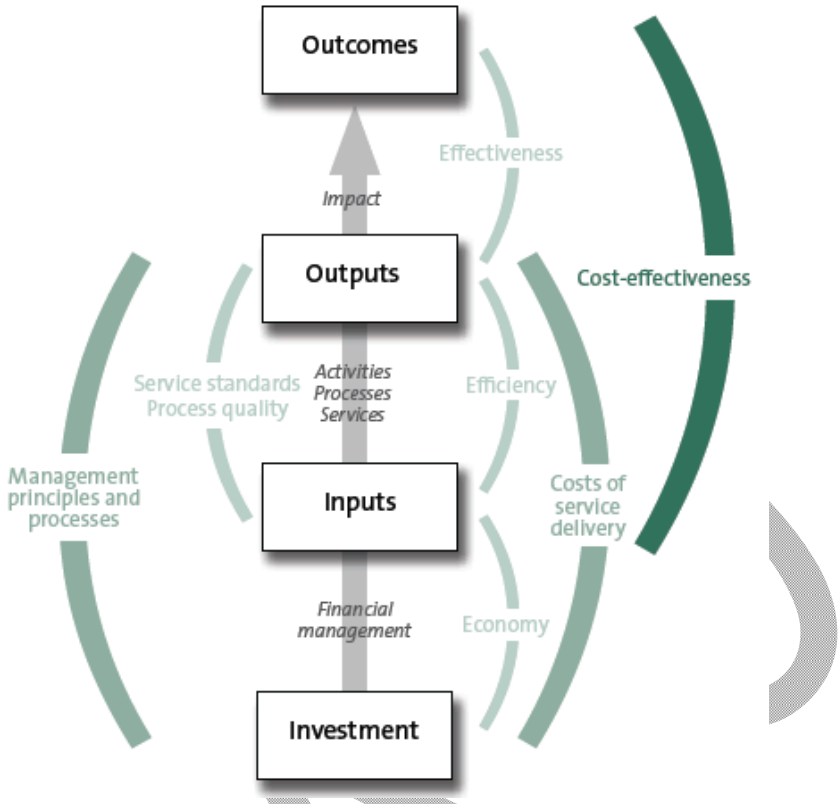

Figure 1: The NPM as a draft plan for Universities (own compilation)

The priorities of EHEA for the next decade are amongst others to support lifelong learning and employability, to increase student mobility, harmonize data collection and enhance the use of multidimensional transparency tools. The ERA focuses amongst others on more effective national research systems, and an optimal circulation and transfer of scientific knowledge.

IC management and reporting can support to achieve this goals by providing comparable indicators and information about the strategies and goals of Higher Education (HE) institutions across Europe and is deeply embedded within a wider set of ideas and trends in the public sector. These can be summarized under two broad headings of New Public Management (NPM) and Post-NPM.

NPM evolved during 1980s and 1990s in the OECD countries as a response to perceived lack of focus on outcomes, efficiency and transparency in national bureaucracies. The solution suggested by the NPM was to introduce managerial techniques borrowed from private enterprises to the public sector. These most often included: delegation, decentralization and deregulation, results-based funding and accountability regarding the extent to which planned results were achieved, strategic management and planning, adoption of contract-based relationships, and strengthening of managerial culture. This typically includes setting of explicit targets (output and outcome indicators), measuring performance and punishing or rewarding organisations on the basis of achieved results.

Governments provided public institutions with more autonomy to meet its goals and reward performance, which demands measurements and reporting mechanisms, subject to the corresponding auditing revisions.

NPM-style reforms had a profound effect on governance of HE institutions in European countries. Universities in an increasing number of countries have gained high autonomy in managing their financial and human resources, deciding on course content, research programmes and size of student enrolment. Increased autonomy has been coupled with results-based funding: public funding increasingly depends on achievement of targets that are expressed as input, output or outcome indicators.

Some scholars have compared the NPM with the IC perspective and argued that the latter will help public institutions' management and reporting by providing a more comprehensive picture of the organisation. The excessive focus of most NPM applications on one stakeholder group (the customer or the recipient of the service) can indeed be criticized. In contrast, the IC framework addresses difference stakeholders simultaneously, providing a better view of how collaboration and networking are key drivers in the value-creating process of a public organisation.

The relationships between 'NPM movement' and IC management in universities are uneasy ones. On the one hand, higher autonomy, spread of managerial ethics, emphasis on accountability and focus on systems of indicators facilitate introduction of IC management and reporting. On the other hand, there are considerable differences and tensions. Focus of NPM on results – based funding implies that objectives for universities are set by political principals. IC management, however, aims to facilitate self-discovery process with the view of assessing own strengths and redefining a university's mission and objectives. Furthermore, while results-based funding emphasizes outputs and outcomes, IC management is focused on intangible resources which are interpreted as inputs.

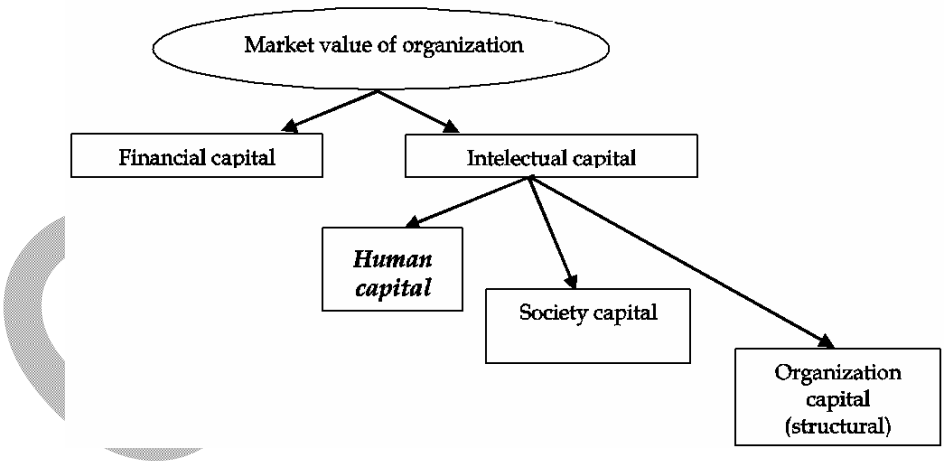

Figure 2: IC reporting elements in Universities (own compilation)

The post-NPM movement in the late 1990s has emerged as a response to the perceived weaknesses of NPM doctrine: focus on efficiency came at the costs of quality and diminished structural capacities; emphasis on several measurable outcome indicators led to emergence of single-purpose agencies that ignored the 'un-measurable' and broader societal needs. Hence, post-NPM emerged as group of loosely coupled efforts aimed at:

i) building structural capacities of public organisations, which shifted focus from outcomes to inputs;

ii) better coordination of efforts with emphasis on networks and cooperation;
iii) building 'common values and ethics' instead of fostering NPM-style competition. The principles of post-NPM doctrine seem highly compatible with the logic of IC management. Both emphasize a holistic and multi-dimensional approach to assessment of performance, strengths and weaknesses of university. There seems to be an emerging consensus on the role of networks and cooperation with other organisations and society at large (instead of treating external actors merely as clients). Furthermore, post-NPM and IC management focus on capacities and assets of organisations rather than solely on outputs.

7. IC in universities and research organizations

Adapting management and reporting IC in companies to other types of organizations has gone two ways. The first deals with assessing intangibles aggregated at meso (communities, industries, etc.) and at macro level (cities, regions and nations). For example, The World Bank has organized three conferences on this issue in 2005-2007 (Chatzkel, 2006) and attempts have been made to measure IC at country level, for instance in Sweden (Rembe, 1999), Israel (Pasher, 1999) and the Arab region (Bontis, 2004). The second dimension, more related to the scope of this paper, suggests using the IC framework at micro-level for public institutions. Some papers included in this group are based on new public management (NPM) principles.

Governments thus provide the particular institution with more autonomy to meet its goals and reward performance (Borins, 1995), which demands measurements and reporting mechanisms, subject to the corresponding auditing revisions. The phenomenon was initially seen as an issue for developed countries, particularly Anglo-Saxon, with the best cases studied in the UK, Australia and New Zealand (Barzelay, 2001; Guthrie et al., 2004).

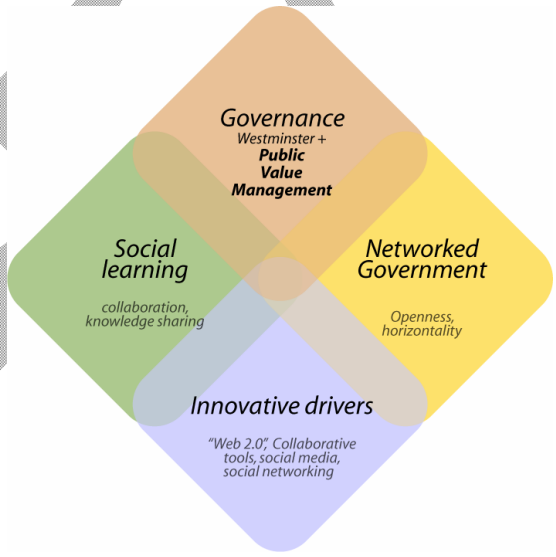

Figure 3: The NPM plan in UK (own compilation, based on the report)

The USA, Canada, and to a lesser extent some European countries, also received attention (Borins, 2002; Guthrie et al., 2004) and the above principles were tentatively applied in certain developing African countries (Larbi, 1999). Dunleavy et al. (2006) argue that "NPM is dead" because in the digital era governments will recover control and central management because of their larger communication and

storage capabilities. Some colleagues have compared the NPM with the IC perspective and argued that the latter will help public institution management and reporting. Guthrie et al. (2004) state, for example, that NPM is simply a refinement of the traditional reporting structures while the IC framework provides a better basis for understanding and reporting on organizational performance and providing greater transparency and accountability.

An IC report can help to identify structural and personal strengths and weaknesses, reveal the current state of the different university missions and be used as a controlling and monitoring instrument (Altenburger and Schaffhauser-Linzatti, 2006).

8. Criticism

Some authors say NPM has peaked and is now in decline. Critics like Dunleavy proclaim that NPM is 'dead' and argue that the cutting edge of change has moved on to “digital era governance” focusing on reintegrating concerns into government control, holistic (or joined-up) government and digitalization (exploiting the Web and digital storage and communication within government). Despite the label, many of the doctrines commonly associated with New Public Management are not new. Jeremy Bentham’s voluminous philosophy of public administration developed in the late eighteenth and early nineteenth century provides the locus classicus for many supposedly contemporary ideas, including transparent management, pay for performance, public service provision by private organizations, and individual responsibility. The idea that more effective public services could be obtained by judicious application of private-sector management ideas is also a theme going back at least to the US city-manager movement of the late nineteenth century (cf. Downs and Larkey 1986). It was advanced early in the twentieth century by figures like Taylor (1916) and Demitriadi (1921). The idea that public services can be improved by giving some autonomy to managers operating at arm’s length from political standard setters was often invoked in the nationalized public enterprise era.

9. Conclusion

NPM evolved during 1980s and 1990s in the OECD countries as a response to perceived lack of focus on outcomes, efficiency and transparency in national bureaucracies. The solution suggested by the NPM was to introduce managerial techniques borrowed from private enterprises to the public sector. These most often included: delegation, decentralization and deregulation, results-based funding and accountability regarding the extent to which planned results were achieved, strategic management and planning, adoption of contract-based relationships, and strengthening of managerial culture.

In contrast, the IC framework addresses difference stakeholders simultaneously, providing a better view of how collaboration and networking are key drivers in the value-creating process of a public organisation. The relationships between ‘NPM movement’ and IC management in universities are uneasy ones. On the one hand, higher autonomy, spread of managerial ethics, emphasis on accountability and focus on systems of indicators facilitate introduction of IC management and reporting. On the other hand, there are considerable differences and tensions.

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In the frame of the Project "Quality Assurance in Higher Education through Habilitation and Auditing" initiated by the Executive Agency for Higher Education and Research Funding of Romania (UEFISCDI) and co-funded by the European Social Funds (Sectorial Operation Programme Human Resources Development 2007-2013) a series of Mutual Learning Workshops (MLW) has been organized in Bucarest Romania, as a mean to bring together international experts and practitioners aiming to draft a Blueprint for IC Reporting for universities. Members of that team where: Karl-Heinz Leitner (Coordinator), Susana Elena-Perez, Jan Fazlagic, Konstaninos Kalemis, Zilvinas Martinaitis, Giustina Secundo, Miguel-Angel Sicilia and Kristine Zaksa. This paper reflects on the MLW suggestions.

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Wind Energy Investment in Greece: Case study of an Aegean Island

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Abstract

Considering that traditional energy sources such as fossil fuel are about to deplete during the following decades, governments try to turn to renewable energy. It is commonly known that Greece has a natural advantage of abundant solar energy and wind power due to its geographical location and characteristics.

The main focus of this study is to examine how wind energy potential across the Aegean Sea and continental Greece can provide a promising field for investments in Greece, considering the economic crisis, current trends and future perspectives.

We firstly focus on current legislation framework considering that laws associated with such types of investment in Greece are very complex and rapidly changing. Furthermore, a case study for a hypothetical investment plan concerning a wind park located in an Aegean island will be presented. RetScreen which is a software made by the Canadian government, will be used as a decision support tool for analyzing the potential investment scenario and a financial report will follow with estimation of the overall cost, depreciation, upcoming benefits, and payback period of the investment.

Data analysis concludes that wind parks still prove to be an economically viable investment, although incentives considering the guaranteed price per kwh and faster investment times must be provided by the government.

Key words: renewable energy, wind power, wind park, investment plan, Retscreen

1. Introduction

Energy is separated in two different types: a) non renewable (coal, oil, natural gas and b) renewable (solar, wind, hydro and wave). Fossil fuel global reserves are constantly depleting thus their use is expected to decrease during the following

decades. For this reason, clear, sustainable and environmental friendly resources of energy are constantly increasing (Chalikias et al.,2012); especially wind energy and solar energy (Sahin, 2004). In addition, renewable energy is considered a key factor in controlling global climate change. Wind energy is the energy that the wind provides due to the movement of air masses into the atmosphere. It is the world's fastest growing energy source and is considered a clean, renewable source of energy. This form of energy has been used for centuries in Europe and recently in the United States and other nations (Raidur, Islam, Rahim, Solangi, 2010). The constant growth in wind power capacity is supported by economic models in renewable energy investments and further motivated by supply security reasons, fuel diversity concerns, ecological awareness and economic reasons (Akdag, Guler, 2010). An issue that is arising is the examination of the environmental benefits of renewable energy systems (Chalikias et.al 2010, Kyriakopoulos et.al, 2010a, Crawford, 2009). Large and small wind turbines produce electricity for industrial applications, home owners and non interconnected sites. Among various renewable energy sources, wind energy in particular has achieved maturity in the energy market (Raidur, Islam, Rahim, Solangi, 2010). Thus, the collaboration between environment and economy is still as relevant as ever before (Kyriakopoulos et.al, 2010b, Mohanty, 2011).

2. Historical Background

From the early stages of human history, wind power has been used for the propulsion of ships. Many civilizations like Chinese, Persians, Greeks and Egyptians used windmills for grinding grain and pumping water. Windmills entered Western Europe during the twelfth century from the Ottoman Empire. Specifically windmills were used for pumping water from flooded areas and transferring it to sea, in Netherlands. In Greece, windmills for water pumping purposes, were mainly used in East Crete. The first wind turbines were used in regions occupied by Alexander the Great and Persians (Hills, 1991). During 17th century the discovery of stream turbines began replacing windmills but even until 1860 multiple flap windmills continued to be built in Chicago for pumping purposes. In 1891 a Danish named Poul LaCour created the first electricity-generating wind turbine (Gipe, 1995). In 1900, Denmark was able to produce electricity from wind power. And during the year 1940 a test turbine with two blades was constructed in USA. But wind energy was not considered significant until the '70 when people realized the important role of energy and the environmental problems of our planet and tried to recreate the wind turbine (Ntanos et al, 2009). Subsequently, between the years 1973 to 1986, wind energy market passed off from domestic and agricultural use to grid interconnected wind farm applications. The first wind energy penetration outbreak was held in California where over 16,000 machines were installed between 1981 and 1990, as a result of the incentives given by the USA government. In northern Europe, wind farm installations increased constantly during the 80s and the 90s. The high cost of fossil fuel based electricity and the excellent wind resource led to the creation of a small and stable market. Eventually, in 1990 most market activity shifted to Europe, bringing wind energy at the front line of the global scene with major players from all world regions (Kaldellis, Zafirakis, 2011).

3. Literature Review and Theoretical Background

In Greece, the legislation is based on five basic laws for the exploitation of renewable energy.
Firstly, L.3468 (2006) addressed electricity production from Renewable Energy Sources and co-generation. With this law, production of electricity from Renewable Energy Sources was promoted as a priority, with specific rules and directions. In 2009, L.3734 is harmonizing with the promotion of co-generation based on demand in the internal market, creates a legal framework, and adjusts absorption of energy from photovoltaic plants. It sets promotion of co-generation and addresses energy projects such as the Hydroelectric Project in Mesochora and other provisions.
Besides this, L.3851 (2010) made a further effort to simplify and shorten the process of approval for new renewable energy projects by aligning certain lengthy individual steps and eliminating others. Of particular importance in this context is the fact that a Production License is no longer required. This exemption from the Regulatory Authority for Energy or other relevant declaratory act exists for photovoltaic and solar thermal power stations up to 1 MW.
The last legislative amendment is L.4001 which passed in August 2011, which launched major changes in the structure and operation of the electricity market with the establishment of independent operators for the transmission system, the distribution network, and independent functions in Electricity Market (DESMHE, 2014).
Even more, the authorization process for wind farms contained in L. 3851 of 2010 about accelerating the development of Renewable Energy Sources to deal with climate change, introduced some additional critical settings (Metaxas & Associates - Advocates & Legal Consultants, 2012).

According to the latest legislative framework about turbine investments in Greece, small investments are now more lucrative than the bigger ones. The produced electric current is completely bought by the “Independent Administrator for the transportation of electric current” («Α.Δ.Μ.Η.Ε.»). For turbine investments of capacity up to 50kWp, the benefit is 0,25€/produced KWp, but for larger investments it is only 0,08785€/produced kWp and 0,09945€/produced kWp if the investment is located to any island that is not connected to the Central Network (Green Energy & Building Solutions, 2014). The return is vastly reduced compared to the past ten years, and this is another result of the economic crisis in Greece, because the Greek Government has no more the monetary fluidity to support renewable energy resources. That means that, payback period of large investments is much longer compared to smaller ones, which are mainly private investments.

It must be noted that HEDNO S.A. (Hellenic Electricity Distribution Network Operator S.A.) has announced that it suspends the grid connection requests of small wind turbines (power up to 50kW) at the interconnected Network of the country until the publication of a Ministerial Decision which sets specific requirements, restrictions and conditions of this program (HEDNO, 2013). Hence the scenario we examine addresses a hypothetical investment considering that grid connection is allowed by HEDNO.

4. Analysis

For the purpose of a hypothetical scenario, we select the Aegean island Milos in Cyclades. The Canadian Government's Software "RetScreen" program will be used as an analysis tool (Kolovos et.al, 2011). This program includes a meteorological database from NASA. According to the information from this database, the island of Milos has the highest average wind speed in Greece: 6,7 m/s.

Figure 1: Map of Milos Island-Investment Location

4.1. Investment Characteristics

As soon as "ΑΔΜΗΕ" provides high prices (250€ per produced MW) for wind parks up to 50 KWp (as we said before, for wind parks above 50 KWp the given price is 87,85€ or 99,45€), we decide to examine a scenario of investment in a small wind park, which will include a single wind turbine of 50 KWp nominal power. It must be mentioned that Public Electricity Company of Greece («ΔΕΗ») is planning on building 89 turbines there and 260 more in other Aegean islands. For the investment site we select the South West side of Milos island, where the highest mountain top "Profitis Ilias" is located at an altitude of >700 meters. (Milos Island,2014). As we know, the high altitude can positively affect the flaps' movement, as a result of faster air's speed. Located west from the mountain top there is a small sierra which ends up on the mountain top "Hondro Vouno", at an altitude of >600 meters, where it is the exact location we suggest to install our turbine. (Coordinates: Width 36°40'49.67"N, Length 24°22'21.94"E). Fortunately, there is access in the point via a dirt road, so it would be easy for the trucks and the bulldozers to transport the turbine and do all the other procedures. We should also mention that, easterly of "Profitis Ilias" on the position «Koutsounorahi" (altitude: >300 meters) another wind park is already located from the company "Aioliki Milou AE", which consists of four wind turbines with a total power of 850 KWp. (Energy Register, 2014).

- In this side of the island there are no houses or other buildings.
- The turbine cost will be subsided by the Greek Government up to 50%, depending on geographical criteria (Ethnos, 2014).

- The noise of the turbine is about 50-55 db in a distance of 30 meters, (Argosy, 2014), 35 db in a distance of 50 meters. At 65 meters the turbine's noise is about the same as the wind's noise, and at 150 meters it does not heard anymore (Karouzos, 2014).
- Project's Timetable:

-Turbine order and supply – preparation on the installation place: 10/10/2014

-Installation of the mounting: 10/11/2014

-Assembly of the turbine: 1/12/2014

-Calibration and wiring of the turbine: 15/12/2014

-Connection of the other parties 1/1/2015

-Review and test: 15/1/2015

-Start of the commercial business: 1/2/2015

4.2. Wind Turbine Characteristics

For the upcoming investment, we suggest the model Argosy Wind AW 50kW. This model has low starting speed (2,7 m/s) and high torque curve at low wind speeds, compared to its competitors. These features offer an annual production of about 178 MW on average wind speed of 6,7 m/s. We suggest using the highest of the three available pillars which is 36.6 meters, in order to exploit the most out of the height. There is also a warranty provided by the manufacturer, including full coverage of the product for 5 years (Argosy, 2014).

Figure 2. Argosy Wind Power

4.3. Economic Analysis-Evaluation

We use Excel to make these scenarios about the investment, analyzing three different cases: a) 50 kw financed by loan on 50%, b) 50 kw and finally c) 500 kw in a hypothetical scenario of installing 10 wind turbines. It is obvious that the smaller investment would give greater efficiency, as they have about 2,5 times higher revenue. The following tables and graphs present the potential costs and revenues.

Initial Cost*:	110.000 €
Expected life:	20
Expected annual MW for 6,7 m/s:	179
Expected Annual Revenue for 6,7 m/s**:	44.818 €
Loan Amount:	55.000 €
Loan interest rate:	0,06
Years of loan payback:	10
Total Amount of Payback:	76.844 €
Tax Rate:	0,26
Total Taxes:	158.472 €
Annual Service and Operating Expenses :	5.000 €
Total Profit / Loss:	451.034 €

**Expected Purchase Cost of Wind Turbine + Other Costs (Transport and installation, Earthmoving-Road, network interface, studies and advisory services)*

*** 250 €/MW*

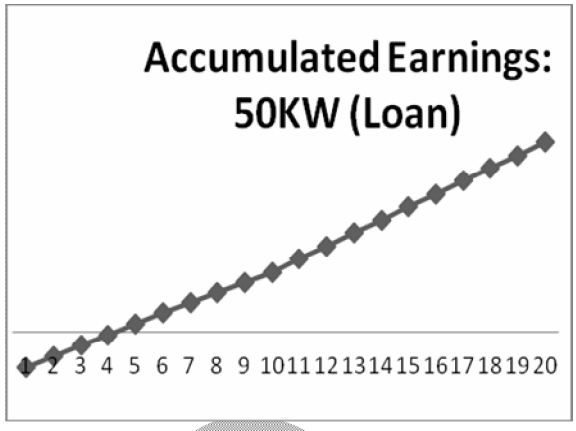

Table 1-Figure 3. Economical Analysis of 50Kw (loan)

Initial Cost*:	110.000 €
Expected life:	20
Expected annual MWp for 6,7 m/s:	179
Expected Annual Revenue for 6,7 m/s:	44.818 €
Loan Amount:	- €
Loan interest rate:	0,06
Years of loan payback:	10
Total Amount of Payback:	- €
Tax Rate:	0,26
Total Taxes:	178.451 €
Annual Service and Operating Expenses	5.000 €
Total Profit / Loss:	507.899 €

**Expected Purchase Cost of Wind Turbine + Other Costs (Transport and installation, Earthmoving-Road, network interface, studies and advisory services)*

***250€/MW*

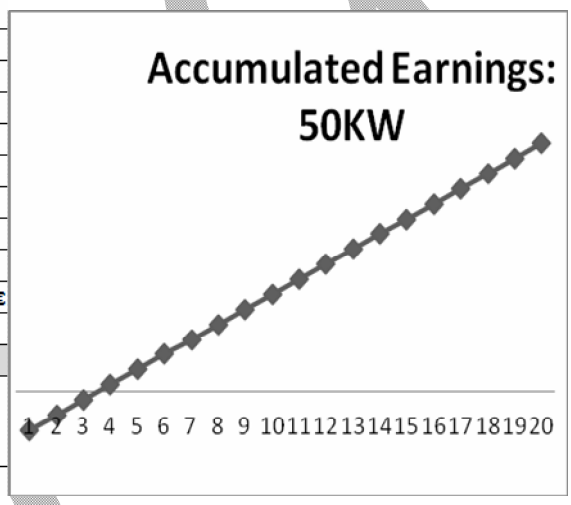

Table 2-Figure 4. Economical Analysis of 50 Kw (without loan)

Initial Cost*:	1.000.000 €
Expected life:	20
Expected annual MWp for 6,7 m/s:	1.793
Expected Annual Revenue for 6,7 m/s: **	178.284 €
Loan Amount:	- €
Loan interest rate:	0,06
Years of loan payback:	-
Total Amount of Payback:	- €
Tax Rate:	0,26
Total Taxes:	407.077 €
Annual Service and Operating Expenses :	50.000 €
Total Profit / Loss:	1.158.603 €

**Expected Purchase Cost of Wind Turbines + Other Costs (Transport and installation, Earthmoving-Road, network interface, studies and advisory services)*

*** 99,45 €/MW*

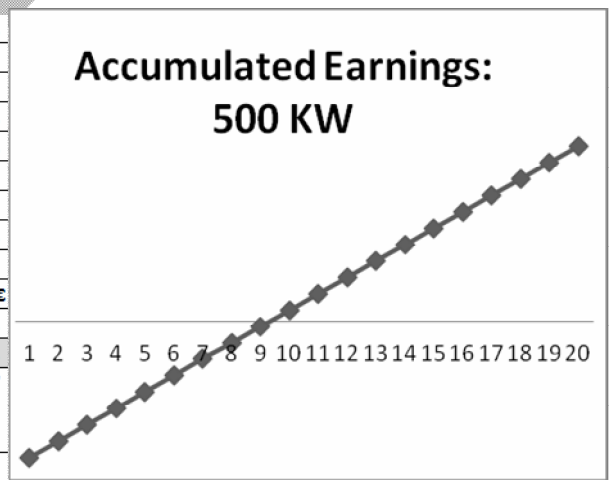

Table 3-Figure 5. Economical Analysis of 500Kw (without loan)

5. Conclusion

Wind energy, has a major role in human history. In this paper, we refer to a hypothetical wind turbine investment scenario the Greek Aegean Island Milos. We

suggest that the current legislative framework (electricity price and grid connection time) plays an important role in the viability and profitability of renewable resources investments. After the analysis, we conclude that wind power is a viable and profitable investment in Greece where the shortest payback period is calculated for small investments up to 50KW. It must be noted that during the time of the article HEDNO S.A. (Hellenic Electricity Distribution Network Operator S.A.) has paused all network connections requests for small wind turbine applications, hence no private investment on wind parks can proceed.

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The Moral / Psychological Harassment and its Dimensions in the Mental Health of the Employee in the Modern Workplace

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KEY WORDS: moral / psychological harassment, violence, employee, workplace, mental and physical health.

The present paper describes the existence of Moral/Psychological Harassment in the workplace, a phenomenon little known and evaluated in Greece.

The moral harassment or Mobbing is a "hidden violence" involving repeated abusive behavior (oral, physical, attitude ...) in small amounts. Usually, it isn't initially realized by the receiver and works cumulatively being very destructive to the mental and physical health as well as the quality of working life of the employee.

More specifically, the study aims to highlight on the nature & the characteristics (definition, causes, consequences and treatment) of the phenomenon while aims to act proactively informing and sensitizing students, graduates & employees towards the issue.

1. Introduction

The moral / psychological harassment in the workplace is a very old phenomenon in all societies. The identification and investigation of the problem began in the early 80's in Scandinavia and then in other European countries, USA, Canada, Australia. The German psychologist H. Leymann established in Sweden observed and named this phenomenon the term mobbing from the English verb «to mob» lash, bother.

The phenomenon of moral harassment is little known in our country as there is no systematic research in Greece.

The moral harassment is a key feature of the inconspicuous nature. This is an aggressive tactic is implemented through psychological manipulation, which gradually may destabilize the individual. Causes serious impact on mental and physical health and quality of life of the worker.

The World Health Organization (2003) & the European Agency for Safety and Health at Work (2012) through research aimed at legislation to prevent and combat the phenomenon of moral harassment.

2. Term Moral Harassment

As moral harassment in the workplace is defined as any abusive behavior (gesture, speech, behavior, attitude ...) that affects, by repeating or systematic, dignity or psychological or physical integrity of the person, putting at risk the work or degrading work climate.

The moral harassment is a violence in small doses, not localized, however it is very destructive. It is the cumulative effect of frequent and repeated trauma constituting the attack (Hirigoyen 2002).

In this presentation, I borrow the term moral harassment used by the French psychiatrist M.F. Hirigoyen who studied the nature, dimensions and consequences of the phenomenon and gave rise to the legal treatment in France. The same term is used by the institutions of the European Commission.

In Greek articles it is described by the terms mobbing & bullying as well as the conditions moral or psychological harassment and sometimes the terms moral terror or intimidation at work (A.X. Tsiama, 2013).

At the international level there is no commonly accepted term for bullying. Researchers refer to the same phenomenon, allowing the common features (A.X. Tsiama,2013).

Some terms in which attributed the particular form of expression of aggression in the workplace are:

Bullying, mobbing, harassment, harcelement moral, emotional abuse, victimization, harcelement psychologique.

3. Segregation between Moral Harassment and Professional Stress

In the workplace by the word stress we mean an excessive workload. Professional stress puts extra pressure due heavy working schedule and can lead to burn out, in a depression due to exhaustion.

However, for the person with anxiety, resting is mostly therapeutic because there is no bad intention of the work.

In the contrary, moral harassment goes far beyond the stress. The actual phase of moral harassment occurs when a person becomes subject to unfavorable treatment by damaging him. The harassment indicates the size of humiliation and disrespect (Hirigoyen,2002).

4. Segregation between Conflict and Moral Harassment

A conflict is a source of renewal and reorganization, giving rise to reflection and new ways of operating. What characterizes the conflict is a theoretical equality of respondents. Admitting the conflict, recognize the existence of the other as a partner that belongs to the same reference system. It promotes honest communication and clear interpersonal relationships.

As long as the conflict remains unresolved it is likely to move in the process of moral harassment.

In contrast, what differentiates moral harassment from conflict that is characterized by recurrent, long, unethical behavior (Hirigoyen,2002).

5. Ways of Expressing Moral Harassment

Surveys have recorded some behaviors which usually express aggressive behavior directly or indirectly.

Indicative behaviors that harm the reputation of the employee and the negative image of the weight:

- Create malicious comments /rumors through hints related to their personality, personal data.
- They slander to create a bad image against him.
- They attack him with shouts and insulting words, treat him with contempt, etc.

Indicative Behaviors affecting work performance:

- They do not assign him tasks or assign him tasks of lower responsibilities.
- Removes assignment in which he was productive and which enjoyed.
- They do not provide him with the appropriate tools and withhold information which is necessary for the execution of the project.
- They do not inform him about developments in the workplace.
- They watch him too closely in order to keep him in tense etc.

Indicative behaviors that block the ability of expression and communication in the work environment and negatively affect the ability to socialize with colleagues:

- Regular follow alliances and isolating the employee from the workplace to make him vulnerable. This can also take the form of spatial isolation.
- In group meetings they ignore him and act as if he is not present, etc.

Indicative Behaviors aimed at discomfort, punishment, intimidation or endanger the physical integrity:

- They refuse him of vacation or provide it the last moment.
- They threaten him with disciplinary action, firing or bad rating.
- Close the door on his face, etc. (A.X. Tsiama,2013).

6. Profile of Victim - General Characteristics

The moral harassment can occur when there is prejudice against an employee. Usually the refusal of diversity - some difference that the person has in relation to others and because of this he has different treatment from the management or the colleagues.

Such differences relate to gender, origin, religious or political beliefs, age, a physical disability, etc.

Other characteristics of the victim, which may cause envy, jealousy, competition is the appearance of some features of his personality, his financial situation, his skills, his studies, his salary, the service of development.

Fear causes the attack we are hurting the other person to protect ourselves from a risk. Basically, the fear of the attacker cannot stand up to the challenge, of the change, not to be liked by the boss (Hirigoyen,2002).

Also, the difference lies in a different code values or way of thinking and experiencing things (eg the person cannot follow the rules imposed by a group, resist manipulation or the group for any reason treat him as alien).

Other factors that strengthen the weakness of the victim is poor self - esteem, excessive conscientious people, people who are very committed to their work, sensitive people (Hirigoyen,2002).

It is important to point out that, as several studies have reported that bullying occurs suddenly, the victim is shocked when she realizes she has been chosen as the target of repeated abuse.

Moreover, as noted by several researchers in most cases the person - victim mentions the problem, those who attack try to distort reality and reverse responsibility, presenting the victim as a person with "difficult" character. They attempt to show the protest as evidence of problematic personality (A.X. Tsiama, 2013).

7. The profile of the Abuser - General Characteristics

The moral harassment is characterized by an attack and not a conflict, there is deliberate damage. The goal of the abuser is to dominate and to control the other person by trampling his mental status. There is loss of self-control, but instead is a desire to control another.
Some psychological profile predisposes more. Others know how to resist, no doubt because they have stable moral values and mental balance (Hirigoyen, 2002).

8. How come the Moral Harassment in the Workplace

A. From Manager to Employee

It is considered as the most common form and involves the abuse of power in the sense of overcoming the authority that someone has due to his position and arbitrary behavior which overcomes the legislative framework.

B. Among his Peers Colleagues

The moral harassment between colleagues may be due to reasons such as feelings of competition and jealousy. Observed phenomenon in business places particularly competitive.

C. From Employee or Group of employees to the Manager

It is less common than other forms of bullying. It occurs mainly when there is no recognition in the face of the head.

D. Among Managers

These behaviors aim to affect the victim's job performance.

E. From the Executives of the Organization to the Employees

Planned and directed by the management of the organization itself. It is directed against one or more employees, with the aim of forcing him to resignate (A.X. Tsiama,2013).

9. International Incidence of Moral Harassment

The investigation of Di Martino, Hoel and Cooper (2003) in the European Union on the ratio of the incidence rates of physical violence, sexual harassment and bullying. The moral harassment show much higher percentages than the other two forms of violence in the workplace. (A.X. Tsiama, 2013).

According to the Greek survey, conducted by the University of Athens are economically and in particular graduate program in human resources management, which was completed in 2010, 13.2% can be classified clearly victims of moral harassment. 47% are in a gray zone suffered negative behaviors but less frequency. Only 39.3% can be assumed that there are victims (Papalexandri, Galanaki 2011).

According to a survey by Workplace bullying Institute in 2010, 35% of workers in the United States say they have suffered harassment in the workplace.

Of interest are the results of research in France of M.F. Hirigoyen 2002 on harassment and discrimination in equality. There is a clear gender difference: 70% of women have been victims of bullying, compared with 30% of men.

Moreover, compared with the origin harassment in France to 58% of cases the moral harassment came from a superior, 29% came from many people, 12% of their colleagues.

10. Health Effects for the Employee

The moral harassment when it lasts for a short time and there is the possibility of hope for solving the problem leads to anxiety and stress.

These symptoms are associated with functional disorders, anxiety disorders such as fatigue, nervousness, insomnia, migraines, stomach disorders, lumbar pain.

If the moral harassment continues for long periods psychosomatic disorders are present in a substantial proportion of cases and are usually the first symptoms (dizziness, skin diseases, stomach and hormonal disorders, blood pressure), (Hirigoyen,2002).

At the end of time and repetition of the phenomenon of violence, symptoms converted to an apparent mental disorder because the victims receive an ongoing destabilization.

- neurosis is created since the aggressive behaviors revive in different forms eg nightmare even many years later.
- There is a time distortion. Memory is blocked on the in traumatic event and the person neglects the simple things of everyday life.
- Victims feel a sense of loneliness, it is very difficult for them to express something for which they are not certain.

- Usually when a person is emotionally over - invested in their work understands the investment as a failure and is incriminated.
- A severe depression may develop into a large 69% of employees according to a survey by the French psychiatrist Hirigoyen 2002 in France.
- The long and brutal humiliation of the person in some cases can cause rupture of the psyche and make certain forms of psychosis.

11. Prevention of Moral Harassment

An employee is harassed in the workplace to the problem of trust must choose who to trust. Within the working potential these people are human resources managers, doctors of the company, unions. However, both in Greece and in other countries, there is often the difficulty of these agents to cope with operating in a phenomenon that requires delicate handling and specific knowledge.

Victims of moral harassment will require more easily help from professionals outside of their work and usually addressed:

- In lawyers
- In psychologist or psychiatrist
- The labor inspectors
- The doctor
- In professional associations

12. Proposals Intervention within the Workplace

Steps for prevention include:

1) awareness among all employees about harassment, a great lecture or training groups.
2) training of specialists in the workplace socio-medical group, trade union representatives who selflessly want to become " trusting people."
3) training of directors of human resources management for conditions already existing.
4) The elaboration of a social law on harassment and discrimination.
5) When the health consequences are serious enough, moral harassment should be recognized as an occupational accident. It should be included in the prevention of occupational hazards because health at work is a fundamental right of employees.
6) A law should remind to everyone that it is an unacceptable violence.

An effective prevention of the global phenomenon of moral harassment should be imposed by the state, but it still is our responsibility. We can all be potential perpetrators, potential future victims of the supervisor or the employees (Hirigoyen, 2002).

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"LIAISON OFFICES-GOOD PRACTICES IN EUROPEAN UNIVERSITIES-THE CASE OF LIAISON OFFICE SEC T.E.I. PIRAEUS, GREECE"

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The employability of higher education graduates is nowadays one of the first priorities in Greece and last but not least in Europe. A smooth and successful vocational socialization of higher education graduates-future workers or entrepreneurs-is a substantial goal of educational systems and policy makers. The contribution therefore of higher education in entrepreneurship and consequently employability can be both a teaching effort (as possible) and the organized transfer of experience and reflection. But because entrepreneurship is not taught ex cathedra, is necessary to operate structures, through which the above mentioned could be done. The creation, operation and further development of Liaison Offices is crucial for the accomplishment of many goals from Higher Education Institutes and as a result its graduates success. Liaison Offices play a vital part by linking the University with society and market through their activities and 'the good practices" they apply. This paper presents the results of the study which was done in the frames of the "Tempus IV-6TH "UNITE PROJECT T.E.I. OF PIRAEUS", concerning the good practices in European Universities and especially the case of Liaison Office T.E.I. of Piraeus. The scientific team of the Liaison Office attempts to analyze and present the supporting structures to promote employment and entrepreneurship educational information as offered and developed in Greek and European universities to accomplish their function as channel of communication between institutions and industry. The structure of T.E.I. Piraeus is presented and the

services offered in particular, by the Liaison Office. Last but not least, this paper analyzes the results and impacts of the operation of these structures such as Liaison Offices, creating tools that lead to useful conclusions for further development and optimal deployment of networks pursuing partnerships based on the role they perform.

KEY WORDS: Liaison Offices, Good practices, Sectors, Mission, Code of Ethics.

1.1 HIGHER EDUCATION IN GREECE

The Greek educational system is mainly divided into three levels, primary, secondary and tertiary (Higher Education), with an additional post-secondary level providing vocational training. Higher Tertiary education is provided by Universities and Polytechnics, Technological Educational Institutes (T.E.I., 1983 ~ present) and Academies which primarily cater for the military and the clergy. Undergraduate courses typically last 4 years (5 in polytechnics and some technical/art schools, and 6 in medical schools), postgraduate (MSc level) courses last from 1 to 2 years and doctorates (PhD level) from 3 to 6 years. Higher education in Greece consists of two parallel sectors: the University sector (Universities, Polytechnics, Fine Arts Schools) and the Technological sector (Technological Education Institutions and the School of Pedagogic and Technological Education). Higher Education Institutes are self-governing legal entities under public law, supervised and subsidized by the state through the Ministry of National Education and Religious Affairs. The main source of funding is the state budget through the Ministry of Education and European funds. Additional funding is provided by National and European Framework research projects (RTD), through other ministries and third bodies that receive services provided by the Higher Educational Institutions.

1.1.1 Universities and Technical Universities

All the Higher Tertiary state-accredited Universities in Greece are public. The duration of the undergraduate degree programs for most disciplines is 4 years (full-time). Programs in engineering, dentistry, pharmacology, agronomics, forestry, along with some programs in fine arts, have a duration of 5 years (240E.C.T.S - 300E.C.T.S ISCED 5A). Medicine is the only discipline with duration of studies of 6 years.

Agricultural University of Athens, Aristotle University of Thessaloniki (campuses: Thessaloniki, Serres), Athens School of Fine Arts, Athens University of Economics and Business, Democritus University of Thrace (campuses: Komotini, Xanthi, Alexandroupoli, Orestiada), Harokopio University, Hellenic Open University, International Hellenic University, Ionian University, National and Kapodistrian University of Athens, National Technical University of Athens, Panteion University of Social and Political Sciences, Technical University of Crete, University of the Aegean (campuses: Mytilene, Chios, Karlovasi, Rhodes, Ermoupoli, Myrina), University of Crete (campuses: Heraklio, Rethymno), University of Ioannina, University of Macedonia, University of Patras (campuses: Patras, Agrinio), University of Peloponnese (campuses: Tripoli, Korinthos, Kalamata, Nafplio, Sparti), University of Piraeus, University of Thessaly (campuses: Larissa, Volos, Karditsa, Trikala, Lamia)

University of Western Macedonia (campuses: Florina, Kozani)

1.1.2 Technological Educational Institutes

All the Higher Tertiary state-accredited Technological Educational Institutes in Greece are public. Technological Educational Institutes were initially established in 1983. They currently offer a 4-years (full-time) undergraduate degree programs equivalent to Honours Bachelor's Degree (240E.C.T.S ISCED 5A) and since 2008 they are also allowed to run on their own postgraduate that lead to a Master's Degree and PhD programs.

Alexander Technological Educational Institute of Thessaloniki (campuses: Sindos, Katerini, Kilkis, Nea Moudania), Higher School of Pedagogical and Technological Education, Technological Educational Institute of Athens, Technological Educational Institute of Chalkida (campuses: Chalkida, Thiva), Technological Educational Institute of Crete (campuses: Heraklio, Chania, Rethymno, Agios Nikolaos, Ierapetra, Sitia), Technological Educational Institute of Epirus (campuses: Arta, Ioannina, Preveza, Igoumenitsa), Technological Educational Institute of the Ionian Islands (campuses: Lefkada, Argostoli, Lixouri, Zakynthos), Technological Educational Institute of Kalamata (campuses: Kalamata, Sparti), Technological Educational Institute of Kavala (campuses: Kavala, Drama, Didymoteicho), Technological Educational Institute of Lamia (campuses: Lamia, Amfissa, Karpenisi), Technological Educational Institute of Larissa (campuses: Larissa, Karditsa, Trikala), Technological Educational Institute of Western Greece (campuses:Patras, Missolonghi, Pyrgos, Aigio, Nafpaktos and Amaliada) (Created by the union of T.E.I. of Patras and T.E.I. of Missolonghi), Technological Educational Institute of Piraeus, Technological Educational Institute of Serres, Technological Educational Institute of Western Macedonia (campuses: Kozani, Florina, Kastoria, Grevena and Ptolemaida).

Students who successfully complete their studies in Universities and T.E.I. are awarded a *Ptychio* (degree) which leads to employment or further study at the post-graduate level. University and T.E.I. graduates can continue their studies to attain an MSc and a PHD provided they meet the criteria set by each department running the courses. According to the Constitution of Greece, higher education is public, is provided solely by the state and is provided free of charge at the undergraduate level. Fees for some MSc courses are set by the departments running the courses. The State Scholarships Foundation (IKY) provides scholarships to students who wish to study at tertiary education institutions. Scholarships are also granted to graduates of universities and technical education institutions for post-graduate or post-doctoral studies in Greece and abroad based on academic achievement of undergraduate studies. Additionally, students (at any level) can receive mobility grants to study at other European Higher Education Institutes under the Lifelong Learning Programmes (LLP). The first cycle leads to the first degree (*ptychio* or *diploma*) in both sectors of higher education, i.e. the university and technological sectors. The second leads to the second degree, which is called a postgraduate specialisation diploma (equivalent to the Master’s degree), and the third degree (doctorate). Studies in the fields known as regulated professions (medicine and surgery, agriculture, arts, dental studies, pharmacy, veterinary medicine and engineering) last for five to six years. A doctorate is obtained after at least three years of original research, including the preparation and writing of a thesis. In some doctoral programmes, theoretical courses are compulsory and are taken prior to

individual research. Under the 2004 law, a new international scheme for joint Master's degrees has been established. This provides for cooperation between institutions to work out the details concerning the organisation and functioning of postgraduate study programmes which lead to joint qualifications. Art. 23 of law 3404.

1.1.3 Liaison & Career Offices in Greek Universities

Liaison Offices/Career Offices are a relatively new institution for Greek Higher Education, as they did for the first time appeared in Universities & Technological Education Institutes of the country in the early 1990s, under relevant financing from the A' CSF. The continuation of funding through B' and C' CSF allowed the creation of Liaison Offices in almost all Institutions of Higher Education, which, through a wide range of activities have been developed, aimed at supporting the academic community, particularly students and alumni in their transition efforts from study to professional life-from the University to the labor market-. Today, the existing services offered by the Liaison & Career Offices appeal to a wide audience, which extends from academic community (students, postgraduate students, alumni, faculty members, Researchers etc) to the labor market (enterprises, chambers, employers' organizations, etc.) and the wider community (students, parents, School Vocational Guidance counselors from area Secondary Education etc.).
More specifically, the most important services offered by the majority of Career Offices of the Universities of the country are the following:

- Counseling Services

Divided into actions of group and individual counseling concerning on resume writing, cover letter, job interview personal, career search techniques, and career decision.

- Services in connection with the labor market

Include activities aimed at market approach. Working primarily through the development of contacts and cooperation with enterprises and employers' organizations, as well as the communication of available work positions. Also, the Liaison Offices concentrated material (printed and / or electronic) associated with labor market trends professions etc.

- Services related to Postgraduate Studies and Scholarships.

They inform and support student Postgraduate Study in Greece and abroad and support in choosing appropriate postgraduate program.

- Services to faculty members and departments of their institutions. In all the institutions there have been developed, either systematically or occasionally, diodes of communication and cooperation with the departments and faculty members.
- Information Services to Secondary Education

In cooperation with the governing bodies of secondary education, actions undertaken to inform students, parents and school guidance counselors for the specialist fields of Institutions and professional outlets of their graduates.

- Events-Organized events, meetings and workshops with topics relevant to the labor market and career days and selection Masters Curriculum.
- Entrepreneurship Services
-

This is a relatively new service, which began to be provided by the 2003 onwards. The relative activity with the greatest impact on student audience is the organization of group counseling seminars, with notes written & distributed by the same Career Office itself for so as to meet specific needs. In parallel, other activities such as workshops, organization and function of libraries information guides and information leaflets on commitment of entrepreneurial action, Entrepreneurship website etc.

- Surveys

These services include development of research for coverage of specific needs, aiming to improve/adapt their services so as to achieve the best possible support of the beneficiaries. The services offered by the Career Offices, although not related exclusively to entrepreneurship, are extremely important and useful, well, not only can complement entrepreneurship actions, but are directed and diffused in a growing number of students. In this light, the exploration of prospect of continuous operation, as an organizational unit of Higher Education Institutions is necessary.

Almost the same period, simultaneously with the Career Offices, the Liaison Offices initiated to operate under the same funding source but under the Ministry of Growth- not the Ministry of Education. The purpose of the Liaison Office is to support the members of the University community and to help create the appropriate partnerships for further development of innovative research results.

Liaison Office is usually organized into two units: The Unit of Public Relations and Promotional partnerships in research and the Unit of Research Results Development & Exploitation. The Unit of Public Relations and Promotional Partnerships aims to intensify the participation of research groups of the University proposals according to the interests of researchers and focuses on finding suitable partnerships and appropriate funding sources for the development of research activity of researchers. Also through the actions of this Unit, the function of the Liaison Office is well known in both the academic community and the business world, while it also concerns for renewing the skills of the staff and finding funding for the operation of that Office. The Unit of Research Results Development & Exploitation aims at providing the necessary assistance to researchers to develop & exploit their research results. Liaison Offices usually offer the following services: Continuous recording of interesting workshops and opportunities for participation in programs, System targeted information on interesting workshops available funding, but requests for cooperation from other agencies, based on their interests and abilities, Counseling and support for participation in proposals, Assistance in finding suitable partners, Finding partners, Counseling in signing the agreements on intellectual property and cooperation agreements in the context of equity -funded programs, Contact with local businesses who are interested in cooperation with the University, Creating networks with other Liaison Offices in Greece and abroad, Establishing relationships with regions, municipalities and other bodies involved in the development of the region, Establishing relationships with our nearby universities and colleges, Organization of information days for researchers, Organization of information days for local entrepreneurs, Information, education staff on issues related to the better functioning of the office, Search for funding to enhance the function of that office, Contact with the local press, Production of information material, Maintain updated website, Continuous recording of useable research laboratories results to find suitable mode of recovery and appropriate method of financing, Providing legal advice and assistance for the registration of a research and cooperation agreements: Copyright, Trademark, Draft , Patents, Confidentiality Agreement for preliminary discussion exploitation investigation,

Technology transfer agreements or technology to third parties, License Agreement, Cooperation Agreements, Surveys, Support in applying for patent, Investigate the existence of another patent, Decision on Greek or other patent, Assisting in the preparation of the patent application, Applying patent, Find programs or other funding agencies for exploitation of research results, Financing of current programs, Funding from specific industrial or other entities) that are in contact and may be interested, Funding from Venture Capital, Funding bodies warmers, Find partners through participation in targeted Investment Forums.

In some Higher Education Institutes there have been created and operate both the Career Office as well as the Liaison Office. However, in some, due to lack of funding or personnel they have tried to combine the two Offices and offer joint services. Of course there is also a minority of Universities where only Career Offices operate while Liaison Offices are underactive or their services are offered indirectly either through other structures or individually by professors and researchers. With the continuation of the funding in the frames of NSRF (National Strategic Reference Framework) and the operational programme for education and life-long learning, co-financed by Greece and European Union, a new structure is developed the Structure of Employment and Career which is established and is active since 2009 in Higher Education and is responsible for organizing, supervising and coordinating all individual structures / programs relating to the connection of higher education to the Labour Market and Industry. Career Offices, Practical Training Agencies, Innovation & Entrepreneurship Units, Counselling and Psychological Support Centers are separate parts of these new Structures of Employment and Career (S.E.C.). Below there is a table with the Public Higher Education's Institutes and their Career & Liaison Offices.

TABLE 1: LIAISON OFFICES IN GREEK HIGHER EDUCATION INSTITUTES

UNIVERSITIES & NSTITUTES	WEB SITE	STRUCTURE OF EMPLOYMENT AND CAREER/CAREER OFFICE/ LIAISON OFFICE
NATIONAL & KAPODISTRIAN UNIVERSITY OF ATHENS	http://www.uoa.gr/	CAREER OFFICE http://www.uoa.gr/foithtes/symboyleytikes-yphresies/grafeio-diasyndeshs.html LIAISON OFFICE http://www.uoa.gr/to-panepistimio/yphresies-panepisthmiakes-monades/grafeio-diamesolabhshs.html
NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA)	http://www.ntua.gr/	CAREER OFFICE http://career.central.ntua.gr/ LIAISON OFFICE http://liaison.ntua.gr/core/portal.asp?cpage=NODE&cnode=1
AGRICULTURAL UNIVERSITY OF ATHENS	http://www.aua.gr/index.php	CAREER OFFICE http://www.career.aua.gr/
ATHENS UNIVERSITY OF ECONOMICS AND	http://www.aueb.gr/	CAREER OFFICE http://www.career.aueb.gr/

BUSINESS		
PANTEION UNIVERSITY OF SOCIAL AND POLITICAL SCIENCES	http://www.panteion.gr/	CAREER OFFICE http://www.panteion.gr/index.php?p=content&section=20&id=143&lang=el
ATHENS SCHOOL OF FINE ARTS	http://www.asfa.gr/	CAREER OFFICE http://www.dasta.asfa.gr/frontend/articles.php?cid=2
UNIVERSITY OF PIRAEUS	http://www.unipi.gr/	CAREER OFFICE http://career.unipi.gr/
ARISTOTLE UNIVERSITY OF THESSALONIKI	http://www.auth.gr/	CAREER OFFICE http://dasta.auth.gr/cmsitem.aspx?sid=2&id=155
UNIVERSITY OF MACEDONIA	http://www.uom.gr/index.php	CAREER OFFICE http://career.uom.gr/careerindex/index.html
UNIVERSITY OF WESTERN MACEDONIA	http://www.uowm.gr/	CAREER OFFICE http://dasta.uowm.gr/career/
UNIVERSITY OF PATRAS	http://www.upatras.gr/	CAREER OFFICE http://www.upatras.gr/index/page/id/104
UNIVERSITY OF PELOPONNISOS	https://www.uop.gr/index.php	CAREER OFFICE http://career.uop.gr/
UNIVERSITY OF IOANNINA	http://www.uoi.gr/gr/	CAREER OFFICE http://www.uoi.gr/gr/facilities/career_office.php LIAISON OFFICE http://liaison.uoi.gr/
UNIVERSITY OF CRETE	http://www.uoc.gr/	CAREER OFFICE http://www.dasta.uoc.gr/career/
TECHNICAL UNIVERSITY OF CRETE	https://www.tuc.gr/2969.html	CAREER OFFICE http://www.career.tuc.gr/3532.html LIAISON OFFICE http://www.liaison.tuc.gr
UNIVERSITY OF THE AEGEAN	http://www.aegean.gr/	CAREER OFFICE http://career.aegean.gr/
DEMOCRITUS	http://www.duth.gr/	CAREER OFFICE

UNIVERSITY OF THRACE		http://career.duth.gr/cms/
IONIAN UNIVERSITY	http://www.ionio.gr/central/	CAREER OFFICE dasta.ionio.gr/liaison
UNIVERSITY OF THESSALY	http://www.uth.gr/	CAREER OFFICE http://www.career.uth.gr/
HELLENIC OPEN UNIVERSITY	http://www.eap.gr/	CAREER OFFICE http://career.eap.gr
INTERNATIONAL HELLENIC UNIVERSITY	http://www.ihu.edu.gr/	CAREER OFFICE http://career.duth.gr/cms/
THENOLOGICAL EDUCATION INSTITUTE OF ATHENS	http://www.teiath.gr/	CAREER OFFICE http://www.career.teiath.gr/Career/Articles/215.html
TECHNOLOGICAL EDUCATION INSTITUTE OF WESTERN MACEDONIA	http://www.teiwm.gr/index.php?lang=el	CAREER OFFICE career@kozani.teikoz.gr
TECHNOLOGICAL EDUCATION INSTITUTE OF EPIRUS	http://www.teiep.gr/	CAREER OFFICE http://dasta.teiep.gr/grafeiodiasyndesis
ALEXANDER TECHNOLOGICAL EDUCATION INSTITUTE OF THESSALONIKI	http://www.teithe.gr/	CAREER OFFICE www.career.teithe.gr
TECHNOLOGICAL EDUCATION INSTITUTE OF CENTRAL GREECE	http://www.teiste.gr/	CAREER OFFICE http://career.teilam.gr/
THECHOLOGICAL EDUCATION INSTITUTE OF THESSALY	http://www.teilar.gr/	CAREER OFFICE http://dasta.teilar.gr/default.htm?box=1&tile=112
TECHNOLOGICAL EDUCATION INSTITUTE OF IONIAN ISLANDS	http://www.teiion.gr/	CAREER OFFICE http://www.teiion.gr/index.php/el/management/daas.html
TECHNOLOGICAL EDUCATION INSTITUTE OF CENTRAL MACEDONIA	http://www.teikav.edu.gr/teikav/	CAREER OFFICE http://career.teikav.edu.gr/
TECHNOLOGICAL EDUCATION INSTITUTE OF KALAMATA	http://www.teikal.gr/	CAREER OFFICE http://dasta.teikal.gr/Career/default.aspx
TECHNOLOGICAL EDUCATION INSTITUTE OF CRETE	http://www.teicrete.gr/tei/en/index.php	CAREER OFFICE https://dasta.cs.teicrete.gr/web/career-office/

		LIAISON OFFICE http://www.liaison.teicrete.gr/
TECHNOLOGICAL EDUCATION INSTITUTE OF WESTERN GREECE	http://www.teiwest.gr/index.php/en/	CAREER OFFICE http://www.teiwest.gr/index.php/el/home-2/dasta-gr
TECHNOLOGICAL EDUCATION INSTITUTE OF PIRAEUS	http://www.teipir.gr	Structure of Employment and Career (S.E.C.) http://www.teipir.gr/index.php?option=com_content&task=view&id=90&Itemid=84 Liaison Office http://gdias.teipir.gr Counselling and Psychological Support Center counseling@teipir.gr Practical Training Office http://apollon.teipir.gr/praktiki/ Innovation & Entrepreneurship Unit http://www.teipir.gr/mke/ European Programmes and International Relations Office, http://euoffice.teipir.gr/ T.E.I. Piraeus Alumni Association http://gdias.teipir.gr/alumni
TECHNOLOGICAL EDUCATION INSTITUTE OF CENTRAL MACEDONIA	http://www.teiser.gr/	CAREER OFFICE http://diasyndesi.teicm.gr/
SCHOOL OF PEDAGOGICAL & TECHNOLOGICAL EDUCATION http://www.aspete.gr/	http://web.aspete.gr/aspete/index.php	CAREER OFFICE http://dasta.aspete.gr/Career/default.aspx

1.2 TECHNOLOGICAL EDUCATION INSTITUTE OF PIRAEUS

Established by a special law in 1976, merging two faculties, Anastasiadis Faculty founded in 1947 and Sivitanidios Faculty founded in 1957, the KATEE of Piraeus was founded. T.E.I. of Piraeus was established under the terms of Law 1404/83 in 1983. It is a Technological Education Institute maintaining a high standard of teaching supported with applied research in chosen areas. T.E.I. of Piraeus maintains permanent links with other national and foreign educational and research institutions aiming at continuous improvement of the education it offers to its students. On the other hand T.E.I. of Piraeus participates in numerous cooperative programs of the European Union so as to encourage international cooperation and improve knowledge diffusion. Technological Education Institute of Piraeus (T.E.I.) of Piraeus (Tel: +30 210 5381100, Fax: +30 2105450962, Web site: http://www.teipir.gr) is one of the oldest T.E.I.s in Greece, with a long tradition of involvement in the country's educational life. It Students wishing to enter TEI must first successfully take the *Panhellenic* examinations, a legal requirement, and once students have joined, full attendance is compulsory. As part of its courses, T.E.I. of Piraeus offers both theoretical and practical education to help students use their scientific, technological and artistic knowledge and skills. Courses at each of T.E.I.'s departments last eight semesters, including the six-month practical work. To graduate, students need to complete successfully the courses offered by their department, write a dissertation and complete a six-month period of work placement. T.E.I of Piraeus's headquarters are in Western Attica in the Municipality of Aegaleo, alongside P. Ralli and Thivon Street. Its buildings are located in the

heart of the ancient grove of Athens, near the Platonic Academy, where philosophers used to teach in ancient times. Its facilities, with additions and improvements form a comprehensive and contemporary academic environment of high standards. The buildings of T.E.I. Piraeus are covering an area of 100.000sqm. The Laws 2916/2001, 3549/2007, 4009/2011 and 4076/2012 have integrated the current operating frame as a Higher Education Institute, providing high level technological education while elaborating applied research programs at the specific professions. The training provided includes undergraduate and postgraduate studies on subjects with technological and economic content. T.E.I. Piraeus maintains permanent collaborations with other institutions and research institutes in Greece and abroad and participates in EU programs to strengthen international cooperation, to continuously improve the level of education and promotion of science. T.E.I. Piraeus offers a wide variety of postgraduate programs, highly estimated and recognized by the Labour Market. The Technological Education Institute of Piraeus is one of the fourteen independent and self-governed T.E.I. which constitute the technological sector of the national system of higher education in Greece. T.E.I.s are distinguished from traditional universities in Greece by their technological orientation of their curriculum. T.E.I. of Piraeus offers more than 25 different degree –awarding-programs across the entire spectrum of learning, from arts and social sciences to applied sciences and engineering. The institute is built on its own campus of approximately 100.000m2 in the middle of an olive grove that includes some of the very same olive trees that used to shade Plato's Academy situated then nearby. It is close to the picturesque and famous port of Piraeus and within the metropolitan area of greater Athens. Regular bus service is provided by the metropolitan transportation system connecting the institute directly with down-town Athens and Piraeus as well as with the rest of Attica through easy connections. Regular bus service connect the institute with Egaleo METRO station 2km of distance. The postgraduate programs at the T.E.I. of Piraeus enjoy the Administration's special attention and with the support of the staff of the collaborating institutions have been well accepted by the market. T.E.I. of Piraeus welcomes international students and promise's an up to date training in the best tradition of Greek hospitality. As already mentioned the operation of the Institute is based on the Greek laws 4009/2011, 4076/2012, 3549/2007, 2916/2001. The degrees offered are recognized by the Greek state and EU and are fully evaluated. The studies in the Departments of TEI of Piraeus for the first level degrees are lasting four years typically and are equivalent to 240 ECTS, according to the Bologna Process Guidelines. After graduation, the new scientists may continue their studies in the second level (MSc) programs that last one to two years weighted 90-120 ECTS. Then, a third level course is possible for PhD studies in collaboration with several Universities in Greece or in European region. Nine (9) Departments exist in TEI of Piraeus, grouped in two schools. In the Engineering School there are the following departments:

1. Automation Engineering Department, 2. Civil Engineering Department, 3. Computer Systems Engineering Department, 4. Electrical Engineering Department, 5. Electronic Engineering Department, 6. Mechanical Engineering Department, 7. Textile Engineering Department,

In the School of Business and Economics there are the following Departments:

1. Accounting and Finance Department, 2. Business and Administration Department

TEI of Piraeus had been may awarded a DS label for the system of Higher Education alignment procedures.

There are also sixteen (17) Postgraduate Programs at the second level (Master). Some of them are autonomous and are governed by the TEI of Piraeus rules. There are also programs that are organized in collaboration with several Universities in the European area and the United States.

- Accounting and Finance, Master in Business Administration, Public Economics and Policy, International Business Management, Health Services Administration, Science of decisions with information systems, Energy Systems Management and Optimization, Information & Communication Technologies in Education, Networking & Data Communications, Applied Information Systems, Management in construction, Applied Policies and Techniques of Environmental Protection, Educational Technology & Human Resources Development, Advanced Industrial & Manufacturing Systems, Master of Science in Energy, Interactive & Industrial Product & System Design, Seismic & Energy Upgrade Construction & Sustainable Development

Each year approximately 1500-2000 new students are enrolled in TEI of Piraeus and the total number of the active full time students is approximately 12.000 while, along with the inactive part time students, the total number reaches 25.000. The permanent Academic Staff is encountered to 160 Professors. The teaching staff is enriched with approximately 300 part time professors. The academic operation is supported by 160 permanent members of the administration staff and 20 permanent members of the technical staff. These operations are also supported by approximately 30 additional persons that are engaged in several R & D programs. There are approximately 25 Laboratories in Engineering Scholl and 10 Laboratories in the School of Business and Economics that support the teaching and research and development activities. They are engaged in several research and development programs that are funded by the Greek Government and European Union. T.E.I. of Piraeus being the second largest Technological Institute of Education in Greece, with 2 Faculties: Faculty of Applied Sciences and Faculty of Management and Finance-, 9 Departments and more than 25.000 students enrolled, running 17 fully accredited post-graduate programs, in various academic fields, in cooperation with other universities from Greece, and abroad maintains permanent links with other and foreign educational and research institutions and participates in numerous programs of the European Union, while encourages international cooperation and improvement of knowledge diffusion. The Technological Education Institute of Piraeus as an autonomous State Institution of Higher Education, is mainly supported by the state funds and the Research Consultancy budget. This account is handling allocations for research and education as well as allocations such as E.P.E.A.E.K., NSRF which are derived from several different sources and are destined for the cover of expenses that are essentials rot the needs of research, education, training, development of projects as well as continuous training. It is in fact that, with the new philosophy of international education, all foundations of third degree education are charged with a new social cost through their active participation in economy. Applied technological research is constantly creating closer relations with production units. Having all of the above in mind, it is therefore natural that this Special Account is constantly upgraded, since it consists the way through which this connection is materialized. There is a **Technological Research**

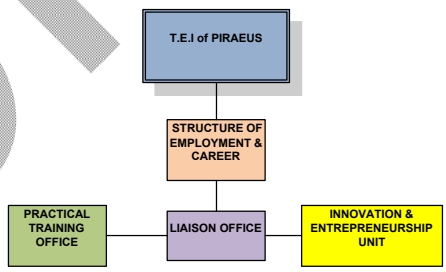
Center, within the bounds of approach of T.E.I. with the Production Units, that functions with the purpose of elaborating researches and studies about its area of responsibility. There is also a **Vocational Training Centre l**ocated at the centre of Athens, which offers training programs to university and High School graduates. Each Academic Year starts on the 1st of September and ends on the 5th of July of the following year. It includes two semesters (winter and spring semester) of 15 weeks each. After the end of course delivering in each semester, two sequential examination periods are programmed (of usually 15 days length). **Main University Regulations (notability recognition procedures):** According to the Regulation of Studies, published in the Gov. Gar. 816\21-5-1999, the modules delivered are distinguished into three categories: Compulsory Modules, Mandatory Elective, Optional Modules. The total number of modules for each student is forty (40) that are weighted (240 ECTS credits). Each module may include theory, labs, tutorials, seminars and special projects. Some of the modules are characterized as prerequisite for other modules that are characterized as dependant. *Exams:* Depending on the way that each module is being instructed, there are examinations for the Labs (which take place during the semester), writing of essays as well as final examinations at the end of each semester, which take place in two successive periods. *Placement:* The six month placement is obtained when the student has successfully attended 2/3 of the obligatory courses and all specialization modules. The aim of the placement is the consolidation and application of all the knowledge that has been gained during the studies. It can take place in public or private companies as well as educational centers and enterprises of European Union Countries, within the boundaries of European Programs. A certain fee is given to the students under placement. *Dissertation:* The dissertation is elaborated under the supervision of the educational staff on subjects related with the topic of studies, and must be orally presented to a three member committee, publicly, one of the members being the supervisor of the student. **ECTS institutional co-coordinator** is the Deputy President\ Academic Affairs. Examination and Assessment Regulations: According to the Institution's studies regulation, grading is in a scale from zero to ten and grade distribution is as follows: 8,5-10: Excellent, 7,0-8,4: Very Good, 5,0-6,9: Good, 4,0-4,9: Insufficient, 0-3,9: Fail. Successful completion of a course requires a grade of at least 5.0. General Information for Students: **Cost of living** for students is minimum because of the low prices of the service in TEI Piraeus and the rent allowance that is provided to the students with financial difficulties. Additionally, there are no tuition fees and the studies are free of charge. The books and notes are also free of charge. For some of the students scholarships are given from the National Foundation of Scholarships, having as a criterion their study record and their financial situation. Scholarships are also likely to be given to students that are continuing their studies in a Post Graduate level either in Greece or abroad. Identity Cards are also supplied to students after their subscription, every year, from the secretariat which offers them a reduced price in all means of transportation (bus, trolleys, metro, trains, ships, airplanes) in Greece and abroad (trains and airplanes). **Accommodation:** Student with financial difficulties as well as those that come from families with many children are hosted in hotel rooms with which TEI has accomplished an agreement, otherwise a rent allowance is provided to those students. **Meals:** Students that are entitled to a meal card are provided with free breakfast, lunch and dinner in the restaurant of the Faculty which is located on the ground floor of Building A of T.E.I. The rest of the students can eat at the same restaurant paying a symbolic amount of money. T.E.I has a restaurant that can feed

around 600 people; it employs 20 persons. There are also 4 cafeterias in the faculty. **Medical Facilities**: Provided that students are not insured in any other service, they are entitled in full Medicare and hospitalization. The personal health booklet that is provided to students ensures that they free of charge medical examination, dental work, orthopedic equipment, pregnancy allowance and physiotherapy. A doctor and a nurse are employed by the Department on a regular basis for medical advice and confrontation of extraordinary incidents. **Financial Support for Students**: Under certain circumstances, students with financial problems can obtain an interest free loan which should be paid after the termination of studies in monthly installments. **Student Affairs Office**: Each student is allocated to a member of permanent staff, who consults/mentors him in every case. In special cases psychological support may be provided by special stuff. According to the Presidential Provisions 483/84, working students are facilitated in their studies as well as their exams. A fourteen days student leave is given to them as well as reduced working hours. Students with special qualifications can be employed with a part time job in several different programs of T.E.I and in particular services of the foundation. **Study Facilities:** *Photocopy Center:* There is a special division in the institute and each department for free printing of notes that are distributed to students. *Sport Facilities:* In our effort to provide a complete athletic program, T.E.I. of Piraeus offers basketball, volleyball, tennis and football courts as well as table tennis with programs for all the above sports and under the attention of special gymnasts. It also organizes special tournaments and contests in different kinds of sports and participates in matches with other universities, in the Pan-Hellenic games of all Greek Universities, in European as well as World Organizations and in games for charitable purposes. *Library:* Students have the ability to use the lending library of T.E.I, which numbers 16.000 book titles (27.000 volumes), 160 magazines and dissertations. Working hours of the library: Monday to Friday 9.00pm-19.00am. *Digital Library*: The digital library gives the students the opportunity to gain access to books, magazines and bibliographic data as well as to all kinds of digital information and knowledge that is available in libraries of other Educational and Research Institutions (National and International). Furthermore, free internet access is available as well as the use of digital material in the form of CD-ROMs. *Public Relation and Information Office*: The activities of this office cover the development of Public Relations of T.E.I, the access of T.E.I's activities domestically and internationally, the achievement and signing of agreements with foreign Foundations, the organization of lectures, ceremonies and cultural events, the exchange relations with foreign Educational Foundations and the welcoming as well as stay of foreigner scientists. *Computer Facilities:* All students have access in computer labs, where they are taught the relevant courses and have the opportunity to use a computer for the needs of their studies as well as the writing of essays. **International Programs**: Through European Union and International Relation Office, T.E.I participates in many programs such as SOCRATES/ERASMUS, TEMPUS PHARE, TEMPUS TACIS, ADAPT, JEAN MONNET, LEONARDO DA VINCI etc. Students are encouraged to participate in such programs in order to gain special knowledge and experience. **Language Center**: Students have the opportunity to improve their knowledge in foreign languages such as English, French, Italian and German. On the other hand foreign students can improve their knowledge and use of Greek language. For this purpose our language center has two labs of 30 students each, equipped with computers and optical-acoustic systems. **Students Union:** All students of the School of Engineering belong to the

Union of the above School which is administrated by a 9 persons committee that is elected every spring semester by the students of T.E.I. A special compartment of the student union is engaged in the everyday needs of the students, such as catering, accommodation, etc. The **Structure of Employment and Career** will be analyzed below.

1.3 STRUCTURE OF EMPLOYMENT AND CAREER TEI PIRAEUS

The Structure Employment and Career (SEC) was established by the Council Decision of TEI with the Act 20/26.05.2009. It coordinates, the planning and programming of the separate structures that compose the institutional Structure Employment and Career (SEC): Liaison Office, Practical Training Office, Unit of Innovation and Entrepreneurship, Counseling and Psychological Support Center. The objectives of the Structure are the exploitation of scale economies, optimized coordination and management, the widening and strengthening of networking with other institutions, the labor market and the Practical Training /Employment/Innovation/Entrepreneurship promotion accredited bodies. This structure is a coalescence action, transformation and rationalization of structures of Technological Education Institutions regarding the above mentioned issues and the liaison between education and the labor market. The role of SEC is to capture the vision, to develop the strategy of each institution for its connection to the labor market and to ensure the development of a sustainable and coordinated approach to individual structures and policies of the Foundation in this field. SEC recommends to the competent bodies of the Institute and implements its decisions, always in collaboration with other involved departments of the institution. SEC's activities are directed to undergraduate and postgraduate students/graduates. The main objective is to offer the students, in an organized manner, the opportunity to experience the environment of their future career and at the same time gain knowledge and skills that will allow them to claim the best terms with their place in the professional arena. All component individual transactions are under the SEC's coordination, but still each of them has also its own administrative organization and operation in accordance with the chart of the Technological Educational Institute of Piraeus and legislation:



1.3.1 Liaison Office TEI Piraeus

The **Liaison Office of T.E.I. of Piraeus** was set up as part of the Institute's efforts to provide support where needed and to reach out to a greater number of contacts, thereby allowing the T.E.I. to become a permanent link between the educational community and the forces of production. In 1993, a Career Office was established in TEI Piraeus with Scientific Director professor Dr Solon Antoniou (1993-2010). The office came into operation during the period covered by the 2nd Community Support

Framework (Hellenic Ministry of National Education and Religious Affairs - Operational Programme for Education and Initial Vocational Training "O.P. Education"). In 1997 it was incorporated into the 2nd C.S.F., renamed to Liaison Office and started participating in the Horizontal Action of Greek T.E.I.'s Liaison Offices. In 2001 it was incorporated into the 3rd C.S.F. & in the formal organizational structure of T.E.I. In 2010 was the initiation of the operation of S.E.C. (Structure of Employment and Career) with (total budget:2.647.897,00 €) till 2014, with Institutional Scientific Director Dr Antonis Antoniou (2009-2013) and Dr Dimitris Tseles (2013-.....). In 2007 Liaison Office becomes a member of the EUE-NET (European Universities Enterprises Network) while in 2010 becomes a member of the CDO-NET (European Career Development Offices Network). From 1993 till 2014 LO completed 21 years of successful operation with total funding 1.683.572,81€.

1.3.2 Practical Training Office TEI Piraeus

Practical Training Office: The six month placement is obligatory for TEI Piraeus and is obtained when the student has successfully attended 2/3 of the obligatory courses and all specialization modules. The aim of the placement is the consolidation and application of all the knowledge that has been gained during the studies. It can take place in public or private companies as well as educational centers and enterprises of European Union Countries, within the boundaries of European Programs. A certain fee is given to the students under placement. Practice is an important part of the Institute regarding the contact between students and the Labour Market. It is a way of linking theory with practice. The practical training office is funded by EU and Greek Government and handles all the issues on internships from the finding of the placement to the quality assessment of the practical training etc.

1.3.3 Entrepreneurship and Innovation Unit TEI Piraeus

Innovation & Entrepreneurship Unit was established as a separate unit along with SEC. However, before this, entrepreneurship services were offered both by Liaison Office and the Undergraduate Departments through Entrepreneurship courses. Activities include elearning entrepreneurship courses, Production of educational material for educational purposes, Visits to businesses and other organizations associated with the object of study of the students, Seminars for entrepreneurs and business executives, virtual enterprises and / or developing simulation exercises and website development both for information and for distribution of educational material, Development of case studies refering to specific existing companies or specific business issues, Development of business ideas and business plans, Prizes of Entrepreneurship, Creation of Figures mentoring within the contact between students & business executives and organizations, Networking (Includes participation in events and conferences of organizations implementing entrepreneurship programs, contact with alumni networks, with incubators of new businesses - technology parks, with new centers of entrepreneurs), Activities for the promotion and publicity of the program as conferences, workshops and display production and diffusion of printed promotional material.

1.3.4 Counseling and Psychological Support Center TEI Piraeus

At the end of 2010 with the establishment of the Structure of employment and career- a **Counselling and Psychological Support Center**, modernly equipped, started to operate as a separate unit with specialised experienced stuff, with ambitious plans, use of modern tools always in cooperation with the above mentioned Offices.

1.4 PRESENTATION OF LIAISON OFFICE TEI PIRAEUS

The Liaison Office of T.E.I. Piraeus has been operating since 1993, aiming to offer:

- ✓ A source of up to date and accurate advice and information on a range of educational, career guidance and counseling issues.
- ✓ A meeting point between T.E.I. of Piraeus and the labour market.
- ✓ An opportunity to get in contact with public sector bodies, in general.
- ✓ A bidirectional node between the Academic Society and the production sector to create partnerships.
- ✓ A contact point between T.E.I. of Piraeus and other educational institutes throughout Greece and abroad.

The Liaison Office has been an important part of the organizational structure of T.E.I. of Piraeus since 2001. It belongs administratively at the Institute's Direction of Studies Co-ordination and Student Care and specifically at the department of Studies, Practical Training and Career. With the continuation of the funding in the frames of NSRF (National Strategic Reference Framework) and the operational programme for education and life -long learning, co-financed by Greece and European Union, Liaison Office is incorporated in the Structure of Employment and Career which is established and is active since 2007. Liaison Office is part of organizationally to Structure of Employment and Career (S.E.C.) of T.E.I. Piraeus.

To achieve its goals the Liaison Office:

- Publishes information material.
- Organizes workshops, special events and exhibitions.
- Keeps its libraries well stocked with a wide range of information, both in printed form and online.
- Maintains confidential databases with details of companies, graduates, students etc.,
- Conducts Graduate Career Path Monitoring Research, Labour Market Studies, Job Profiles Guides Studies etc.
- Offers counseling on personal and career issues and performs individual and group consultative seminars.
- Has its own dedicated website, blog, e-magazine, Facebook profile, Twitter, Linked In and Youtube accounts, which are regularly updated.
- Participates in third party activities,
- Coordinates and supports activities of T.E.I. Piraeus Alumni Association (T.P.A.A.).
- Develops information guides: Career Management Guide in Greece and Abroad, Post Graduate Studies & Scholarships Guide in Greece and Abroad, etc.
- Enables the use of computers with free internet access and also provides a reading room.
- Provides psychometric evaluation tests for free.

- Brings together students and alumni with potential employers for job vacancies respectively in Greece and abroad.
- Supports activities that help secondary-level students to make vital career decisions and to take advantage of the specialized services offered by the Institute, in regard to its current departments.
- Develops collaborative networks at local, national and international level with the productive and social agencies.
- Gathers information about agreement or joint projects, I & D research projects.
- Assists in matters of Entrepreneurship.
- Participates in the coordinating, institutional and advisory committee of Structure of employment and career.
- Participates in European University Enterprises Network & Career Development Offices Network.
- Maintains project committee consisting of representatives from all departments aiming to bidirectional information between Academic Society and Liaison Office, on common interest issues.
- Last but not least, Liaison Office, in order to ensure the quality of its services, has established and applies a quality management system for Counselling and Advising Services to Educational and Employment Issues according to DIN EN ISO 9001:2008.

The Liaison Office provides you information on:

- ✓ Postgraduate studies in Greece and abroad,
- ✓ Scholarships and endowments,
- ✓ The classification of Higher Education Graduates,
- ✓ Professional Rights & Employment Fields for T.E.I. Piraeus Departments,
- ✓ Jobs in Greece and abroad,
- ✓ Enterprises and Organizations Profiles,
- ✓ Résumé writing, cover letter, self-descriptive report and presentation to interview selection either for work, postgraduate study program or scholarship,
- ✓ The existing legislation, employment programs, funding for individuals special categories,
- ✓ Training and retraining,
- ✓ Seminars, workshops, events and conferences,
- ✓ Agreement or joint projects, I & D research projects,
- ✓ Entrepreneurship issues.

Services provided by the Liaison Office can be used by:

- Students (undergraduate & postgraduate) of T.E.I. Piraeus but also of all Higher Education, seeking opportunities & prospects to continue their studies, to get into the labour market or express interest in a part-time or volunteer work.
- Seniors of T.E.I. Piraeus and of all other Greek T.E.I.s, with common specializations, looking for a temporary job.
- Graduates of T.E.I. Piraeus and of all other Greek T.E.I.s, with common specializations who seek a workplace as well as information on postgraduate studies, seminars, professional rights, etc.

- Companies-Organizations which are looking for specialised staff to fill job vacancies and seeking to develop co-operation with the Institute.
- Members of the T.E.I. of Piraeus Academic and Administrative Community, who need support organizing various events.
- Greek and foreign Educational Institutes interested in developing collaborations with the T.E.I. of Piraeus.
- KE.SY.P (Advisory and Orientation Centres) and GRA.S.E.P. (Advisory and Professional Orientation Offices) – Secondary – level students who require information concerning T.E.I.'s departments and career opportunities for graduates of these departments.

How can someone use Liaison Office's services?

One can visit the Liaison Office S.E.C. T.E.I. of Piraeus (A014) everyday from 07:30 until 17:00pm and use its services, libraries, computer facilities or just pick up some information from the notice boards. It's easy to use our services and completely free of charge. One should ask to complete the specific registration form so that his details can be included at the Liaison Office's databases. This will help him take full advantage of our Employment and Educational Information and Advisory Services.
Specifically:If someone is a senior / graduate looking for part time or full time job in Greece or abroad, wanting educational information, needing to take advantage of the Counseling Service, wanting to subscribe to T.E.I. Piraeus Alumni Association (T.P. A.A.) then he should fill in the "D 4.3.2 Inventory Card/Census Form". While if someone is an employer looking for undergraduates / graduates to fill vacant permanent / fixed term / part time / seasonal jobs he should fill in the "D 4.3.1 Notification Form of Available Job or Practical Training Offers".

Liaison Office S.E.C. T.E.I. of Piraeus has the following permanent staff:

-Prof Pantelis Malatestas, Scientific Director of Liaison Office and Head of the Electrical Engineering Department of T.E.I. Piraeus, pmal@teipir.gr
-Maria Kaltsogianni, Msc Mechanical Engineer, Coordinator, Education Advisor, Publicity & Information Dissemination and Quality Assurance Manager of Liaison Office S.E.C. T.E.I. Piraeus, dy@gdias.teipir.gr & edu@gdias.teipir.gr
-Chris Tsitsis, Mechanical Engineer, Assistant Coordinator, Quality Labour market Monitoring Manager of Liaison Office S.E.C. T.E.I. Piraeus, dy@gdias.teipir.gr
-Eugenia Moulou, Automation Engineer, Employment Advisor & Secretariat of Liaison Office S.E.C. T.E.I. Piraeus secre@gdias.teipir.gr & ergasia@gdias.teipir.gr
-Alexandros Alatsatianos, Msc Electronics Communication Engineer, E-magazine administrator of Liaison Office SEC T.E.I. Piraeus, emagazine@gdias.teipir.gr
-Nasos Stergiopoulos, Msc Automation Engineer, Information Technology Manager & Technical Support of Liaison Office S.E.C. T.E.I. Piraeus, administrator@gdias.teipir.gr
-Nicholas Alexiou, Psychologist,Career Counsellor of Structure of Employment and career (S.E.C.), counsellor@gdias.teipir.gr & counseling@teipir.gr

1.4.1 Mission

It is the job of the Liaison Office at the T.E.I. of Piraeus to provide top quality services, both to the educational community and to public and private sector companies, organisations, local authorities and collective bodies. By providing such services, the T.E.I. of Piraeus aims to:

- Contribute to the training, specialisation and professional placement of graduands and graduates of the Institute.
- Help businesses find the specialised staff they need.
- Keep the Institute informed of the needs and demands of production and to participate in activities related to the adaptation of Study Programmes.
- Co-operate with similar offices in A.E.Is and T.E.Is throughout Greece and abroad.

A fundamental principle and commitment of the Liaison Office at the T.E.I. of Piraeus, and, indeed the guiding philosophy of each member of its staff, is to provide all interested parties with services that meet their requirements fully, that comply with regulatory demands and that meet the quality standards that the Liaison Office insists on.

To guarantee quality, the management of the Liaison Office at the T.E.I. of PIRAEUS

- Has introduced a quality assurance system which complies with ISO 9001:2008. This has been applied to all aspects of the Office's work and to all the activities it is involved in which affect the quality of service it offers and the assistance it provides to students and other interested parties.
- Continually reviews and improves its services wherever possible to maximize the effectiveness of its procedures and, by extension, of its Quality Assurance System as a whole.
- Has established measurable objective targets for quality in the Office, T.E.I. Departments, procedures and services. Efforts to achieve these targets are regularly appraised by the Senior Management of the Liaison Office of the T.E.I. of Piraeus as part of the Quality Assurance review process.
- Strives to ensure the necessary resources are available to enable each section of the Office to operate freely, effectively and efficiently.
- Invests in ongoing training and education to keep its staff abreast of contemporary developments and to promote the concept of Quality throughout all the office's activities.
- Monitors, measures and appraises all the vital parameters and procedures to ensure it achieves its targets.
-

By adopting the principle of ongoing improvement, the Liaison Office of the T.E.I. of Piraeus recognizes and rewards team work and individual effort, makes an investment in people and shows its respect for students and other interested parties.

1.4.2 Program Components

In the current NSRF, Liaison Office has the following content:

W.P.1: OPERATION AND MANAGEMENT
W.P.2: PUBLICITY and DIFFUSION of INFORMATION
W.P.3: STUDIES-RESEARCHES
W.P.4: EMPLOYMENT SECTOR
W.P.5: EDUCATIONAL INFORMATION/ADVICE
W.P.6: COUNCELLING/MENTORING

Table 2: Content of the project

The SUBSTANTIVE OBJECT ANALYSIS is presented below.

WP1: OPERATION AND MANAGEMENT (1/9/2010 - 31/10/2015)

1.1 Management of the Scientific Director
1.2 Internal Operation Sector
1.2.1 Staff's Education and Training
1.3 Development, Management, Maintenance Communication - Information Systems and Networks Sector
1.3.1 Extension, further development of the information system and Integration in the SEC's unite information system
1.3.2 Development of electronic services' system
1.4 Secretarial Support Sector
1.5 Data Collection and Processing Sector
1.5.1 Collection and recording of data for monitoring / evaluation
1.5.2 Monitoring the progress of students/graduates who benefited from the services

1.6 Quality Management Sector

1.6.1 Project Assessment Mechanism Creation

Management (Monitoring the progress of the Project (substantive and financial)), aiming the successful completion, is implemented by the Scientific Director and the **Internal Operation Sector** through the Internal Operation Coordinator and the Deputy Internal Operation Coordinator under the coordination framework of SEC. A new innovative electronic document management system is applied so as to accelerate communication, improve working conditions and increase productivity.
Development, Management, Maintenance Communication - Information Systems and Networks Sector monitors and implements new technologies in LO, and assumes : a) Integration in the SEC's unite information system b) the development of an integrated information system to integrated information - communication system / network interaction between Liaison Office's beneficiaries and users in real time (interactive real time information networking system) and c) the improvement and further development of e- services system (e-servicenet).

All data from the Liaison Office's operation are collected and encoded in Monitoring Indicators within the wider evaluation mechanisms which are developed continuously & updated by the Office. This includes the maintenance of the Quality Management System according ISO 9001:2008 which we already have applied since 2007. The currently existing system has been expanded and an objective staff/ external partners appraisal system has been designed and is implemented on a regular basis.

A continuous monitoring mechanism has been developed for the beneficiary graduates aiming at the SEC's "regular Database feeding" and the contribution of the Office in developing intervention actions for disabled and socially vulnerable groups which will be implemented by the Institute's Counseling Center.

Liaison Office has developed training plan activities for its staff using also e-learning methods on specific topics such as innovative e-consultancy, life coaching-mentoring, and sign language. Besides Liaison Office makes the necessary trips so as to participate in national & international networks, knowledge transfer meetings, relevant conferences etc in order achieve its goals.

WP2: PUBLIC RELATIONS, PUBLICITY & DISSEMINATION OF INFORMATION (1/9/2010 - 31/10/2015)

2.1 Database & Site Upgrade, Enrichment and linkage to the SEC's unite information system
2.2 Printed and Electronic Informational Material Completion
2.2.1 Implementation of E-magazine
2.2.2 Reading Hall & Libraries development, update and enrichment
2.3 Events Organization and conduct
2.4 Liaison Office's promotion actions to the academic community
2.5 Partnerships and Promotion General Activities
2.5.1 Networking at International level
2.5.2 Connection to secondary education
2.5.3 Update stakeholders on the TEI Piraeus specialties, their graduates and their employment opportunities
2.5.4 Development of Mechanisms for the linking of alumni to the Institute

The Liaison Office's printed and electronic information material is continuously updated and enriched (E-magazine, Career Guide in Greece & Abroad, Postgraduate & Scholarships Guide in Greece & Abroad, Job Profiles, Entrepreneurship Guides etc). The site is also continuously updated and enriched so as to meet the increased needs. The rich information material of the Liaison Office is available in hardcopies in the reading hall but also in digital archive. We continuously organize events to promote the institution of the Liaison Office and we further develop the network of collaborations with several Bodies, Champers, Observatories, Businesses/Industries, Universities, Embassies, Ministries, Municipalities, other institutions and networks at national, European and international level. There have been developed binding activities with the Secondary Education and the Alumni Institute Association.

WP3: STUDIES-RESEARCH (1/9/2010 - 31/10/2015)

3.1 TEI Piraeus' Graduates Career Path Monitoring Research

3.2 Labour Market Research

3.3 Job Profiles Guides Updating

The performance of the **TEI Piraeus' Graduates Career Path Monitoring Research** every three years as well as the **Labour Market Research** every three years aim to capture the Greek reality of the labor market, lifelong learning, disabled and vulnerable groups peculiarities. By improving the system of data collection, record keeping, processing and analysis LO aims to monitor the alumni career path and simultaneously create a useful tool for the development and further improvement actions at both the educational process and at the employment promotion especially in the current economic challenging environment. Regarding **Job Profiles Guides,** they are updated and published every three years for all **TEI Piraeus'** specialties, giving one more asset to our beneficiary users.

WP4: EMPLOYMENT (1/9/2010 - 31/10/2015)

4.1 Students/graduates support process from practical training/work placement finding, in Greece and abroad

4.1.1 Networking with other bodies of employment promotion

4.1.2 Online job search service

4.1.3 Actions counseling in employment

The Employment Sector refers to the operation and development of the respective areas of LO. The Sector A) has developed a network of partnerships with institutions for the promotion of employment at national, European & international level, b)has organized and runs the information service for working in Greece and abroad, and c) currently uses a database and maintains a special blog for practical training/work places in Greece and abroad, but is also developing a modern "jopnet" (online registration service & students' / alumni's CVs search, new job vacancies from employers, innovative entrepreneurship ideas etc) and d) has already begun to systematize actions of mentoring (career mentoring).

WP5: EDUCATIONAL INFORMATION (1/9/2010 - 31/10/2015)

5.1 Education Counseling Sector

5.1.1 Information on undergraduate & postgraduate studies, scholarships, qualifying exams, training seminars

5.1.2 Vocational Guidance of students and graduates at secondary education level

5.1.3 Mentoring Actions on postgraduate studies issues

The Education Counseling Sector regarding the operation and development of the respective areas has developed a network of partnerships with training organizations at national, European & international level (connecting to the network alumni.net), b) applies an electronic service "e-servicenet" on relevant issues, c)has developed further actions for collaboration with the Secondary Education and last but not least d)has systematized actions of mentoring (education mentoring).

WP6: COUNSELING (1/9/2010 - 31/10/2015)

6.1 Counseling Sector

6.1.1 Career Counseling & Professional Orientation

6.1.1.1 Mentoring Actions on career issues
6.2 Support Services Development for the Disabled or other vulnerable social groups
6.3 Supply and implementation of psychometric test tools for personal skills & self-awareness assessment

The Liaison Office's Counseling Service works in partnership with the Counseling and Psychological Support Centre of our Institute and is supported by the internal/external mentors networks and several external partners. As part of the infrastructure we provide a) e-counseling system (on professional matters etc), b)implementation of mentoring activities targeting vulnerable social groups. c) use of development tools and personal skills self-assessment (psychometric tools), d)implementation of activities designed to support students / graduates-disabled or from vulnerable social groups-. Networking with Institutions worldwide, collection of information, recording of the above students / alumni and actions for the development of opportunities that facilitate the access of the disabled to information and services applied are also included.

However besides the above outputs Liaison Office has proposed expanding its activities developing new ones such as Assistance in finding suitable partners, Finding partners, Counseling in signing the agreements on intellectual property and cooperation agreements in the context of equity -funded programs, Providing legal advice and assistance for the registration of a research and cooperation agreements: Copyright, Trademark, Draft , Patents, Confidentiality Agreement for preliminary discussion exploitation investigation, Technology transfer agreements or technology to third parties, License Agreement, Cooperation Agreements, Surveys, Support in applying for patent, Investigate the existence of another patent, Decision on Greek or other patent, Assisting in the preparation of the patent application, Applying patent, Find programs or other funding agencies for exploitation of research results, Financing of current programs, Funding from specific industrial or other entities) that are in contact and may be interested, Funding from Venture Capital, Funding bodies warmers, Find partners through participation in targeted Investment Forums. As soon as it gets the funding the above activities will operate through the Liaison Office by specialized personnel rather than being implemented professors individually or through other existing structures partially.

1.4.3 Quality Management System

The main system for support and aid of the Liaison Office SEC T.E.I. of Piraeus is based on the continuous evaluation of the system using internal processes. Consequently, it provides continuous control and updating of the electronic systems used for the diffusion of information as well as the guarantee of unhindered follow-up of the project's requirements, based on the recording of internal needs from the Institution and the briefing with regard to the innovative processes that take place in other equivalent liaison offices. Several qualitative and quantitative indicators have been set to guarantee the evaluation process in addition to the statistics software used, which is based on 6-sigma and is going to contribute to the control of the system and the new information system that is under development. Weekly sessions have been established for the personnel of the liaison office to present and evaluate to the whole of the team all the processes, in order to solve any kind of

problem that might arise, also daily cooperation takes place between the internal operation manager and the Scientific Director. Flow charts of the services, duties catalogue, job descriptions that the liaison office of SEC T.E.I. of Piraeus has developed, are evaluated regularly and are modified accordingly to achieve the best possible results for the liaison office. Additionally the evaluation of the liaison office is not only concerned with the Intermediary Report of Evaluation but also expands yearly to develop analytic reports of proceedings of travels / attending third party events / support and organize events as well as development of analytical process plans of all the parts of the office using monthly work sheets. Thus is ensured, the continuous feedback of the Scientific Director but also of all the participants and the stakeholders. Besides the internal evaluation, we have development external evaluation of the project with the entrusting of relative study to a responsible researcher. Objective of the external evaluation was the identification of possible interventions in the operation of the office for the optimization of processes and their effectiveness. The external evaluation was considered more objective and had the possibility of proposing corrective processes as much in the current system of evaluation as in the more general organization and operation of Liaison Office. All the above, constitute a most excellent source of information for the project, by referring specifications and results that have resulted in combination and the objectives that have been placed. Continuous evaluation includes using also the project indicators, as they have been recorded and defined in the Technical Bulletin of the Project. The operation but also the services offered from the liaison office were recorded and the necessary improvements took place so that the liaison office achieved the ISO 9001:2008 certification in June 2008 up to today, with annual audits, from the Accredited Institution of Certification TUV RHEINLAND. The certification of services ensures the continuous evaluation of our work and constitutes a step towards the guarantee of its viability.

1 Scope	**6 Resource management**
1.1 General	**6.1 Provision of resources**
1.2 Application	**6.2 Human resources**
2 Normative references	**6.3 Infrastructure**
3 Terms and definitions	**6.4 Work environment**
4 Quality management system	**7 Product realization**
4.1 General requirements	**7.1 Planning of product realization**
4.2 Documentation requirements	**7.2 Customer-related processes**
5 Management responsibility	**7.3 Design and development**
5.1 Management commitment	**7.4 Purchasing**
5.2 Customer focus	**7.5 Production and service provision**
5.3 Quality policy	**7.6 Control of monitoring and measuring equipment**
5.4 Planning	**8 Measurement, analysis and improvement**
5.5 Responsibility, authority and communication	

5.6 Management review	**8.1 General** **8.2 Monitoring and measurement** **8.3 Control of nonconforming product** **8.4 Analysis of data** **8.5 Improvement**

Table 3: Content of ISO 9001:2008

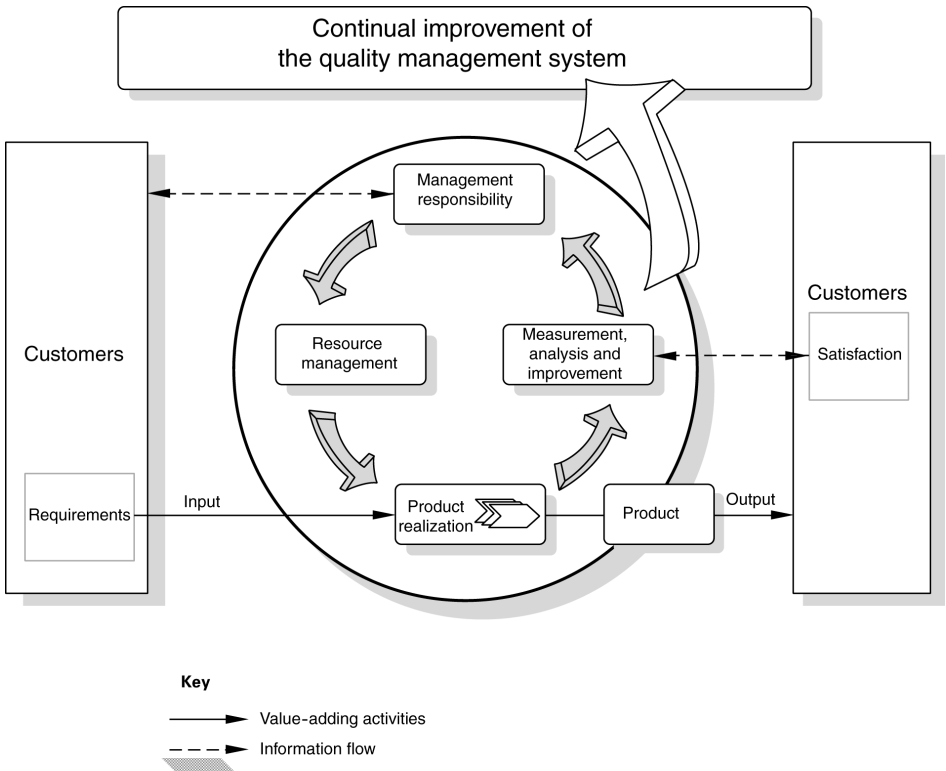


Figure 1: QMS

In an attempt to secure the overall quality of the services offered to our beneficiaries, Liaison Office of T.E.I. of Piraeus has established and applies a QMS for Counseling and Advising Services to Educational, Employment and Practical Training Issues. Proof has been furnished that the requirements according to DIN EN ISO 9001:2008 are fulfilled. The Quality Manual has full description of all the standardized processes and procedures that are used by the liaison office of T.E.I. of Piraeus for all the services provided.

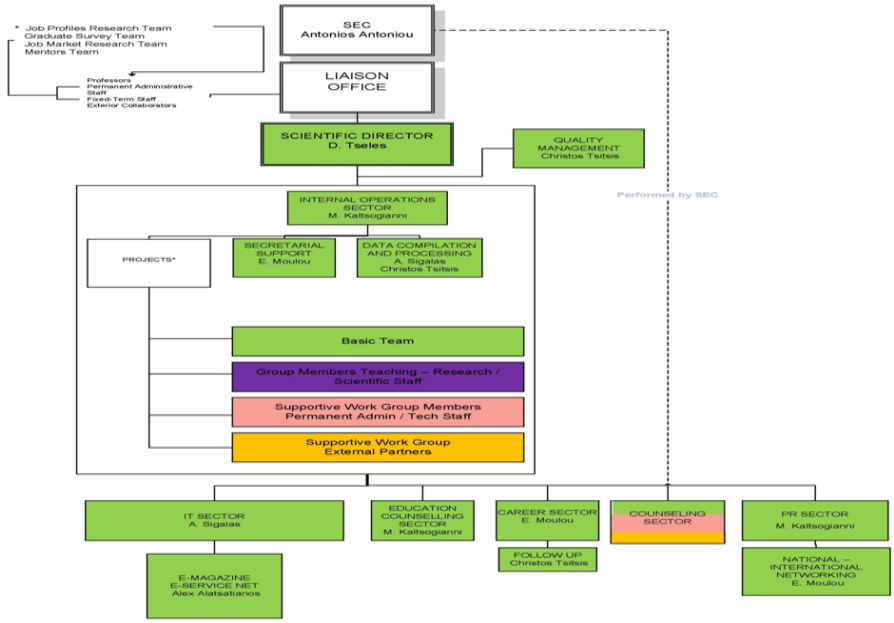


Figure 1: Organizational Chart

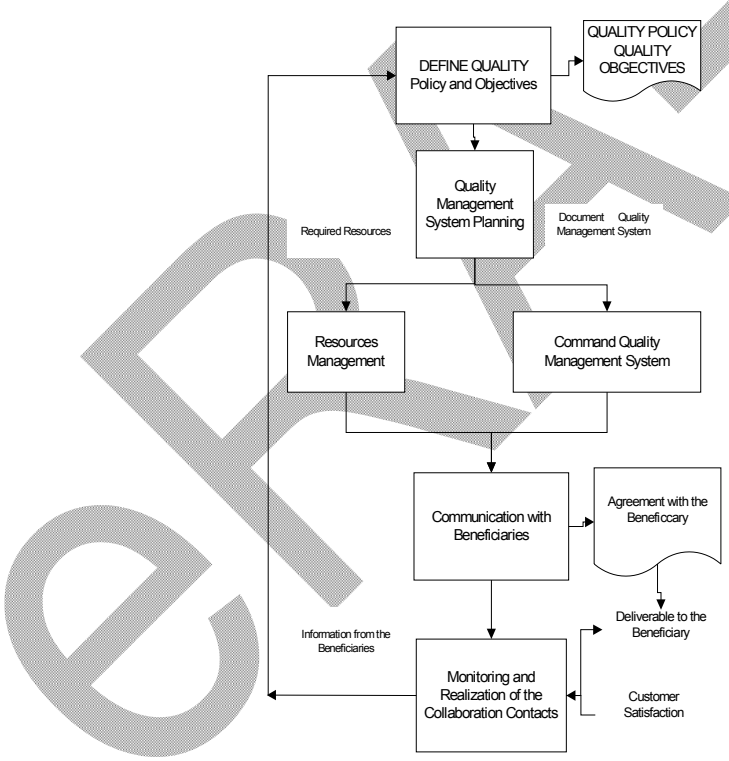


Figure 2: Basic Processes

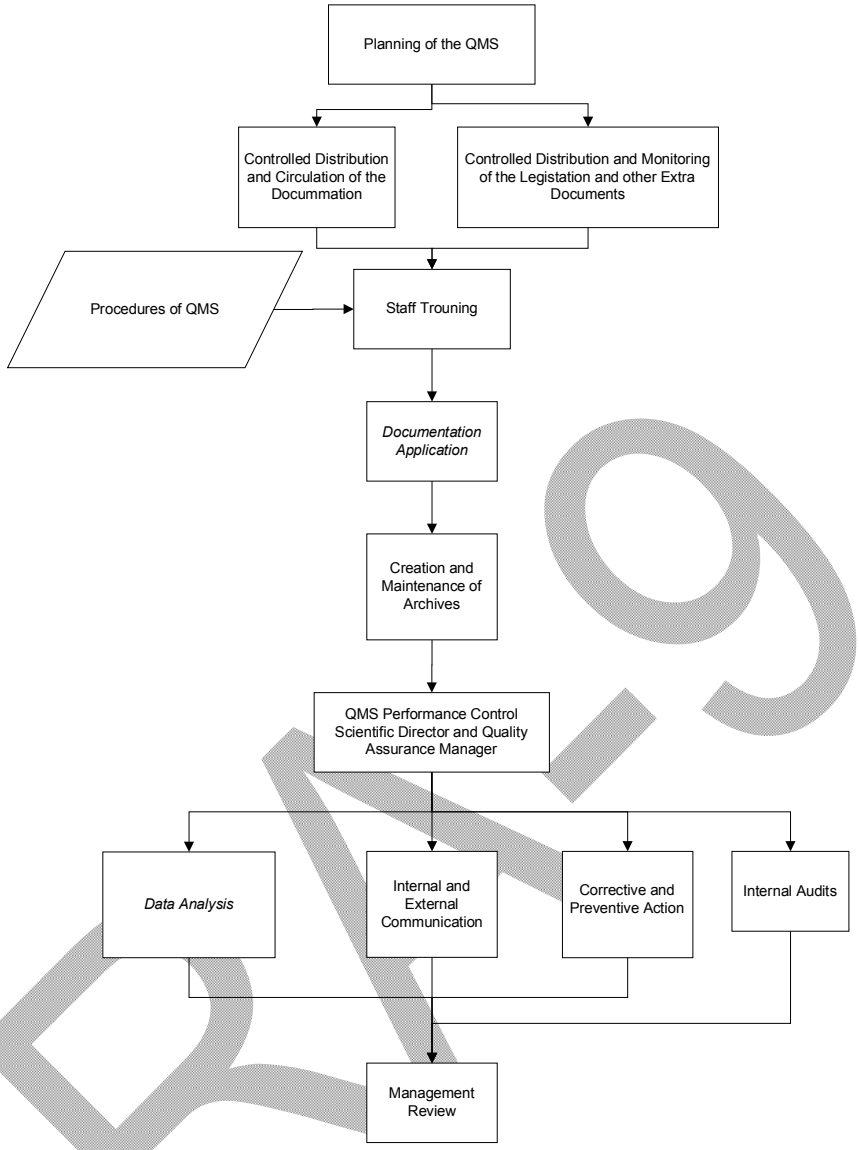


Figure 2: Command of the Quality Management System

13.

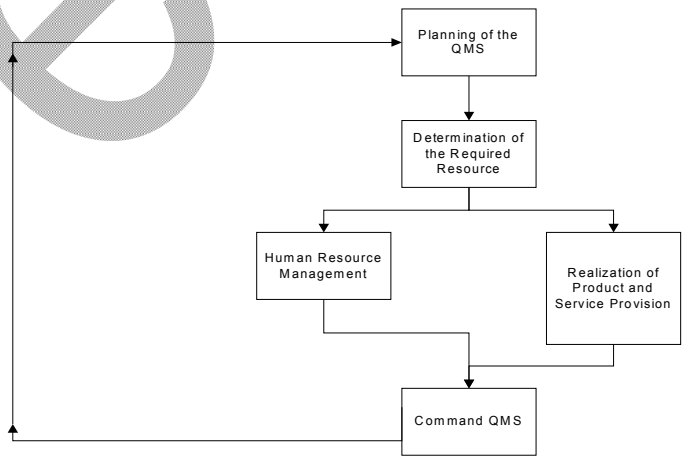


Figure 3: Resource Management

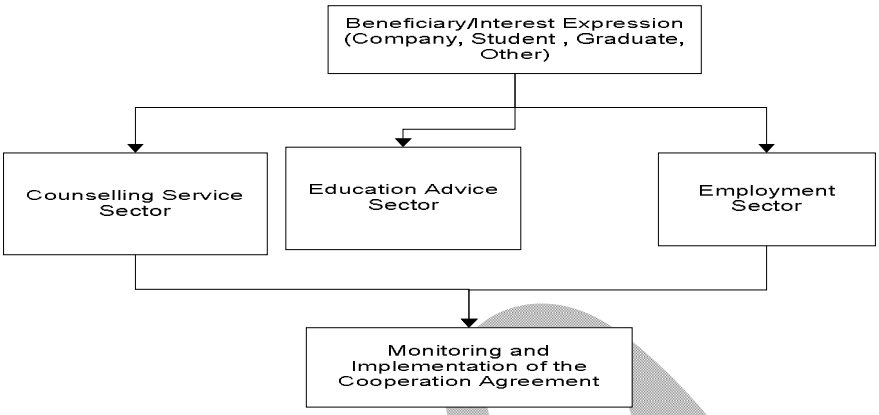


Figure 4: Communication with Beneficiaries

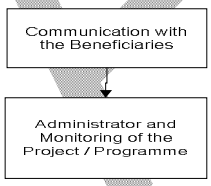


Figure 5: Monitoring and Implementation of the project

Serial Number A/A	Procedure Code	Procedures of the QMS
1.	P 1	Development and Improvement
2.	P 2.1	Control of Documents and Records
3.	P 2.2	Corrective and Preventive Action
4.	P 2.3	Internal Audits
5.	P 3.1	Human Resource Management
6.	P 3.2	Products and Services Provision Process
7.	P 4.1	Counseling Service Sector
8.	P 4.2	Education Advice Sector
9.	P 4.3.1	Employment Sector (Companies)
10.	P 4.3.2	Employment Sector (Students , Graduates)
11.	P 4.4	Integrated Information System

Table 4: Quality Management System Procedures Catalog

Serial Number A/A	Record Code	QMS Records/Documents
1.	D 2.1.1	QMS Documents Catalog
2.	D 2.2.1	Problems and Complaints
3.	D 2.3.1	Audit Program
4.	D 2.3.2	Audit Report
5.	D 3.1.1	Personnel's Education
6.	D 3.1.2	Individual Evaluation Form
7.	D 3.1.3	Staff Evaluation Catalog
8.	D 3.1.4	Staff State Check in – Check out
9.	D 3.2.1	Suppliers Evaluation Catalog
10.	D 4.3.1	Notification Form of Available Job or Practical Training Offers
11.	D 4.3.2	Inventory Card/Census Form
12.	D 4.3.3	Companies Service Evaluation Questionnaire

13.	**D 4.3.4**	**Students /Graduates Service Evaluation Questionnaire**
14.	**D 4.3.5**	**Loyalty card – Complaint**

Table 5: List of Documented Records Required

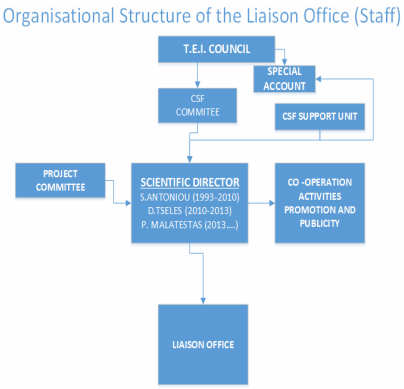
a. **Interim Evaluation Annual Report**
b. **Annual action plan**
c. **Technical Project Bulletin**
d. **Monthly expenditure monitoring reports**
e. **Operation Progress Monitoring Sheet**
f. **Financial Forms**
g. **Administrative Forms**
h. **Application Forms**
i. **Sworn Statements**
j. **Project Plan**
k. **Personnel's Duties Catalog**
l. **Job Descriptions**
m. **Plenary session proceedings**
n. **Code of ethics**

Table 6: Other record kept

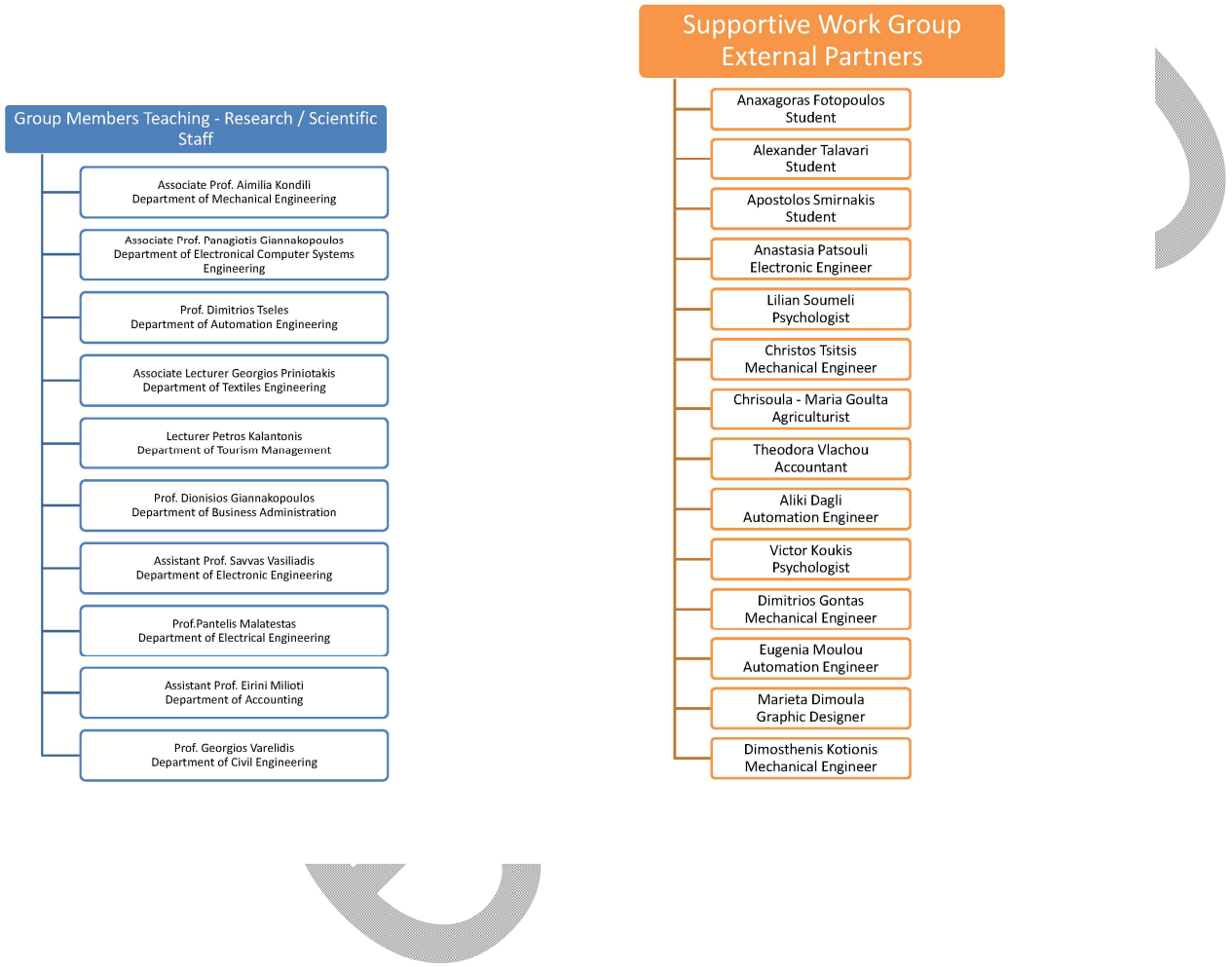
1.4.4 Organization

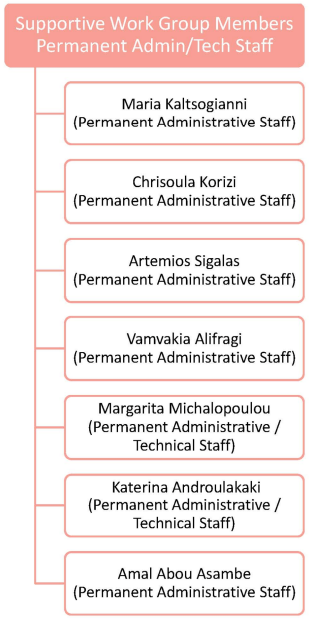
Nowadays, Liaison Office consists of four (4) teams:

A. The Basic Team which constitutes from the Scientific Director and the staff:
B. Group Members Teaching-Research Staff
C. Supportive Work Group Members-Permanent Administrative & Technical Staff
D. Supportive Work Group External Partners




*Job Profiles Reseach Team
Graduate Survey Team
Job Market Research Team
Mentors Team
Professors
Permanent Administrative Staff
Fixed Term Staff
Exterior Colaborators
SEC
Dimitrios Tseles
LIAISON OFFICE
SCIENTIFIC DIRECTOR
Pantelis Malatestas
QUALITY MANAGMENT
Christos Tsitsis
INTERNAL OPERATIONS SECTOR
Maria Kaltsogianni
PROJECTS
SECRETARIAL SUPPORT
Eugenia Moulou
DATA COMPILATION AND PROCESSING
Christos Tsitsis
BASIC TEAM
GROUP MEMBERS TEACHING – RESEARCH/ SCIENTIFIC STAFF
SUPPORTIVE WORK GROUP MEMBERS PERMANENT ADMIN/ TECH STAFF
SUPPORTIVE WORK GROUP EXTERNAL PARTNERS
IT SECTOR
Athanasios Stergiopoulos
E-MAGAZINE
E- SERVICE NET
Alexandros Aidsatianos
EDUCATION COUNSELLING SECTOR
Maria Kaltsogianni
CAREER SECTOR
Eugenia Moulou
FOLLOW UP
Christos Tsitsis
COUNSELING
SECTOR
MENTORS
PR SECTOR
Maria Kaltsogianni
NATIONAL – INTERNATIONAL NETWORKING
Eugenia Moulou


Group Members Teaching - Research / Scientific Staff
Associate Prof. Aimilia Kondili
Department of Mechanical Engineering
Associate Prof. Panagiotis Giannakopoulos
Department of Electronical Computer Systems Engineering
Prof. Dimitrios Tseles
Department of Automation Engineering
Associate Lecturer Georgios Priniotakis
Department of Textiles Engineering
Lecturer Petros Kalantonis
Department of Tourism Management
Prof. Dionisios Giannakopoulos
Department of Business Administration
Assistant Prof. Savvas Vasiliadis
Department of Electronic Engineering
Prof.Pantelis Malatestas
Department of Electrical Engineering
Assistant Prof. Eirini Milioti
Department of Accounting
Prof. Georgios Varelidis
Department of Civil Engineering
Supportive Work Group External Partners
Anaxagoras Fotopoulos
Student
Alexander Talavari
Student
Apostolos Smirnakis
Student
Anastasia Patsouli
Electronic Engineer
Lilian Soumeli
Psychologist
Christos Tsitsis
Mechanical Engineer
Chrisoula - Maria Goulta
Agriculturist
Theodora Vlachou
Accountant
Aliki Dagli
Automation Engineer
Victor Koukis
Psychologist
Dimitrios Gontas
Mechanical Engineer
Eugenia Moulou
Automation Engineer
Marieta Dimoula
Graphic Designer
Dimosthenis Kotionis
Mechanical Engineer


Supportive Work Group Members
Permanent Admin/Tech Staff
Maria Kaltsogianni
(Permanent Administrative Staff)
Chrisoula Korizi
(Permanent Administrative Staff)
Artemios Sigalas
(Permanent Administrative Staff)
Vamvakia Alifragi
(Permanent Administrative Staff)
Margarita Michalopoulou
(Permanent Administrative /
Technical Staff)
Katerina Androulakaki
(Permanent Administrative /
Technical Staff)
Amal Abou Asambe
(Permanent Administrative Staff)

1.4.5 Code of Practice and Ethics

As soon as the T.E.I. of Piraeus Liaison Office came into existence, it began work on creating its Codes of Practice and Ethics, which governs all the Office's dealings with and responsibilities towards the outside world. Staff of the Office has, from the very outset, observed certain operating principles. These principles, which are based on the staff's expertise and experience and on the guidance provided by the Scientific Directors, have subsequently shown themselves to be proper and appropriate and have, therefore been included in the attached Codes of Practice and Ethics. Drawing up the Codes was referred to the Project Committee, becoming one of the primary matters it dealt with at its meetings during the Academic Year 1998 - 1999. Thereafter, the Liaison Office also used the results of similar work by the Universities and T.E.I. Horizontal Action departments. By combining all the work done, and adapting it on the basis of its own experience, the Office created the Codes of Practice and Ethics. The Codes of Practice and Ethics is attached to all application forms given to those interested in working with the Liaison Office. This ensures that all those who use the services of the Office are aware of the Codes and accept its contents. The Code of Practice & Ethics was reformed and approved by the TEI Council, with the Action No.15/5.4.2000 – Item 2 in 2000 and with the Action No.30/26.7.2012 – Item 2 in 2012. The code of practice and ethics deals with matters such as: *GENERAL PRINCIPLES AND OBJECTIVES, LIAISON OFFICE SEC TEI PIRAEUS STAFF, PROJECT COMMITTEES, INSTITUTIONAL STEERING & ADVISORY SEC COMMITEE, DATABASES - E-MAGAZINE WEBSITE - IN SOCIAL NETWORKING MEDIA, SERVICES USERS, EMPLOYERS' SPECIAL OBLIGATIONS AS SERVICE USERS, APPLICATION OF THE CODE OF PRACTICE & ETHICS.*

1.4.6 Human Resources

The Liaison Office is distinguished in the following sectors:

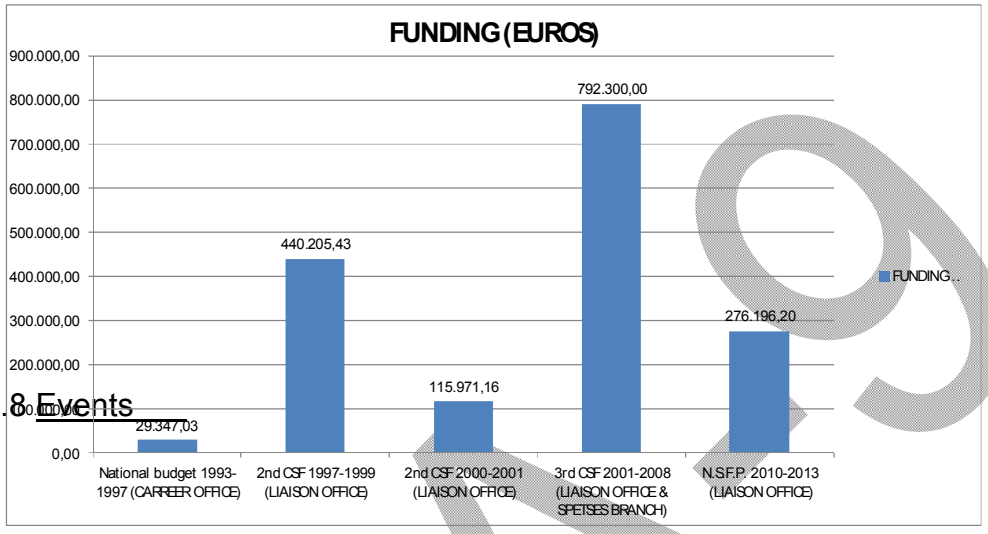
SECTOR OF MANAGEMENT BY THE PERSON IN CHARGE OF THE PROJECT, SECTOR OF INTERNAL OPERATION, SECTOR OF GROWTH, MANAGEMENT, MAINTAINANCE OF COMMUNICATION - INFORMATIVE SYSTEMS AND NETWORKS,SECTOR OF SECRETARIAL SUPPORT, SECTOR OF COLLECTION AND TREATMENT OF ELEMENTS, SECTOR OF MANAGEMENT OF QUALITY AND FOLLOW-UP OF JOB MARKET, SECTOR ELECTRONIC PERIODICAL AND INFORMATIVE SYSTEM, SECTOR OF NETWORKING & PROMOTION IN NATIONAL AND INTERNATIONAL LEVEL ,SECTOR OF PUBLICITY AND DIFFUSION OF INFORMATION, SECTOR OF STUDIES, SECTOR OF EMPLOYMENT, SECTOR OF EDUCATIONAL ADVISORY, COUNSELLING SERVICE.

While respectively the human resources consist of the:

PERSON IN CHARGE OF ACTION, PERSON IN CHARGE OF INTERNAL OPERATION, ASSISTANT PERSON IN CHARGE OF INTERNAL OPERATION PERSON IN CHARGE OF GROWTH, MANAGEMENT, MAINTAINANCE OF COMMUNICATION - INFORMATIVE SYSTEMS AND NETWORKS, SECRETARIAL SUPPORT, COLLECTION AND TREATMENT OF ELEMENTS, MANAGEMENT OF QUALITY AND FOLLOW-UP OF JOB MARKET, SUPPORT ELECTRONIC PERIODICAL AND INFORMATIVE SYSTEM, SUPPORT OF NETWORKING IN NATIONAL AND INTERNATIONAL LEVEL

OF ALSO ACTION OF PROJECTION, SUPPORT OF PUBLICITY AND DIFFUSION OF INFORMATION, COLLABORATORS FOR THE STUDIES, THE PUBLICITY AND DIFFUSION OF INFORMATION, THE MENTORING, PERSON IN CHARGE OF EMPLOYMENT SECTOR, PERSON IN CHARGE OF EDUCATIONAL ADVISORY SECTOR, PERSON IN CHARGE OF COUNSELLING SERVICE

1.4.7 Financial Resources



1.4.8 Events

To help establish strong links between the Educational Community and the forces of Production, the LO of the TEI of Piraeus organises **Open Weeks, Careers Days**, **Forums, Innovation Festivals, Entrepreneurship Exposition, Seminars** and **Meetings, etc** covering topics that match the needs of those who attend. These events represent a permanent source of reliable information and also act as a channel for the promotion and dissemination of the work of the Office. Some of them are the following: “Innovation Festival 2014”, “Liaison 2013:From studies to Career”, “Support of ERA 5,6,7,8 convention”, “Entrepreneurship-patent Exposition 2010”, “The presentation of the TEI of Piraeus and the L.O. at secondary level education events”, (2001-2008), “Liaison 2007:From studies to Career”, “Liaison 2006:From studies to Career”, “Education 2006”, “Tourism, Entrepreneurship and Liaison Offices” (2005), “Careers’ Days” (2004, 1999), “Postgraduate studies in Greece and abroad” (2003, 2000, 1998), “Education 2002”, “Development of young people’s entrepreneurship and enterprise excellence” (2001), “Education and employment at the threshold of the 21st century” (1999), the “Curriculum Vitae – Interview: the start of a career” seminars, (run more than twice a year, each year from 1998 until 2006), etc.

1.4.8 Networks

The **Horizontal Action of Liaison Offices of the Greek TEI** was an OP program which was co-financed by the Ministry of Education and the European Union. The purpose of the project and the initial aim was to define and implement a modern organizational / coordination framework horizontal networking of Liaison Offices of the Greek TEI and ASPAITE. The Horizontal Action complemented and assisted vertical actions carried out by each Institution. The main instruments of the project was the Steering Committee and the three Members Executive Secretariat. The Scientific Directors attended it representing all the Greek Liaison Offices of TEI and

ASPAITE. The Liaison Office of TEI Piraeus participated in the Horizontal Action from 1998 until 2008, -when it ceased operating- while our Scientific Director was one of the three Members in the Executive Secretariat.

The **European Network EUE-Net** (www.eue-net.org) began its operation, in October 2007 with the approval and financing of European Union. It is the continuation of of the previous Network EUI-Net that also had been financed by the EU, on time interval 2005-2007. Objective of the Network is the narrower collaboration of Universities and enterprises. In March 2007, TEI of Piraeus, via its Liaison Office, it signed Letter of Intention of Collaboration (Letter of Intent) with EUE-Net. In February 2007, in 7 and 8, part of its personnel, concretely S. Antoniou, X. Korizi, A. Sigalas and M. Kaltsogianni, participated in the inaugural meeting of the Network that was realised in Brasov of Romania and was organised by the Transilvania University (the particular University coordinates the program). Objective of our attendance in this Network was the enlargement and extension of our Office' activities in European level. In 2010, Liaison Office S.E.C. TEI of Piraeus became also member of the **CDOnet** network (www.cdonet.eu).

CDOnet is the **Network of Career Development Offices in Europe**, initiated by EUE-net - the European University - Enterprise Network. All European Career Development Organisations related to Universities are invited to join. The main objective of the network is to assemble and make the efforts of CDOs visible and usable at European level for the benefit of students, enterprises, universities and policy makers. The network will reach this objective by gathering together all actors, organising regular meetings and European conventions as well as developing IT- and marketing tools for the benefit of its members. The first general assembly of CDOnet took place in Vienna, Austria at the CareerCon2010 Convention.

THE OBJECTIVES

- ✓ To support the realisation of a European Higher Education Area.

CDOnet will encourage best use of activity results both of its members but to any subscribing organisation type CDO through the capitalisation of crucial information at European level that will allow the Universities to continuously tailor their offer to the demand. It will also to develop innovative products and processes and to exchange good practice of CDO's to support employment and employability in all fields covered by the Lifelong Learning Programme, in order to improve the quality of education and training in general.

- ✓ To improve the quality and to increase the volume of multilateral cooperation between higher education institutions in Europe

CDOnet aims to eventually become pan-European Network assembling all efforts in the field of Career Development. Through the creation of a Virtual space for employment and employability at European level it will significantly contribute to the creation of a European Higher Education Area, creating a framework of common interest where Universities, Enterprises and students will meet to know each other better in terms of needs and expectations.

- ✓ To improve the quality and to increase the volume of cooperation between higher education institutions and enterprises.

The CDOnet will lift the regional and national career centres to a European level and open transnational opportunities for the recruitment of young potentials for employers. With the acquisition of CDOnet member's multilateral cooperation will increase and an exchange of information among and about CDOnet content will start and grow.

- ✓ The management of higher education institutions.

CDOnet is a generic framework for Cooperation including not only Universities and Enterprises but also the students. Taking the matters of employment and employability at European scale represent a significant step towards a shift in quality and volume of the cooperation. CDOnet will create a new momentum that has the potential to show new levels of collaboration between the Universities and enterprises. The European Barometer of employment and employability will connect together all actors around the main result of the educational process – the graduate and his/her job.

- ✓ Cultural and linguistic diversity.

As transnational networking and co-operation on the basis of a web hosted database with multilingual access are the main issues of the project, the cultural and linguistic diversity is implicitly involved. As one of the CDO partners is UEAPME – the European Association of SMEs, one of the main beneficiaries are the SMEs that will be enabled to act at transnational level, having access to information on a European scale. Taking into consideration UEAPME counts more than 10 million SMEs, the potential for cultural and linguistic diversity promotion is significant.

- ✓ Employment

CDOnet systematically addresses the matter of employment in Europe putting the graduates face to face with the employers offering the jobs, thus improving their employability. The education providers will be able to see at any time what is the demand from enterprises and quickly adapt their offer accordingly; enterprises will be able to see what is the availability of certain qualifications in terms of students approaching graduation in a specified location and thus base their business on real facts; high school graduates will be able to see what is the demand from enterprises at which locations and thus be more informed before choosing their future education path.

- ✓ Enterprise

On demand, detailed information will be made available by online connected Career Centres' data. Enterprises will be able to check availability of graduates via the networks IT tools; feedback from enterprises will influence the curricula of universities.

- ✓ Lisbon partnership for growth and jobs

The CDO-net results with its good practise business model for the management of a career service centre will be a tool for identifying, developing and disseminating information on good practice to stimulate growth and jobs Europe in terms of exploiting the full potential of jobs in enterprises on one hand and maximising employability of graduates on the other hand.

CareerCon is the European Convention of Career Centres that was launched in 2009 as result of EUE-Net project. Representatives of Career Services from all over the world come together to present their Centres' best practices in cooperation with the Enterprises and Universities, Career mediation tools, employment statistics, as well as to discuss the future development of cooperation between Universities and Enterprises. Well-established career services and newcomers find the needed platform for networking and exchange of ideas. EUEnet and CareerCon contribute to reach the objectives of Europe 2020. Concretely, the Union has set five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020. Career Centres can give major input to answer the most important questions regarding the modernisation of higher

education. How to ensure that (new and existing) curricula meet the needs and requirements of the Labour Market and of Academia; what are the key issues preventing the stakeholders to engage in dialogue and cooperation for the design of curriculum; learning outcomes – a possible common language to facilitate dialogue between higher education and business; how to develop co-operation in the field“ what needs to be done on institutional, regional, national or European level; what concrete actions could/should be initiated on European level. (*source European Commission, DG EAC, Brussels 8.12.2010).

1.5 GOOD PRACTICES OF LIAISON OFFICE TEI PIRAEUS

1.5.1. Results and impact

This section describes and analyzes the results expected and the impact on our stakeholders. As already mentioned, in the implementation of the related Programs in Institutions of Higher Education we observe significantly differences between the approaches and variations in the success of the program and the achievement of objectives. Through these different approaches, a series of 'good practice', can be traced, which can be analyzed and exploited (as it is or where applicable adjustments) from the Higher Education Institutions in the next phase of implementation of these or similar programmes. The "good practices "identified concern both Incentive Programs Business activities, innovative applications, entrepreneurship actions and Liaison Offices discussed above. A good practice is identified in realizing stable and long-term partnerships between educational institutions and bodies related to entrepreneurship/market etc (at local, regional or national level). Although to some extent all the institutions have developed partnerships with agencies and organizations for the implementation of programs, some institutions have developed collaborations in a systematic way and on a long bodies and organizations, which also involved them in several stages and in several activities at the implementation of programs. The stability and duration of these partnerships has enabled substantial involvement of stakeholders and people outside the institutions and provided substantial incentives for their participation in program activities. At the same time, was a factor activation of local communities (in an extent) as to be interested and participate in the programs, while also helped significantly to the diffusion and dissemination of programs and results. At the level of cooperation and networking, the collaboration between structures of common interest, creation of scale economy is identified as a good practice within the institutions themselves. In some of the institutions that implement entrepreneurship programs, there was substantial and continuous cooperation between different Programs especially with the Liaison Office and as a result joint actions were implemented, allowing economies of scale and development of synergies. As good practice, we can identify, also the development and monitoring & assessment mechanisms for the progress of the programs and the achievement of objectives in relation to qualitative & quantitave characteristics. In some such cases mechanisms were developed (for example questionnaires surveying business, attitudes of students / graduates before and after monitoring entrepreneurship courses), which served as an effective monitoring tool about the achievement of quality targets and feedback of Strategy for Institutions that applied.

Some of the expected results of a comprehensive analysis of all Actions (old & new ones), include:

- ✓ the widespread introduction of entrepreneurship in Higher Education, which is one of the major innovations in higher education in relation to economy,

economic development and professional / business careers of graduates. Although the emergence of substantial results requires significant over time, on one hand and on the other hand the Greek Economical crisis overturned the results, still, it is the beginning of implantation of the concept, and then the culture of entrepreneurship throughout the Tertiary Education.

- ✓ Employment impacts can not always be quantified as it depends from exogenous factors. Qualitatively, however, one can characterize them as very positive for the following reasons:

 Develops and fosters students:

- Analytical ability to identify and evaluate business and innovation opportunities.
- An understanding of the economic and multi- technological developments and their effects.
- The development of entrepreneurial culture and mindset.
- Acquisition of basic knowledge on the principles of entrepreneurship and the business operating.
- Development of creative thinking about new products and services.
- sharpening of critical thinking and the development of professional Flexibility.
- The overall initiation of student entrepreneurship, functions and design of business-oriented action discipline / professional field trained.

 encourages students to turn to creative self employment

 increases the employability and adaptability of graduates as managers, since they know the mode, the market rules, the domestic and international competition etc.

 improves business competitiveness and effectiveness of public interest organizations which absorb the students.

 provides an alternative outlet for graduate employment, helping to overcome the mentality that prevails on the graduates' preference to work in the public sector.

In other words, the graduate, who has taken part in courses, games on entrepreneurship and gained knowledge and culture in relation to entrepreneurship, has acquired qualifications that are hard to find in labor market and contribute substantially to meet the needs of businesses and organizations.

As shown, after all, and so far the implementation of actions on the entrepreneurship, the opportunity for the students to gain knowledge, experience and direct contact with questions about the entrepreneurship and business reality, provides them "one way out", encouraging them to develop business activity and providing them with the right knowledge and tools so that their business becomes successful. It is characteristic that operations and business plans of students enrolled in the respective programs have won awards at regional and national level, while some of them are currently in search of funding so to begin implementation or have already been implemented. The expected impact on the economy is directly related to the expected impact on employment. More specifically, through the several actions, we expect:

- increasing of the employability of graduates and thus reducing waiting time for entering the labor market,
- increase of the skills of graduates and therefore increase of their salary,
- decrease of unemployment by creating new businesses,
- improving the competitiveness of the economy through the improvement the establishment of scientific and operational executives in private and public sectors,

- improving conditions for SMEs and succession of female and juvenile entrepreneurship and employment.

In this direct impact on the economy, we should include the ripple effect due to the development of a business culture/mentality that currently lacks the Greek economy and society in general, which is difficult to concretise.

Actions associated with the Liaison Office, match - and in many cases, are common or complementary. The expected impact of the implementation of activities related to connection with the labor market and vocational rehabilitation of graduates (Actions, ie, implemented by the Liaison Office and Practical Training Office are related to employment, economy in general and in extraversion and - to a degree - in effectiveness of our Higher Education Institute. Specifically, the expected impacts regard:

- Increase of employment through information and support of student for their entry into the labor market.
- Employment growth through networking with businesses, organizations and organizations and support services recruitment.
- Reducing the time of entry into the labor market by the time of obtaining the degree.
- Reducing the number of higher education graduates employed in positions not related to their field of study and increase the satisfaction degree of our graduates in finding suitable job.
- Improving the employment prospects of graduates, through systematic information, contact with the labor market and work experience.
- Increase of productivity through the improvement of qualifications, skills and competencies of students and facilitation in finding the appropriate and relevant to the subject of study, workplace.
- Contribution to lifelong learning with a positive impact on career graduates and the productivity and competitiveness of the economy.
- Improvement of the satisfaction of students and alumni regarding employment and their employment prospects, which, except of social, have positive economic impacts enhance the propensity to relieve the public sector through the enlargement of the employment prospects of graduates.
- Increase the internationalization of our institute, through the cooperation and networking with businesses, associations and organizations
- Improving knowledge and understanding of the labor market - and the economy in general - at local, regional and national level.
- Increase of the adjustment capacity of the strategy - and, therefore, the curricula at undergraduate and postgraduate level- to respond more appropriately to current needs and requirements.
- Gaining experience and expertise in issues and career employment of graduates of educational institutions.

The LIAISON OFFICE SEC TEI OF PIRAEUS, despite the difficulties that had to face, along with the Greek economic crisis, has had a positive impact on all the stakeholders students/graduates/recruiters/faculty and staff/families/academic community/labor market. Until today, indicatively, Liaison Office, for example:

- Has conducted a total of **30.720** documents, incoming and outgoing correspondence and in particular for the period from 1/9/2010 through 30/04/2014, **6.189** respectively.

- Has worked steadily with **3.946** companies in total, while especially for the period from 1/9/2010 till 30/04/2014, with respectively **711** companies mainly in the private sector, aiming at employing TEI PIRAEUS' students and graduates and the development of multidimensional cooperation in technological issues of common interest.
- Promoted total of about **30.540** student & graduates CVs, in internships and workplaces, while especially for the period from 1/9/2010 till 30/04/2014, **15.113** respectively.
- More than **17.173** students and graduates in total are enrolled in the Liaison Office's databases and both benefited from the information services offered on the postgraduate studies possibilities in Greece and abroad, placement exams, training seminars, workshops, conferences and the Counseling Service, while in particular for the period from 1/9/2010 till 30/04/2014, **5.110** respectively.
- More than **147.026** in total students, graduates and others (uniquely) visited our website, more than **11.324** visited our blog, more than **1.679** have stated their preference on facebook profile, both benefited from the various electronic information services offered for the period from 1/1/2012 till 30/04/2014.
- More than **234.944** and **12.713** multiple visits to the Liaison Office's website and blog respectively.
- More than **60.861** multiple visits while **53.831** in total students, graduates and others visited the Liaison Office's e-magazine and there were more than **160.000** bulk e-mails with the e-magazine newsletter for the period from 1/1/2012 till 30/04/2014.
- There were more than **15.388** students and graduates of the institution, informed for different Liaison Office's events and actions for the period from 1/1/2012 till 30/04/2014.
- There were more than **6.880** graduates of the institution's academic years 2001 to 2011, informed about the Career Path Monitoring Research while 1168 of them finally responded for the period from 1/1/2012 till 31/12/2012.
- There were more than **1.245** companies informed about the annual Labour Market Research while 5,3% of them finally responded from 1/1/2012 till 31/12/2012.
- There were more than **24** events organized by others that the Liaison Office participated from 1/9/2010 till 30/04/2013 while it organized with its own resources or in collaboration more than **69** events and **229** counseling group workshops in the same period. Last but not least, the Liaison Office participated in **10** scientific conferences with more than **15** joint publications on relevant topics to its activities from 1/9/2010 till 30/04/2013.
- There were **10** Job Profile Guides published by the Liaison Office staff, **4** studies performed, **2** Guides on career & postgraduate issues, 1 volume of proceeding from its open week, -all of them with ISBN numbers- during the period from 1/9/2010 till 30/04/2013.
- Has conducted **4** internal staff assessments, **4** external inspections, during the period from 1/9/2010 till 30/04/2013.

1.5.2 Conclusion

After all good methodologies:

- promote self-assessment and self-regulation initiatives using professional standards as key factors in fostering improvement in programs, services, and processes;

- honour institutional uniqueness and recognize that information is not always comparable across institutions because of differences in location and local economic conditions; student characteristics, abilities, and preparation; variety and quality of academic programs; and missions of the institutions and their career services offices. Any analysis of data must include explanations of such qualifiers;
- include qualitative as well as quantitative approaches;
- lead to internal improvement;
- encourage methodical, meticulous, and reliable collection and presentation of information that will provide evidence of quality, and promote analysis and synthesis of information; and
- demonstrate external and internal accountability.

Small career centers or liaison offices face many challenges in today's higher education industry. These challenges often force centers to be more specific in their approach while providing services to their students, graduates, faculty, fellow staff, administrators and others. In an effort to ensure, that, a center is bridging these challenges and audiences, a simple acronym is put together to help guide directors or staff. Experience, tells us that, without students, no program is going to be successful, especially for smaller schools. Time and again, great ideas often fall flat due to low engagement or student turnout. This leads to the first R – Relationships. In a small school environment, this is of the utmost importance. Career staff must make efforts to build relationships with key players on their campus and outside it. The notable thing here is to identify who that is. Each campus has its own culture - define what that is (certain high enrolled majors, athletics, etc...), and look for ways to partner or assist them in their objectives. This will often times, lead to increased presence and credibility. Secondly, to add even further use of services, student engagement and increased outcomes, a small center needs to focus on building R-Resources. This comes in the form of utilizing alumni, having a resources page devoted to websites, subscribing to searchable databases, and subscriptions. Find ways to cater to specific audiences within your campus culture. This seems to be commonly understood, however, it plays a critical role with one key audience – your students/graduates. If and when, you have an opportunity to meet with a class, or one-on-one in appointments, having multiple resources to explain, can quickly connect and resonate with students, and build confidence and credibility of your office. In addition, this allows beneficiaries to feel empowered that, there is something they can use from your office, without having to make an appointment. Lastly, small career centers can struggle with the perception of the needs of their students. Make office goals and keep an agenda to focus on using up-to-date web technology, popular databases, and more programs. I would caution this as the third and final R - Reality. For a center to operate effectively and have a positive impact on its campus, it must be realistic in its aims. Setting unrealistic goals, trying to be all things to all beneficiaries, doing more programs that are less targeted (i.e. general workshops) can work, but can also lead to less impact and staff burnout. Though each career center or liaison office is different, most aim for the same goal – to prepare students/graduates for the world after college and to liaise education to production. Keeping in mind these guidelines can help your office become stronger, better skilled and effective in working with your students.

Acknowledgements to:

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"RES Policies. The reasons responsible for the delay in the development of wind energy in Greece"

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The ever increasing in consumption of energy worldwide, combined with the exhaustion of energy resources by conventional sources of planet and the ecological problems which have been created, lead to the necessity to develop the use of Renewable Energy Sources (RES).

The last two decades most countries of the world –especially the mostly developed ones-, are investing in study, development and production of energy from Renewable sources and particular from Wind Power.

The EU has set specific goals, published EU directives and supervises the progress of each country- member on the evolution in the use of Renewable Energy and the development of Wind Energy Parks.

This paper attempts 1. the recording of the current situation in the field of wind energy all over the World, 2. effort to review the evolution of penetration of wind energy in the energy mix in the last twenty years, in Greece, Europe and the World.
Also, this paper aims at record the policies governing the promotion of wind power energy used by other countries –especially of the European Union-, and comparing these policies with the policies used by our country.

The aim of this comparison is to identify the reasons responsible for the delay of the development of wind energy in our country.

Keywords: Wind Energy, Renewable Energy Sources, evolution of Wind Energy, RES policies.

1. Evolution of the total installed wind power capacity

The last 15 years took place a huge increase in installed wind power all over the world.

Worth mentioning is that the installed wind power on Earth in 1996 was 6.100 MW, and at the end of 2013 reached 318.105 MW (Figure 1).

The wind capacity in Europe in 2000 was 12.900 MW and arrived at the end of 2013, 117.300 MW (Figure 2).

The installed wind power in Greece in 2000 was 244,6 MW and arrived at the end of 2013, 1.864 MW (Figure 3).

2. Resources and Production of Wind Energy in Europe

a. Wind Potential

The average wind potential in Europe is very high, establishing wind power early in the first positions of Renewable Energies.

The wind shows maximum values mainly in the southern portion of the Scandinavian Peninsula and the surrounding area of the United Kingdom. Correspondingly high potential was recorded in Iceland, the west coast of France, Central Europe (including Poland, the Czech Republic and Slovakia), the Islands of the Mediterranean (Aegean Sea, Sardinia, Corsica). [1]

b. Wind Energy in the European Union

The European Union is in very high level in the field of wind energy capacity, surpassing the optimists development goals that she occasionally poses. The 1997 White Paper [2] had set a target for 2010 to 40 GW of installed wind capacity. This objective was achieved as early as 2005 In 2010 the final real power reached 84,6 GW, while in 2012 the 106 GW.

Also, the ten largest wind turbine manufacturers worldwide are in Europe, and has developed a high level of technology and know-how on the Wind Energy. [3 [4 [5]

c. European Union policy on RES

The sessions for global climate, such as the Rio Conference in 1992, and the Kyoto Protocol in 1997, in which the EU participated actively, have guided the development of Renewable Energy. At various times were issued White and Green Papers which reflected the objectives of each period [6], [7], [8].

It also issued series of EU Directives which forced Member States to incorporate into their national law.

1. Directive 96/92 / EC 'common rules for the internal energy market "[9],
2. Directive 2001/77 / EC 'Promotion of electricity produced from RES in the internal energy market "[10],
3. Directive 2002/91 / EC on the energy saving in buildings [11],
4. Directive 2003/30 / EC on the promotion of biofuels or other mild forms of energy for transport [12],
5. Directive 2003/54 / EC concerning common rules for the internal market in electricity (essentially replacing the 96/92 / EC) [13],
6. Directive 2009/28 / EC "Promoting the use of energy from renewable sources" [14].

In the same framework with the above Directives are the announcements:

1. Communication from the Commission Com (2004) 366. [15],
2. Communication from the Commission Com (2006) 545 «Action Plan for Energy Efficiency: Realising the Potential. [16],
3. Communication from the Commission Com (2006) 848 «Roadmap for Renewable Energy - Renewable energies in the 21st century: building a more sustainable future" [17],

4. Communication from the Commission Com (2008) 30 «Two times 20 to the 2020 Climate change and opportunity". [18],
5. Communication from the Commission Com (2008) 768 «Offshore Wind Energy: Action needed to achieve the Energy Policy Objectives for 2020 and beyond". [19],
6. Communication from the Commission Com (2010) 2020 «Europe 2020 Strategy for smart, sustainable and inclusive growth". [20],
7. Communication from the Commission Com (2011) 31 «Progress towards the target for energy from renewable sources by 2020." [21]
8. Working Documents SWD (2012) 343, SWD (2012) 344. [22].

And finally:

Green Paper Com (2013) 169 «The framework for climate and energy policy for 2030". [23], [24].

d. Member States and Wind Energy

Germany and Spain occupy more than 50% of the total wind energy production (Figure 4) [25].

At the level of participation of wind energy to electricity generation, Denmark and Portugal are the first two positions, followed by Spain 3rd, 4th Iceland and Germany 5th.

We note that Germany, with a total installed capacity of 33,7 GW, with about 25 000 wind turbines and more than 100,000 workers employed in the sector at the end of 2013 is by far the leading wind energy for Europe, while globally comes third behind China and the USA. [26], [27], [28].

It is interesting to see the ranking of countries according to per capita installed wind power in Table 1, where Greece ranks 10th among the 15 EU countries

Installed wind power in our country - given the very rich wind potential- both in absolute numbers and in per capita is lower than in other EU countries.

In Table 2. is reflected the evolution of installed wind capacity by the end of 2003 until the end of 2013 in all countries of the world.

Impressive is the huge increase in installed wind capacity in China which passed in the first place worldwide, 568 MW of installed capacity at the end of 2004 reached 91.412 MW this year, the USA respectively by 6.374 MW 10 years ago reached 54.717 MW and the second in the world. But also countries closer to EU registered an impressive growth eg Romania from 1 MW in 2004 reached today 2600 MW, while Turkey in just two years (2012-2014) passed from 646 MW to 2935 MW!

3. RES support policies

Noting the uniformity in growth of renewables and in particular wind power, we understand diversity in political support for renewable energies following each individual country, even countries that have agreed to specific frameworks and specific targets, such as the countries of the EU following the same directives.

The basic mechanisms of RES support which have been developed Worldwide are:

In relation to the measurement of the sale price of the energy produced (Remuneration):

1. Feed-in tariff,
2. Premium or Adder system,
3. Auction or tendering system,
4. Tax based (electricity) production incentives,
5. Spot market trading,
6. Investment subsidy or tax credit,
7. Tradable Green Certificate [e.g. REC/ ROC],
8. Concessionary finance through government supported agencies,
9. Concession on import duty.

In relation to setting goals to the penetration of RES (Target or Standard):

1. Renewables Purchase Obligation or Renewables Portfolio Standard,
2. Federal or statewise targets (binding or indicative).

In relation to the way licensing works (Permitting):

1. Project siting guidelines,
2. Project permitting process.

In relation to how to integrate into the system of energy from RES (Grid Integration):

1. Priority access to the grid,
2. Grid code.

In Table 3. is made short presentation of policy mixes that have been selected in twelve different countries of the world [29]: Brazil, China, Denmark, Germany, Greece, India, Ireland, Italy, Portugal, Spain, United Kingdom, USA.

e. RES policies in EU countries

This section attempt record the policies for the promotion of wind energy in the EU countries which are the most interesting to be able to compare them with those in Greece.

3.1.1. Denmark [30], [31], [32]

In 1970, Denmark was one of the most energy-dependent countries in the world. 99% of the country's energy needs were covered by imported coal and imported oil. The balance between imports -Exports Denmark was very negative while the pollution from the use of conventional fuels was great too. The oil crisis 1973- 1974 was substantially catastrophic consequences on the Danish economy.

The participation of renewable energy in energy consumption has doubled while the corresponding contribution to electricity generation has tripled in ten years. To achieve these targets, the policy intention has been effective as created Ministry of Environment and Ministry of Energy and Climate Change and the National Policy on Energy has remained constant for 20 years. There was also a consensus of all political parties, and there was public consultation and debate about environmental problems. At the same time Government organized together development projects with investors of generating companies.

Funding of Danish research and development of wind energy is increasing. At the end of 2007, the Danish government has created a new ministry on climate and energy to increase efforts to mitigate of climate change and to prepare for the climate summit in Copenhagen in 2009.

Since 2008 the Danish Government took further initiatives related to targets for renewable energy:

- The target for participation of RES in the mixed consumption to be 20% in 2011.
- Funding for new A/C should be increased by 0.25 DKK / kWh on the first 22,000 to 0.023 DKK / kWh depending on cost (DKK Danish krone). In the

A/C under plan a replacement A/C (repowering scheme) will be given a further constant flow of 0.08 DKK / kWh for the first 12,000 hours of full operation.

- Municipalities should guarantee land for the installation of new 75mw A / C.
- Approximately 10 million DKK for the Guarantee Fund for financial support of local manufacturing companies A / C.
- Scheme for compensation in order to ensure that the new neighbors A / C in order to obtain compensation for the loss of value of their property due to the installation.
- Invitations on Auctions for installing two offshore wind farms.
- Fund 30 million. DKK on over two years on information campaigns.
- Increase tax of carbon dioxide from 3 to 90 DKK / ton emission CO2.

But what is particularly important is the fact that the number of entities to needed to be a licensed onshore wind farm are only 5.

Installing new A / C in Denmark has declined in recent years due to the reduction of the price at which absorbed the generated electricity.

The new units take the average monthly price, which is in the wholesale market plus an environmental award (environmental premium), which is at most 13 € / mwh, plus a compensation to compensate for the installation cost, which amounts to 3 € / mwh. The final price thus formed does not exceed 48 € / mwh.

3.1.2. Portugal [32], [33]

The Portuguese legislation on RES been in force since 2000 The guaranteed prices differ depending on the technology of renewable energy used. For wind farms provide price 83 € / mwh on the first 2000 hours, 70 € / mwh from 2000 to 2200 hours, 60 € / mwh 2200-2400 hours, 51 € / mwh 2400-2600 hours and 43 € / mwh over 2,600 hours.

It also provides investment subsidies, including subsidies except calculated as a percentage of the amount of investment and interest rate subsidies of green investment loans and tax breaks for renewable energy installation.

3.1.3. Germany [32*],* [34*]*

In 1991 came into force the initial legislation (Act on the Supply of Electricity Generated from RES into the Public Grid - Electricity Feed-In Law ") about the establishment and promotion of the power produced from renewable Network.

Was followed the law to grant priority to RES (Renewable Energy Sources Act -Act on Granting Priority to Renewable Energy Sources), which was the main supportive mechanism on the promotion of energy from renewable sources.

This law has dealt with the price of energy produced by renewable sources. Provided that charges will be paid by administrators of the network rather than the electricity distribution companies.

The Law Renewable Energy Sources Act contains no grants or government assistance. On January 1, 2002 set the values of the energy produced by wind farms:

A) For onshore wind farms at least 0,09 € / kWh about 5 years and 0,0617 € / kWh for the next five years. Then the minimum compensation will be reduced to 1.5% per year for new installations which are connected to the grid after that day.
B) For offshore wind farms: the A / C installed before 2006 the value was set at 0,09 € / kWh about the first nine years of operation and the next was 0,0617 /

kWh. For offshore wind farms will be operational by in December 2015 will receive an initial price 150 € / mwh about over 12 years.

After this period the price will amounts to 35 € / mwh until completion of 20 years. Wind farms with a distance of 12 miles from the coast and depth of over 20 meters take longer initial period, ie should receive 150 € / mwh for more than 12 years.

Furthermore, German government introduced in 1999 a special environmental tax, the Eco-Tax Reform. The purpose of the new tax is to incorporate environmental costs related with the production and use of energy. This tax imposed on fossil fuels as well as in electricity.

Energy producers up to 2MW per establishment are excluded from the tax. This provides incentive for RES private individuals who invest in small and medium-sized establishments. The receipts from the tax designed to be used for the promotion of RES.

Furthermore, the power companies have introduced schemes for green pricing (The green pricing schemes).

The customer pays an additional charge between 3,1 - 4,1 € Cent / kwh for green electricity. Most providers are planning to build new power plants from renewable sources of additional revenue to cover the demand for electricity from RES.

Finally, in Germany provided large sums for the promotion of research and development for renewable energy technologies, feature is that the Ministry of Environment has for this purpose amounts to around 40 million euros per year.

3.1.4. Spain [32], [35]

The development of wind farms in Spain from 1995 to 2005 was really impressive. Spain is the second country in the EU installed capacity in wind farms.

In Spain have been installed mainly medium and large wind farms.

Small private individuals do not have significant involvement in investment Windfarms, since most of such investment is in large consortiums or companies construction wind turbines or regional government.

The main reasons for the development of wind farms are:

1. The very good quality wind energy potential. According to the map of the European Wind Energy, wind speed moves above 7 m / s to 80% of the territory of Spain, while many areas have wind speed that exceed 9 m / s.
2. The Spanish wind turbine construction companies are among the top of the world. The evolution of technology coupled with economies of scale, have significantly reduced the cost of wind farms. In Spain, the cost in € / kw decreased from 1700 1986 to 865 in 2000 and 700 € / kw in 2010.
3. Very good is also the institutional framework promotes safely RES development.

Spain has established strong incentives by high price per kilowatt-hour. Basically follow the feed-in tariff pricing system kWh. Electricity producers can sell their generated electricity, either directly to consumers or to distribution networks.

Spain has set itself the target and has achieved 13.000 MW of installed capacity by the end of 2011 secure environment that provides investors Spain, played a decisive role in promoting wind energy, creating new jobs and providing a number of benefits to the country.

Also, the majority of society is very positive towards wind power. Banks also perceived high efficiency of RES investments, have strengthened the activity provides loans on favorable terms.

Producers of RES have to choose between two systems for determining the absorbed price of electricity which they generate. The first method is to guarantee the absorption of energy with guaranteed fixed price (feed in tariff), which for wind farms amounts to 62,1 € / mwh. The price is adjusted based on the retail price minus an adjustment factor.

The second method of payment for energy, producing, based on the wholesale price plus a premium and reduced the cost of deviation from the estimate of energy. There is a minimum and a maximum guaranteed limit for the economic survival of the plant.

Also, by the Royal Decree 252/2003 amended the tax code and included in this provision provides tax relief of 10% for companies that invest in renewable energy.

Finally, in Spain there are several local programs and incentives for investment in renewable energy.

3.1.5. UK [32], [36].

The UK has set a target of 2010 10% of electricity produced from RES.

Has instituted a legal obligation on electricity suppliers to increase the share of energy from RES, providing specific ratio of electricity to consumers from renewable sources.

The additional costs resulting from this requirement, passed on to consumers, by a specified maximum cap. If a supplier is unable to meet this minimum of RES will be able to buy green certificates.

Furthermore, the UK introduced tax on climate change to promote the RES. The tax is levied on climate change, is a new initiative, which applies to energy used in industry, commerce and the public sector, while omitting the domestic sector. Energy, electricity as well as heat, which is produced from renewable sources are exempt from this tax, resulting in a competitive advantage given to RES.

The Law (Non Fossil Fuel Obligation -NFFO), which became applicable 1989, was the first mechanism selected in the United Kingdom by the Government to convey properly RES in the commercial market.

The Electricity Law of 1989 created an obligation on electricity suppliers to provide a certain amount of electricity from non-fossil sources. This additional cost will be covered by the charge of duty charged on behalf of consumers. With the real start of the NFFO renewables has been discontinued in 1999, having created the way for the development of RES.

In the UK renewables supported by a system of obligatory demand and several grant programs. Renewables constitute for the UK an important tool for the prevention of climate change.

3.1.6. Austria [32], [37]

Austria has committed to increase the production of alternative energy sources to 34% by 2020.

The Austrian legislation for national green energy ("Ökostromgesetz") up to 2004 provide a support system for the development of wind energy and in general all kinds of renewable energy, providing a constant absorbance value (feed-in tariffs)

for new energy Wind Parks, which were guaranteed for 13 years, which amounted to 78 € / Mhw. It also provided investment subsidy, which is 30% of the investment cost.

Since 2004 there was discussion about amending the law. In 2006, the amendment has caused uncertainty among investors, as the price has dropped from 0.078 € / kWh to 0.075 € / kWh. Under the existing law, the fixed price feed in tariff should be reduced each year.

3.1.7. Belgium [32], [38]

In 1995, Belgium adopted the first law for the promotion of wind farms, which was revised on 1998 and 2003 The main parameters applicable to the legislation for renewables in the country are: the green certificate price guaranteed absorption and tax exemptions (tax compensation scheme). The guaranteed price offered is 90 € / mwh for offshore wind farms and 50 € / mwh for onshore wind farms.

3.1.8. Cyprus [32], [39]

The Cyprus because the energy infrastructure depends entirely on the import of fossil fuels Act 2003 adopted about the strengthening of wind farms to absorb the energy generated for the first 5 years to 92 € / mwh and for the next 10 years from 48e / mwh up to the 90 € / mhw according to the average annual wind speed. It also offers an investment grant of 30-40% of the investment cost.

3.1.9. Finland [32], [40]

The Action Plan for RES (Action Plan for Renewable Energy) describes the central policy of Finland on the RES. The plan is given great emphasis in research and development of renewable energy in the long term, and applying tax on fossil fuels. The impact of emissions trading on operating costs of thermal power plants resulted in a significant increase in the price of electricity. In Finland, in coastal areas the cost of wind energy is about 50 € / mwh up to 80 € / mwh without subsidies (15 years with indoor yield of 7% per annum), while the cost for offshore ranges from 80-100 € / mwh . Finally, given subsidies, which amount to 40% about wind farms.

3.1.10. France [32], [41]

France provided significant financial incentives for the RES development, which are based on fixed and guaranteed rates of absorption of energy produced. These incentives were introduced in 2001 and 2002 Until then applied the system of investment grants. For installation up to 12 MW prices are guaranteed for 15-20 years. For wind farms guaranteed price is 85 € / mwh about the first five years of operation of the park, 65 € / mwh for the next 10 years and 30 € / mwh about the last five years. The guaranteed high prices attract investment in medium-sized wind farms.

3.1.11. Netherlands [32], [42]

The Dutch government has set a target for renewables to contribute 10% of the total energy supplied until 2020.

In the Netherlands the licensing process RES installations is relatively complex. Since 2009, the Law provides specific procedures for licensing and installation of large-scale (between them and wind farms).

In the process of siting and permitting wind park installations involving and the three levels of administration of the country: Municipalities, Prefectures and Government. The Municipal Council is responsible for issuing Building Licenses on installations Wind Turbines. The granting of authorization by the Municipalities is related with the

development plan applying in any area and will to grant authorization either the suggested establishments to follow the rules of the existing land use, whether it be modified.

Prefectures have the right -In order to protect the environment or other special interests in the region - to prohibit or allow installation of wind farms in this region. Municipal councils must adopt plans for spatial planning and land use indicated by the the Prefecture.

Over the Prefectures operates the power of the central government. The Government may establish specific areas for the installation of large wind farms, and to prohibit the installation of wind turbines in specific areas where that is deemed necessary for environmental reasons.

Note that, although the responsibility of licensing is to the Government, but every citizen has the right it to submit its objections. Objections evaluated by specialist bodies and then defining the relevant licenses and national space. Citizens have the right to appeal again against decisions and institutionalized land use framework, the Council of State. The Council of State is obliged to issue a decision within six months of filing the application.

Also in 2009 the institutional framework introduces green certificates, and introduced Obligatory minimum share of electricity production from RES.

Green energy certificates

A green energy certificate proves that a manufacturer distributes electricity to the grid a certain amount of electricity produced from RES in a given period.

The owners of the plant for producing electricity that exploit wind, solar, hydro (less than 15 MW) and biomass (if the stream produced from 100% biomass) fulfill the necessary conditions for green certificates.

By the obligation of energy companies, to include the quantity of electricity that distribute a minimum percentage of electricity which is produced from RES, the trade of green certificates for renewable energy boost. Furthermore, the Dutch government adopted an energy tax (Regulatory energy tax). This tax is levied on the consumption of energy from small and medium-sized businesses and residential customers. The implementation of this measure has resulted the promotion of RES and RES are exempt from tax.

Finally, the prices of energy from wind farms is stable: for onshore wind farms, the price is 77 € / mwh and 97 € / mwh for offshore wind farms. Also, there are significant tax reductions for investments in RES.

4. Conclusions

Observing the consistency with which most European countries faced the issue of renewable energy, we understand the reasons for delay of our country.

Our country has chosen to promote RES only with the relatively high guaranteed prices. Prices of energy from RES in Greece is similar to that in Germany and Denmark, proving that price alone is not enough to develop renewable energy. Denmark also recently reduced the price of the produced energy from wind farms in all new wind farms connected to the network.

But in Greece a number of factors have led to a standstill increase of the wind park in relation to the rest of the EU:

1 First and major reason for the low installed capacity of wind farms in Greece, compared to other EU countries is the issue of overregulation, unstable legal environment ambiguity and bureaucracy led to aversion of investor interest. In our country there are many laws on licensing wind farms, the provisions of which often conflict.

2 Obvious are also the consequences of the lack of effective spatial framework and a forest register as the lack of clarity of capabilities of land use and the possible involvement of any one investment in the Council of State, act as a deterrent for every investor. Expectations for positive development creates the new Law on Spatial Planning voted a few weeks ago.

3 We also saw that in countries that have developed rapidly and effectively wind turbines were spent heavily to information and public opinion, which was not in our country with the known effects of the reactions of local communities and the rise of nimby syndrome, created as ground to any form of laicism and scaremongering (the local communities came to speak for radioactive installations for complete destruction of flora and fauna, even suspending the reproduction ability of sheep and goats). It is obviously imperative requiremen for the State to proceed the public information on any existent disadvantages of wind farms and on the many benefits of them.

4 Our country chose with rigid stability the system of feed in tariff, and the system of subsidy of the initial investment, but without consider alternative and more flexible policies, eg copying stimulus given to Spain through local programs. Could enhance overall Greek entrepreneurship and give real boost development giving better incentives (subsidies, tax exemptions) for wind farms whose engines are designed and manufactured in Greece. It is sad that there is no present in the country neither a Mechanical workshop that is able to repair damage to the rotor of the turbine already installed, although the Industry -and because of its factories DEI (Public Power Corporation S.A.)- until a few years ago was considered well developed. The installation of wind farms while construction of mechanisms needed of the domestic industry creates new jobs by absorbing qualified staff.

5 Finally, in Greece there is a complete lack of offshore wind farms -despite the fairly strong and economically exploitable offshore wind Potential-, in contrast to other EU countries which are beside the sea. Already much of energy that produced by wind parks in the EU is from offshore wind farms, Germany, Denmark and the United Kingdom are the leaders.

ANNEXES

Charts

Chart 1: Global cumulative installed Wind Capacity 1996-2013 (MW) (GWEO)

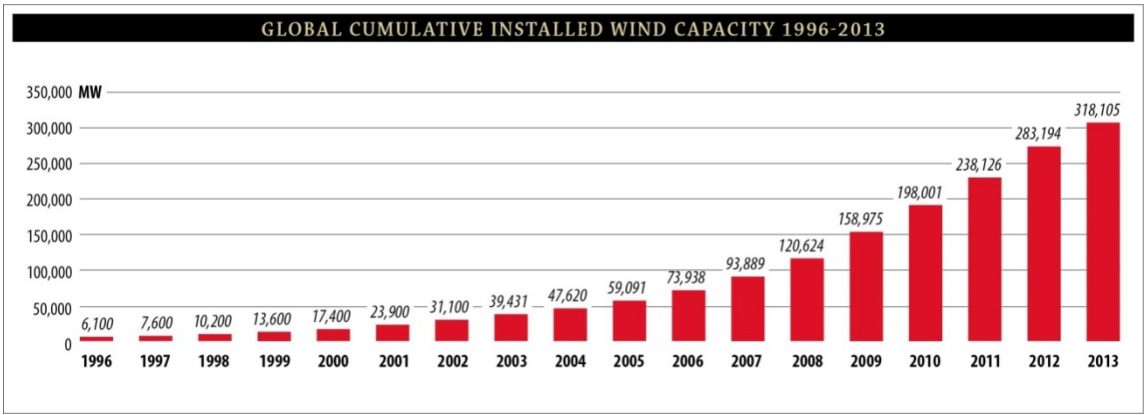


Chart 2: Cumulative Wind Power Installations in the EU (GW) (EWEA)

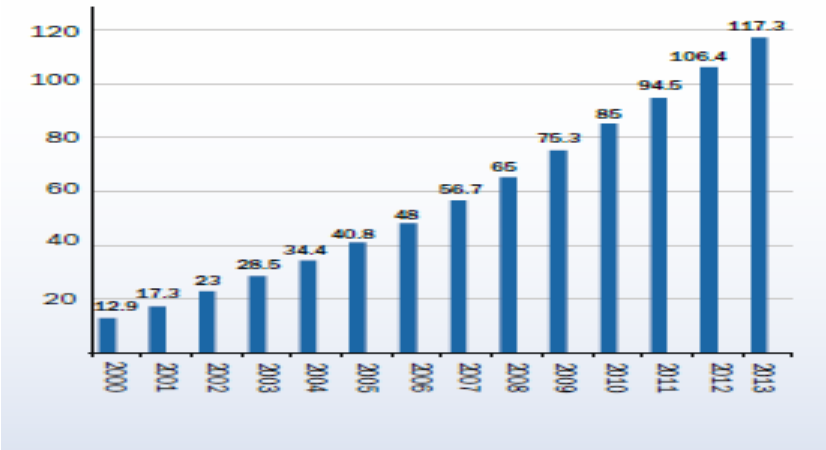


Chart 3: Cumulative Wind Power Installations in Greece 1987-2013 (MW) (ELETAEN)

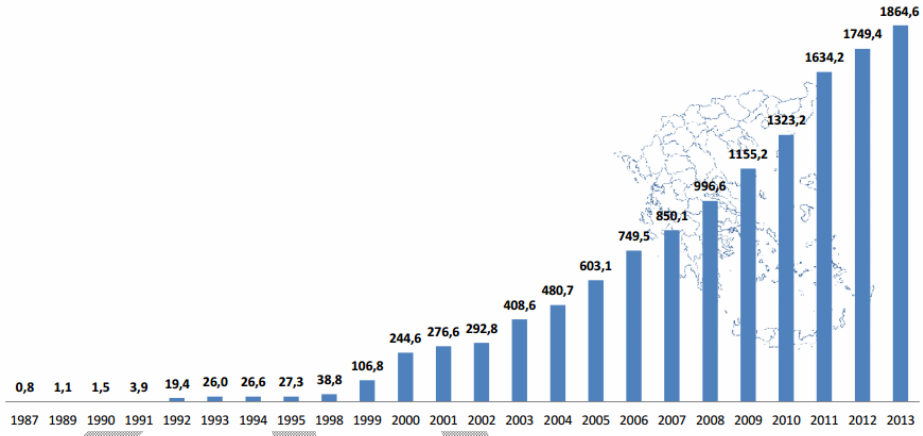
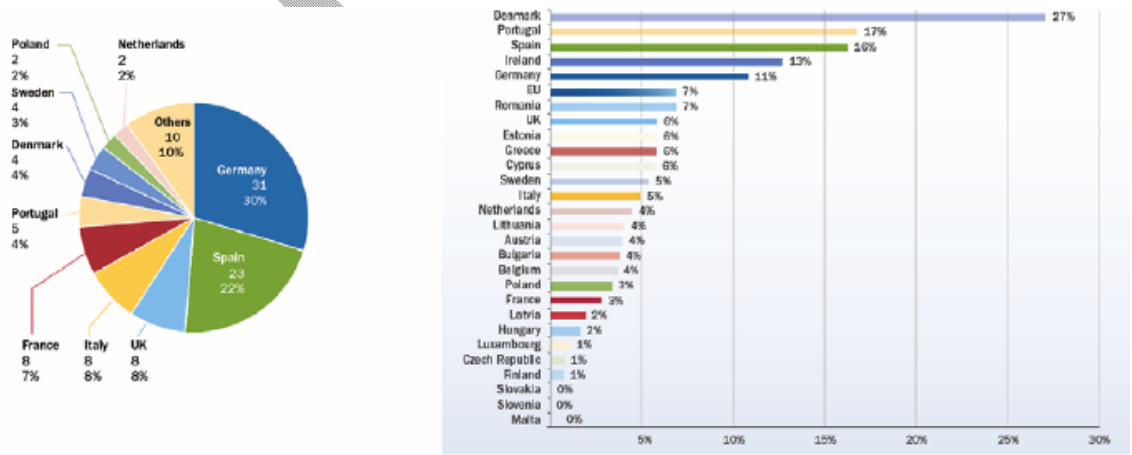
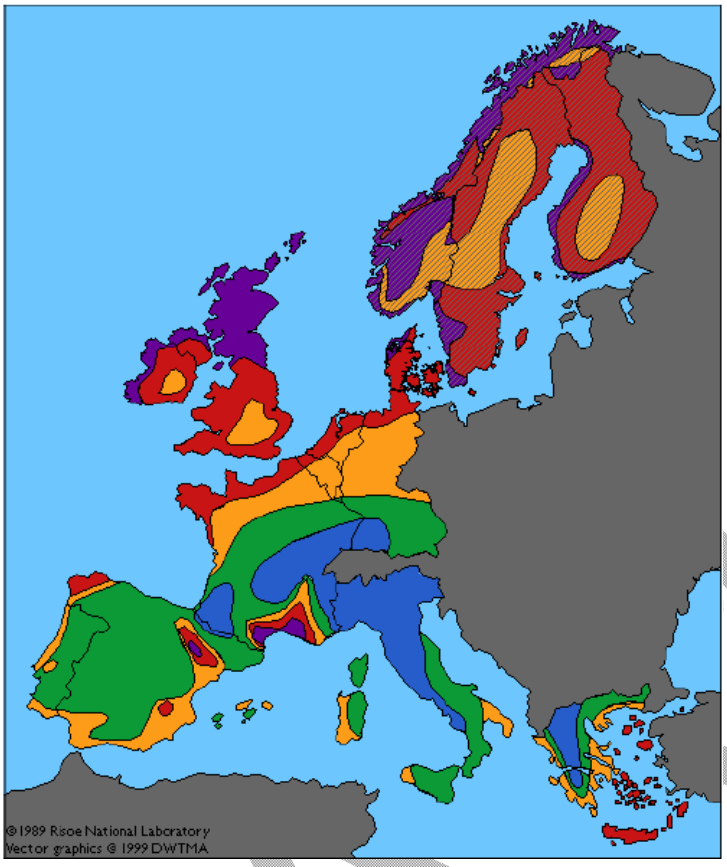


Chart 4: Total production of wind energy in the European Union and distributed among Member States & Wind Energy Participation in electricity generation to the Member States of the Europe [25]. (European Wind Agency Association)



Pictures

Picture 1: Wind potential at 50 meters height for five different topographic conditions (Copyright © 1989 by Risø National Laboratory, Roskilde, Denmark):



1. Sheltered terrain,
2. Open plain,
3. At a coast,
4. Open sea
5. Hills and ridges.

Tables

Table 1. Classification of countries according per capita installed wind power (2013)

W/κάτοικο	**Χώρα**
0,87	Danish
0,48	Suiden
0,45	Ireland
0,44	Portugal
0,41	Germany
0,35	Spain

0,2	Austria
0,17	UK
0,16	Netherlands
0,17	Greece
0,15	Belgium
0,14	Italy
0,13	France
0,12	Luxembourg
0,08	Finland

Table 2. Evolution of the installed wind power capacity in the last decade (from end 2003 to end 2013)

Global wind capacity by country (MW)				
E.U. (15)				
Country	**End 2003**	**End 2013**	**Increase (MW)**	**rate of increase %**
Germany	14.609	33.730	19.121	131
Spain	6.202	22.959	16.757	270
Dunmark	3.110	4.772	1.662	53
Netherland	912	2.693	1.781	195
Italy	904	8.551	7.647	846
U.K.	649	10.531	9.882	1523
Suiden	399	4.470	4.071	1020
Greece	375	1.865	1.490	397
France	239	8.254	8.015	3354
Austria	415	1.684	1.269	306
Portugal	299	4.724	4.425	1480
Ireland	186	2.037	1.851	995

Belgium	68	1.651	1.583	2328
Finland	51	448	397	778
Luxemburg	22	58	36	164
E.U. (28)				
Poland	57	3.390	3.333	5847
Latvia	24	62	38	158
Czech Republic	10	269	259	2590
Hungary	3	329	326	10867
Estonia	3	280	277	9233
Cyprus	2	147	145	7250
Lithuania	0	279	279	100
Malta	0	0	0	0
Slovakia	3	3	0	0
Slobenia	0	2	2	0
Rest Europe				
Norway	101	768	667	660
Ukraine	57	371	314	551
Switzerland	5	60	55	1100
Romaine	1	2.599	2.598	259800
Total Europe	4.809	121.474	116.665	2426
Others				
Turkey	21	2.956	2.935	13976
Belarus	0	0	0	0
Serbia	0	0	0	0
Russia	0	15	15	0
North America				

USA	6.374	61.091	54.717	858
Canada	317	7.803	7.486	2362
Total N.America	6.691	68.894	62.203	930
Rest World				
India	211	20.150	19.939	9450
japan	686	2.661	1.975	288
China	568	91.412	90.844	15994
Australia	198	3.239	3.041	1536
Total World	39.294	318.106	278.812	710

Table 3: Range of major policy mechanisms and support schemes used over time in the 12 studied markets. The chart illustrates the large number of policy instruments available (rows), while the constant adaptations of the policy regimes in a single country (columns) correspond to a learning process in developing a policy framework for wind energy.

	ΧΩΡΑ	BRAZIL	[illegible]	DENMARK	GERMANY	GREECE	INDIA	IRELAND	ITALY	AL	SPAIN	M	UNITED STATES
	INDICATIVE SUMMARY OF THE RANGE OF SUPPORT MECHANISMS USED HISTORICALLY												
Remuneration	Feed-in tariff	*		*	*	*	*	*		*	*	*	
	Premium or Adder system			*	*						*		
	Auction or tendering system	*						*			*	*	
	Tax based (electricity) production incentives												*
	Spot market trading			*	*			*	*		*	*	
	Investment subsidy or tax credit			*		*	*						*

	Tradable Green Certificate [e.g. REC/ ROC]						*		*			*	*
	Concessionary finance through government supported agencies	*			*		*				*		*
	Concession on import duty	*					*						
Target or Standard	Renewables Purchase Obligation or Renewables Portfolio Standard						*						*

	Federal or statewise targets (binding or indicative) -	*		*	*	*	*	*	*	*	*	*	*
Permitting	Project siting guidelines	*		*	*	*					*	*	*
	Project permitting process			*		*	*	*	*	*	*	*	*
Grid Integration	Priority access to the grid	*		*	*	*		*	*	*	*	*	
	Grid code			*	*	*	*				*		

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The fluctuating relationship of academic recognition and professional recognition of rights in the field of the European Union

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In the field of EE both terms professional and academic recognition that appear for a period of time not far removed conceptually not to say that coincided significantly, recently diversified considerably. The reasons leading to this variation are reduced to a general tendency to conceptual differences imposed or invented and conceptual structures for reasons related to the pursuit of particular objectives and priorities laid down in the EU. Which could be in this case the reasons and the superior considerations served?

A central and especially important target and priority even from the early stages has been undoubtedly the intra-EU mobility. Such a target is considered that is impossible to be effectively promoted without the release of the professions in the European context, and also without providing full opportunities to the members of any profession to exercise their profession in any EU country, with at least the same terms and conditions as they do in their own country. It was considered that that freedom of establishment could only have a limited effect if it is not accompanied by substantial liberalization of professions and it was also considered that the substantial leverage to enhance mobility within the Community is precisely this release.

In this context it was considered necessary to the professional disengagement of academic recognition.

However, the following question is posed with intensity: Is it really logical and methodologically possible such a release? It is true that though the distinction between the two types of recognition is for systematic reasons essential, the disengagement could lead to inconsistencies and absurd and could also pose critical and incapable of answering questions.

How could it be understood that one can exercise a profession without the parallel recognition of his academic degree by the host country?

How could it also be understood that a university professor able to practice his profession in the country of origin, would not have the ability to practice his profession in the host country, because the titles of his studies may not be recognized as equal?

How could it be understood that the key element for the acquisition of the ability to exercise a certain profession, the possession of a certain academic degree, is disconnected from it and it works beyond a certain point and regardless of this?

Lack of rationalization and hierarchy is an important reason why the introduction of successful institutions is misplaced. There are in the path of the configuration of European integration cases where something could be noted. In many cases a feasibility in the context of European integration has been designed without the hierarchical coordinate path to be followed. That explains various inconsistencies appeared[1].

It is necessary in our opinion to analyze how intra-EU mobility as a prefix target will not be banished to harmonize the issues and the recognition of qualifications and training stages

1. Distinction between two different status

There is a conceptual distinction between two different status: the "effectus akademicus" and "effectus civilis"[2]. These two status attribute both distinguishable between the species identification, namely the academic and the professional recognition, respectively. The question is whether the absoluteness of taking this principle methodological distinction reflects the reality or not. The answer to this question is that even assuming that this distinction exists in terms of reality, you should avoid "systematic opposition" of these two concepts[3].

The first status (effectus akademicus), includes the legal instruments in force within the framework of the given educational system and which may be related to the recognition of studies, the exam recognition and the permissibility of launching other subsequent studies based just on this recognition. The particular areas of this stage is open and constantly evolving, as there are constantly ideas and proposals to extend them[4]. The second status (effectus civilis) includes legal recognition results, especially in the field of administrative law and business law[5]. The first of the two above leads to the second status. Those who have followed certain stages of education have the opportunity to pursue certain occupations[6].

A similar and parallel to the above distinction is the distinction between academic and business "equivalence", which, however, could not be regarded as identical with the above, but it is a distinction that ensues logically above.

In a more periphrastic expression the recognition refers both to identify which is purely academic purposes, and also to the recognition which has professional

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[11] Characteristic and universal meaning and importance such case is preceded economic union based on a common currency without a common political and economic policy instruments and procedures for the exercise of general economic policy.

[2] For this distinction see rather more *H. Kasparovsky – I. Wadsack,* Prüfungs- und Diplomanerkennung im Hochschulbereich, 2005, p. 16.

[3] *C. Ferrari – Breeur,* Libre circulation des étudiants et reconnaissance académique, σε: La reconnaissance des qualifications dans un espace européen des formations et des professions, επιμ. J. Pertek, 1998, p. 68: “Donc, même si la dinstiction doit demeurer, il faut éviter une opposition systématique de ces deux notions”.

[4] *A. Prevos*, La reconnaissance des diplômes dans un espace européen des formations et des professions, σε: La reconnaissance des qualifications dans un espace européen des formations et des professions, επιμ.: J. Pertek, 1998, p. 11-15 (14).

[5] For these *H. Kasparovsky – I. Wadsack*, as above, p. 16.

[6] *H. Kasparovsky – I. Wadsack*, as above, p. 16: “So haben die absolventen bestimmter Studienrichtungen das Recht, genau ungeschriebene Berufe bzw Tätigkeiten auszuüben”.

purposes and reasons[7]. The above formulation of the distinction emphasizes the targeting of the various political categories that compose it.

It must be emphasized that this distinction is not absolute, but is qualified by the consideration of reality, which wants the two previous categories to communicate and enter into each other. By its nature, the certified cognitive "experience", particularly under the current circumstances, cannot be isolated, but it must tend to direct productive exploitation of the professional field.

As aptly noted the recognition granted for academic purposes produces secondly or in second stage professional results[8]. Thus the boundaries between the two types of recognition seem to be increasingly hard to distinguish. The professional experience is treated in many cases as a part of training and education. On the other hand, the exercise of the profession today cannot be done without an established and certified knowledge that only in the context of organized and academic characteristics of study may be warranted.

In the wider European and international context, the best way to utilize the cognitive experience in the professional field, as well as the adoption of an effective system of certification of knowledge and skills acquisition, without narrow national boundaries and strict national standards as a prerequisite for access to a profession are steadily and constantly evolving requests. So the above two categories are recognized in this field as completely complementary one to the other, based on a purely logical and systematic approach.

It is true that in the field of the EU a single identification system of recognition is mentioned[9]. The lack of even a single identification system is enhanced by the fact that on the basis of fundamental Community right of free movement of workers, freedom of establishment and freedom to provide services, it has been the only the professional recognition and not the academic.

2. The fundamental methodological change in the academic recognition and in association with the professional recognition

The strong correlation between the academic recognition of diplomas and professional recognition, which is a modern phenomenon, was the result of a change in strategy that occurred in the european field. This change was associated with the introduction and establishment of a new general system of recognition of

[7] In German theory refers to "rein akademische Anerkenung", when there is a direct or indirect connection with the pursuit of a regulated profession and "akademische Anerkennung zu beruflichen Zwecken", when someone asks for a certain profession or the submission of an application for recognition of an asset for access to a profession. For these particular see *W. Obwexer - H. Bezinka*, Die Anerkennung von Diplomen im Binnenmarkt, ibid, p. 385 and *M. Wasmeier*, Aktuelle Fragen im Zusammenhang mit der Anerkennung von Berufsabschlüssen, EuZW, 1999, p. 746 ff. (748), and says that the above cited decision of Justice of 8 July 1999, C-234/97, Teresa Fernández de Bobadilla.

[8] *J. Pertek*, Une dynamique de la reconnaissance des diplômes à des fins professionnelles et à des fins académiques: réalisations et nouvelles réflexions, in: La reconnaissance des qualifications dans un espace européen des formations et des professions, επιμ. J. Pertek, 1998, as above, p. 141: "…la reconnaissance accordée à des fins académiques produit aussi, dans un second temps, des effets professionnells".

[9] *W. Obwexer – H. Bezinka*, as above, p. 386, where noted in conclusion that: "Das gemeinschaftsrechtliche Anerkennungsregime basiert demzufolge auf der berufliche Anerkennung".

diplomas and professional skills, to which led the finding that the process of drafting and entry into force sectoral Directives for specific occupations, was not effective to implement this set by the Treaties[10]. After a long application of the system of sectoral Directives recognition, the results were found only in certain professions, though for all the "regulated professions" in EU countries it had not been achieved what was determined by the Treaties, in order for the freedom of establishment and freedom to provide services[11].

Based on the above, it was found that the vertical approach was not appropriate and there was need for a horizontal approach. Such a horizontal approach resulted in the formation of the European level of all 'regulated professions' in a different basis. Thus, while previously the recognition of a diploma for a certain 'regulated profession' was based exclusively on a previously obtained or presumed decision[12], now rests in a more meaningful and based on specific data evaluation. The circulation of professional activities is now done through a harmonization, based on the limitation of different national settings[13].

3. The effect on vision of academic recognition after the 'single market'

Following the Single European Act of February 28, 1986, where the 'single market' was adopted, the vast majority of jobs was in danger not to be able to benefit from the perspectives that ensured this single market. On the other hand, due to the lack of Directives relating to a prompt and effective way, to the freedom of establishment and freedom to provide services, the defense of those freedoms was taken by the European Court[14].

Under these circumstances it was required a new methodological terms diametrically opposite position.

Legal certainty on the one hand the organization require the recognition of diplomas, not to protect only certain "privileged" professions, but for all professional activities.

On the other hand, the Court of Justice has shaped the architecture of a new identification system. The question of legality of recognition in terms of EU law, depends on national judicial remedies, while the person is able to be informed for the reasons that support the decision on recognition[15].

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[10] *C. Fouassier*, Le système général de reconnaissance des diplômes: la confiance mutuelle et ses limites, R.A.E – L.E.A, 2005, p. 31.

[11] *C. Fouassier*, as above, p. 31.

[12] *C. Fouassier*, as above, p. 31.

[13] *C. Fouassier*, as above , p. 31.

[14] Characteristic of the role undertaken by the Court of Justice decision of 15 October 1987, C-222/86, Unectef.

[15] It is typical wording of the ECJ judgment of 15 October 1987, C-222/86, Unectef, according to which:

"When a Member State to undertake paid employment depends on the possession of a national or recognized equivalent foreign diploma, the principle of Article 48 of the Treaty on the free movement of workers requires the decision not recognizing the equivalence of a diploma awarded by another Member State to a worker who is a national of that Member State subject to appeal under national law in order to permit its legality under Community law, no person can be made aware of the reasons on which it is based the decision. "

4. Practical change the new identification system

The new system introduced in the field of recognition allows a licensed and qualified professional in the country of origin to practice in another member - state of the EU, on the basis of two data[16]. The first is that this occurs, despite the different regulations between countries of origin and the host country. The second is that this is also based on the respect of the requirements set by the relevant regulations of the host country and not by the arbitrary overcome them. The new recognition system refers to liberalization within the EU framework of practice and emphasizes the overall conditions of the country of origin

5. The lag of academic recognition in the professional recognition and its justification

The academic recognition in relation to professional recognition, shows a shortfall at European level, to the extent that is still set at national level in particular[17]. This is explained historically since in principle the Community seemed to give priority to the free circulation of professionals. This resulted directly from the arrangements made at a very early stage in the Treaties, while in contrast there were not similar arrangements relating to academic recognition. Thus the need to broaden also in the field of academic recognition was realized much later[18].

The pursuit of achieving direct effect turned into a relatively unilateral direction to that of priority support and professional recognition lag vesting of academic recognition.

The delay of the institutional consolidation of academic versus professional recognition is justified by the fact that what primarily puzzled and remains puzzled, with respect to the freedom to live and work, is that although these institutions seems to be guaranteed, hindered by the fact that the exercise of professions connected with national criteria, which each

5.1. The Treaty of Lisbon and the academic recognition

The Article 165 of the Treaty of Lisbon (and the corresponding 149 EEC) provides that action by the EU side for the recognition of diplomas and periods of study, and through it, but also by other means to enhance the mobility of students and teachers. Now generally recognized in the Union competences in education matters on cooperation between educational institutions, development and exchange of information on the educational systems of the country, encouragement of distance learning, overall development of youth exchanges, development of sports exchanges etc. So the academic recognition as recognition of diplomas and periods

[16] For the general system of recognition see. *JM Favret*, Le système général de reconnaissance des diplômes et des formations professionnelles en droit communautaire: l 'ésprit et la méthode, RTDE, 1996, p. 259. See. *Well J. Pertek*, La reconnaissance des diplômes en Europe, coll. "Que sais-je", 1999; same, La reconnaissance des qualifications dans un espace européen des formations et des professions, 1998.

[17] *E.Mouameletzi*, The impact of Community law on public and private education in Greece, 1996, p. 185.

[18] *E.Mouameletzi*, as above, p. 185.

of study, emerges as the necessary field of enlargement and one of the key areas in which that modern requirement of "reciprocity" in the area of EU.

Therefore, the pre-owned Treaty of Lisbon responsibility to member - state in the formulation of educational policy is transferred to the Union, hence the hope to strengthen the integrative processes in regards to issues of academic recognition on the basis of "reciprocity".

6. The determination of Directive 89/48 / EEC on the construction of a new identification system

The Directive 89/48 / EEC was a real turn up to the regulation in force and certainly to the relationship professional and academic recognition until the time of its impementation. The new concept is that the studies realized, are considered from a substantive point of view. This means that at the level of recognition, the recognition concerns the final result of academic education and all the titles held by the person, and further qualification considered from the point of view that allows access to a profession[19].

The Directive does not refer to a recognition system based on a model similar to that introduced by the sectoral directives, but on the 'principle of trust' that occurs on the basis that every member – state recognizes the possibility to define professional requirements to which must be reconciled every national education system[20].

The Directive embraces the logic that if a certain title gives its holder the opportunity to exercise a profession in a member - state, then all other member - states will have to accept, without necessarily requiring the harmonization of education systems and educational conditions[21].

Therefore, the amendment introduced by this Directive innovation is that changing the standard model of professional recognition and academic recognition becomes relative autonomy versus professional. The change in the relationship between professional and academic recognition is associated with the abandonment of the logic of sector regulation, which becomes an entity of a simulating and harmonizing action in the field of educational systems and systems of professional evaluation.

However, there are still many meeting points of professional and academic recognition, which make them complementary and serving the one to the other[22]. It is also noteworthy that, although the aims of the professional recognition are different from those of the academic and also different authorities are competent, the two kinds of recognition have content partly resembling[23].

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[19] *E.Mouameletzi*, as above, p. 185.

[20] *E.Mouameletzi*, as above, p. 191.

[21] *E.Mouameletzi*, as above, p. 193-194.

[22] *J. Pertek*, La reconnaissance des diplômes, un acquis original à développer, Journal des tribunaux – Droit Européen, 1999, σ. 182, for the relationship professional and academic recognition: "Il existe plusieurs points de rencontre entre la reconnaissance à des fins professionnelles et la reconnaissance à des fins de poursuite d' études, ce qui les rend complémentaires et à certains égards, tributaires l' une de l' autre".

[23] *J. Pertek*, as above , p. 182: "…un contenu en partie semblable".

The impact particularly on the academic professional recognition is undisputed, and this for obvious and practical reasons. In order to obtain a judgment for any professional recognition, account primarily consideration titles, provided tests that certify skills and abilities based, at the larger volume, on the title awarded by the country of origin[24].

In practice, because of academic recognition, with the portability and continuity within the education system of another country, an extension of the results in relation to professional practice is also necessary, because opportunities and possibilities are created and also interest for installation in another country[25]. From another aspect, the recognition of certain periods of study or educational steps of someone moving to another country raises, regarding the traineeship and general access to a profession, at least at the same and usually better place than someone who entirely follows the established studies in his country. Overall it could be said that the outcome of the academic recognition under the new situation empowers partly the professional recognition.

7. Formulation of new proposals that recognition to be "more functional"

There are several recommendations on the issue of the recognition, in order to make it more functional and responsive to current circumstances. As such are the aggregated strengthening (par accumulation) of academic recognition, the strengthening and improving of the recognition mechanisms, that are both academic and professional, and in particular the development and strengthening of administrative Annex (supplément) of the academic degree, in order to facilitate the identifiability of studies carried out in another country, the setting mechanism conciliatory settlement (médiation) to avoid recourse to judicial settlement for the issue of recognition, the right to bring someone a title that proves training lawfully obtained in another member - state, without obstacles and constraints, and the creation of academic and professional development network for the discussion on the issues of education and occupation[26].

8. Conclusion

The academic recognition and professional recognition are concepts which are distinguished primarily by systematic and pedagogical value and mark the corresponding status in the Union area. In terms of reality concepts are also distinct from each other. The distinction between them is based primarily on historical reasons for which the professional recognition was separated from the academic recognition, because the freedom of qualified professionals that should be preceded and serve preferentially as a target, if it is considered that this should primarily be based on the enhancing mobility within the Community. While, however, the system

[24] *J. Pertek*, as above, p. 182; *C. Ferrari - Breeur*, as above., p. 67-68: "... in order to obtain a decision on recognition for professional purposes we aim to a training often certified by an academic - a university degree. "And further states that at different periods of their lives, people may be interested in a different kind of recognition history and even sometimes sequentially and sometimes simultaneously."

[25] *J. Pertek*, as above, p. 182.

[26] For those see especially *C. Ferrari – Breeur*, as above, p. 70-73.

of sectoral Directives supported only partly academic recognition, the release of this system and the transition to the current, that was strengthened and more universal significance and gave visibility to academic recognition. At the same time that led to a weakening of academic versus professional recognition, providing indisputable priority in the last promotion of disengagement and even relative autonomy from it, in order that the academic recognition has displayed a normal lag versus professional. Modern data require not selected artificial ways and means to promote those objectives that do not correspond to individual indeed substantially and 'natural' requested levied in European integration. In this context, the professional recognition should not be separated and autonomous from the academic recognition, but it is essential to look for the right timing and for a common gait during development, so that in the future to keep pace and to go along, helping and supporting each other. De facto academic and professional recognition cannot operate independently, but they should be based each on the other. This will avoid absurd and discrepancies observed today which is not also unusual in the perpetual but fluctuating process of European integration

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