

# **Developing an Integrated Business Excellence System and Proposing its Implementation as the Hellenic National Business Excellence Award**

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## **Abstract**

Most of Business Excellence – Total Quality models provide a static view and processing of Total Quality issues. This paper proposes a system of Business Excellence taking into consideration: current European practices of Total Quality and competitiveness, a modular, open architecture like this in computer networking, calculation of the performance and effectiveness of the approaches, rather than enablers and results in separate and a system Dynamics to support interdependence and correlation of system variables. The paper, also, reviews some major European National Quality Awards to identify routes of tendencies and proposes in general terms the structure of the business excellence system. The research is based on information gathered by bibliography, by own findings, as well as, by issues provided from the first implementation of the Hellenic National Quality Award by the Ministry of Development. Research findings showed that EU countries do not have a common framework to address business excellence, however the “European Quality Award” (EQA) based on the “EFQM Excellence Model” is the most widespread in the previous decade. There is a tendency towards own developments on national quality awards in the current decade. There is also a clear indication of Quality Awards ‘nature’ across EU: there are the ‘national ones’ which are supported by their governments in the sense of financial support to organisations and the ‘private ones’ which are supported by associations, chambers, private organisations and non profit organisations. In addition, a Business Excellence System is proposed to verify this European tendency of own developments providing a modular and open architecture of Total Quality practices or developments.

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## **1 Review of Business Excellence Models in EU-25**

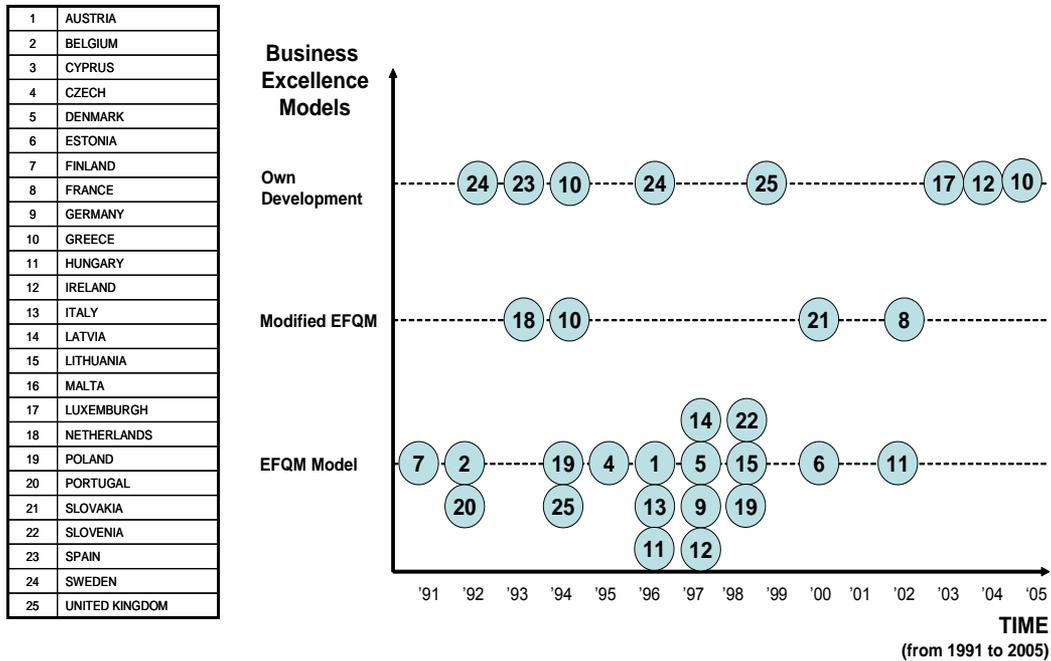
Since the initiation of the Deming Prize in Japan, Malcolm Baldrige National Quality Award (MBNQA) in the USA and the European Quality Award (EFQM) in Western Europe, several national quality awards have been established to stimulate systematic quality improvement and to promote quality awareness in different places of the world [1,3,8]. Many countries have modeled their award programs based on these three awards [1,7].

Respectively, many quality awards have been developed in Europe within the last 15 years. Their purpose is the improvement of the competitiveness of various types of organizations. Most of the European countries have initially used the ISO quality assurance standards in order to promote development and production procedures. The next stage was the implementation of methods of self-assessment and systems of quality management, basically through quality awards schemes, serving the ultimate goal of the alteration of the quality's philosophy and the improvement of competitiveness of small and medium sized firms [4].

The European Quality Award is administered by the EFQM. The EFQM has a membership of more than 750 European organizations, all of which are committed to improving efficiency, effectiveness and achieving excellence. Organizations in Europe widely accept that quality management is a way of managing activities to gain efficiency, effectiveness and competitive advantage. Consequently, it aims at ensuring long-term success via meeting the needs of their customers, employees, financial and other shareholders and the community at large.

The driving forces of the development of quality awards are more or less the same in all E.U. countries. Despite the fact that almost all the countries during the last 15 years have developed initiatives and strategies that facilitate the introduction of TQM in their organizations, basically all the decisions that have been made on the creation of various types of awards, are closely related to the political status, the law, the interaction and dependence between state on one hand and private and public sector on the other, and finally the business and administrative philosophy [5].

Figure 1 shows that European Union (EU) countries do not have a common framework to address business excellence, however the "European Quality Award" (EQA) based on the "EFQM Excellence Model" was the most widespread in the previous decade. There is a tendency of own developments on national quality awards in the current decade.



Also, there is a clear indication of Quality Awards “nature” across EU: There are the **national ones** (could be also stated as Government Supported Awards) which are supported by their governments in the sense of financial support to organisations for operating and administrating the award, **or** in the sense of political support (as for example the presence of President or Vice President of the state in the award ceremony) and the **private ones** (could be also stated as Privately Supported Awards) which are supported by associations, chambers, private organisations and non profit organisations. In bibliography, as national quality awards are referred all those awards which are supported by their governments both in the sense of financial – administrative point of view and in the sense of the content of the relative criteria. It should be noted that the Malcolm Baldrige National Quality Award (MBNQA) in USA is considered as a national quality award whereas the European Quality Award does not belong in the category of “National Quality Awards”.

Toliopoulou & Agoritsa [10] found that 17 quality awards out of 31, almost half of them, are supported by their governments (“national” awards), as shown in Table 1.

Table 1: Quality Awards in EU: “National vs Private”

EU COUNTRY	NATIONAL	PRIVATE
AUSTRIA		"Austrian Quality Award"
BELGIUM		"K2 Award"
CYPRUS		"ECO-Q recognitions"
CZECH	"Quality Award of the Czech Republic"	
DENMARK		"Danske Kvalitetspris"
ESTONIA	"Estonian Quality Award"	

EU COUNTRY	NATIONAL	PRIVATE
<b>FINLAND</b>	"Suomen laatupalkinto"	
<b>FRANCE</b>	"Prix Francais pour la Qualite"	
<b>GERMANY</b>		"Ludwig-Erhard-Preis"
<b>GREECE</b>	Hellenic National Business Excellence Award	
<b>HUNGARY</b>	"Hungarian Quality Award" "Regional Quality Award" "IIASA SHIBA Award"	
<b>IRELAND</b>	"Q-MARK" National Quality Award	"Irish Business Excellence Awards"
<b>ITALY</b>		"Premio Qualita Italia"
<b>LATVIA</b>	"The Latvian National Quality Award"	
<b>LITHUANIA</b>	"Lithuanian National Quality Prize"	
<b>LUXEMBOURG</b>	"Prix Luxembourgeois de la Qualite"	
<b>NETHERLANDS</b>	"INK Management Model - Dutch Quality Award"	
<b>POLAND</b>		"Polish Quality Award" "Business Fair Play Award"
<b>PORTUGAL</b>		"Premio de Excellencia - Systema Portugues da Qualidade"
<b>SLOVAKIA</b>	"The Slovak Quality Award "	
<b>SLOVENIA</b>	"The Slovenian Business Excellence Prize"	
<b>SPAIN</b>	"Premios Principe Felipe a la Excellencia Empresarial"	
<b>SWEDEN</b>	"Utmarkelsen Svensk Kvalitet"	"Quality in Northern Sweden"
<b>UNITED KINGDOM</b>		"UK Business Excellence Award" "Investors in Excellence", IiE
<b>TOTALS</b>	<b>17 / 30</b>	<b>13 / 30</b>

Source: Toliopoulou & Agoritsa [10]

## 2 Trends

According to the bibliography, it is noticed that the business and social culture of a country or region affects the level and diffusion of Total Quality Management practices, especially in Europe where there are diverse cultures and economies [9]. This consideration shows the need that regional cultures should be taken into account due to the development of a National Quality Award or a Business Excellence System.

These national characteristics which define the representative national culture have to do with the national priorities of competitiveness, development, integration of national frameworks regarding Quality, reliability of organizations managing Quality Management issues, the economical and social development, promotion and knowledge society and continuous improvement in general.

The review of the EU National Quality Awards shows the diverse adoption of Quality Management issues in companies. The EFQM Model is applied to almost 56% [1], of the EU National Quality Awards which indicates that although it is the dominant framework of business excellence there is an indication of own developments [6]. According to the above considerations, including the findings of Mavroidis [1], the following trends are revealed:

- Most of the EU models of business excellence which are the representative National Quality Awards follow an open architecture in order to be able to support dynamic changes and market demands.
- Plenty of the EU models of business excellence have been affected by the EFQM Business Excellence Model but they have changed on the needs of the business community they represent.
- There is a definite gap between the enterprises which are certified by ISO 9001 and use it as the means of managing business practices and the enterprises which use the above standard for marketing reasons only.
- There is a growing demand of sector certification (e.g. education, telecommunications, food industries, etc).
- There is the need to identify and implement best practices in order to make companies more innovative and competitive. The Innobarometer index is a reference point to measure innovation and diffuse good practices per EU country.
- There is the need to integrate activities for Quality Management, in order to provide routes from “Quality” by the product point of view to “Quality” by the business perspective.
- Importance is given to the Managing Organization which implements the National Quality Award or Business Excellence Award for each country. The selection of this organization provides reliability and clarity of the country’s national mechanism.

According to the above trends and EU national quality (or business excellence) awards (NQA) review, a new Business Excellence System is proposed which will encounter the following issues. The proposed system is applied to represent the Hellenic National Business Excellence Model.

1. The development of a National Business Excellence System which will take into consideration the culture, social and business characteristics of the community it represents. EU is formed by countries which have different cultures and economies.
2. The proposed system should reinforce the implementation of ISO 9001 standard as the means of continuous improvement rather than marketing tool.
3. Sector certification and cluster – networking trend is clear and the proposed system shall encounter this market demand.
4. There is the need of systems integration as far as Quality Management practices or business practices to avoid competition between models, systems, or practices.
5. There is the need of a Managing Organization which will manage the representative National Quality Award mechanism and provide companies with reliability and clarity of its processes.
6. SMEs and their characteristics should be encountered, especially those with less than 50 employees.

### 3 Proposed System of Business Excellence

The proposed system is based on the above mentioned trends, especially in European Union. It is noticed that a new **system** is proposed rather than a new **model** of Business Excellence. The meaning of “system” is defined, in this research, by the inclusion of several Business Excellence models, initiatives which are related and influence each other and altogether form a “Dynamic Business Excellence System” (using as a theory framework the Dynamic Systems).

It is composed by well-structured levels or fields of excellence, with specific contents per level (as Quality initiatives or Business Excellence Models) which represent, up to a point, the meaning of the Quality, the Management & Organisation, and the Competitiveness- Innovation concepts in an organisation. The six levels are **independent** as to their approaches for Quality improvement, but they **depend on one another** for the total performance score and their consequent influence. The levels are 6, leaving the last level open towards the upper part (i.e. future levels). This approach is equivalent to the familiar level model of Telecommunications Networks (OSI-RM Model) that applies for computer networks and offers a clear description, a modular development and easy future development-enlargement. This system proposes a dynamic evaluation of the business performance, taking into consideration time, culture and business differences.

The proposed System is not a congregation of initiative models, nor is it a new model. The concept “system” is **characterized** by the dependence of the levels (as to their influence) and by the concept already explained. The proposed system is **dynamic** as to:

- The integration of current and potential tendencies and initiatives,
- The time-relation of “self assessments” of itself or of other levels,
- The relation with the business cultures of the respective geographical areas

The levels should follow the changes occurring dynamically in the models (publications or new models) and refer to the requirements deriving from the current market trends and the differentiation requirements, always focusing on the Greek market (combined with the European directions). These levels of excellence [2] comprise the following areas:

- Level 1, “Organising and Managing Quality Management Systems” as refers to the international standards ISO 9001 and ISO 9004 (latest edition).
- Level 2, “Organising and Managing Sector specific and advanced (Quality) Management Systems” as refers to the international standards ISO 14001, ISO 22000 or other documented national initiatives.
- Level 3, “Managing and Supporting Clusters or Networked Enterprises”,
- Level 4, “Managing Human Resources”, either through a recognized standard or a documented national practice (such as the Investors in People initiative),
- Level 5, “Managing Advanced TQM Tools or Business Excellence Models”, such as the EFQM Model or other national or sector specific initiatives or other recognized TQM initiatives such as 6 sigma where appropriate,
- Level 6, “Managing and supporting Innovation”, as it is appreciated by national or European means of evaluation.

Additionally, the proposed System is open as to:

- The number of levels upwards (ie.7, 8) – Dynamic differentiation,

- The actions for new models implementing specific levels (i.e. potential new national model for a quality system in super markets or a new model on level 5 for very small businesses)
- The methodologies for re situating and processing data deriving from internal and external self assessments.

Each level of business excellence represents an integrated and measurable initiative for the “Quality”. The levels structure follows a logic route which encounters:

A. From the **external** environment of a company as far as:

- i. Product processes
- ii. Knowledge management

Towards the **internal** environment of a company as far as:

- i. design of business processes,
- ii. New product development,
- iii. Knowledge management

B. From the environment of well structured criteria or demands, as expressed in international standards towards to the environment of less demands or defined criteria, as expressed by research results, new programmers or EU activities.

C. From the environment of standards and business administration systems which are well known and applicable to most businesses towards the environment of business initiatives which are less known and applicable.

The following Figures (2 – 4) show the level definition, correlation and structure of the proposed business excellence system.

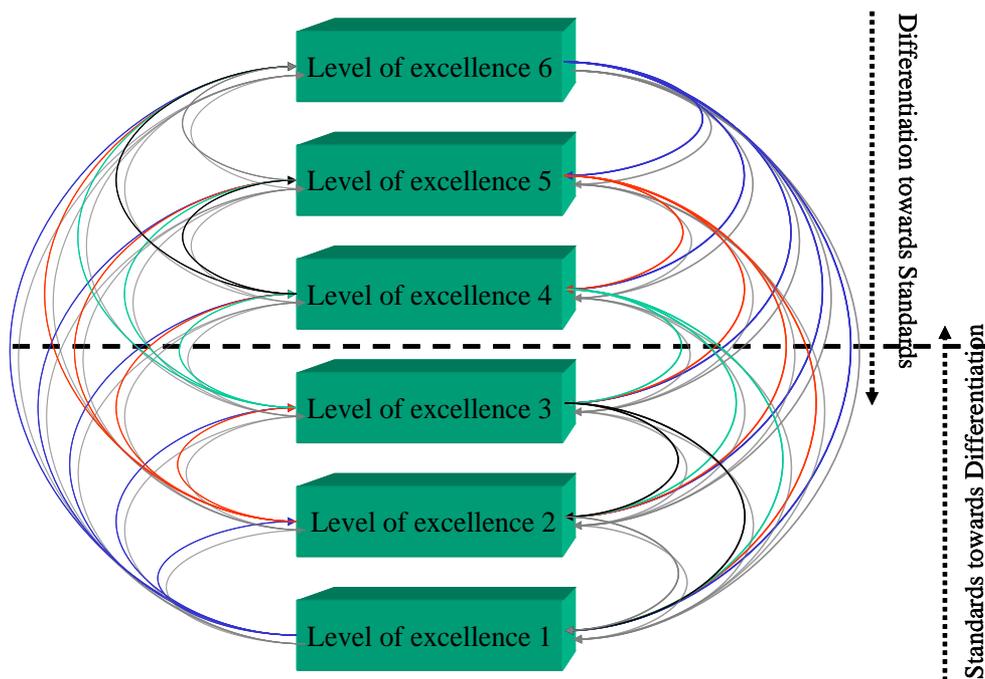


Figure 2: Proposed Business Excellence System as an integration of business practices and levels correlation

Source: V. Mavroidis [2]

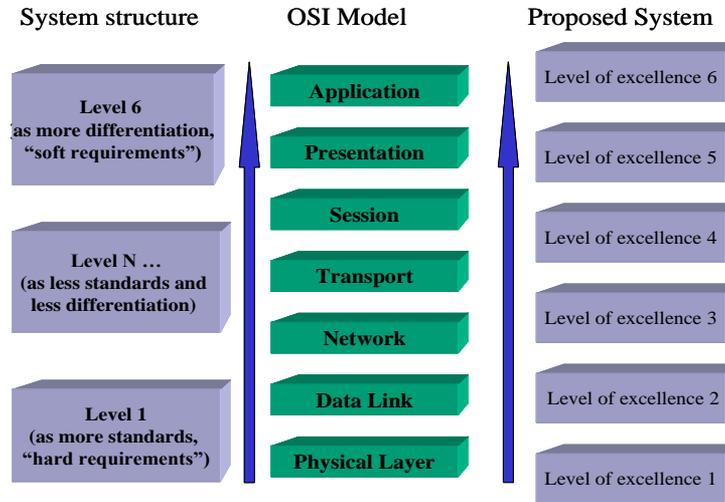


Figure 3: Proposed Business Excellence System structure, levels logic structure and correlation to the OSI-RM model of telecommunications  
 Source: V. Mavroidis [2]

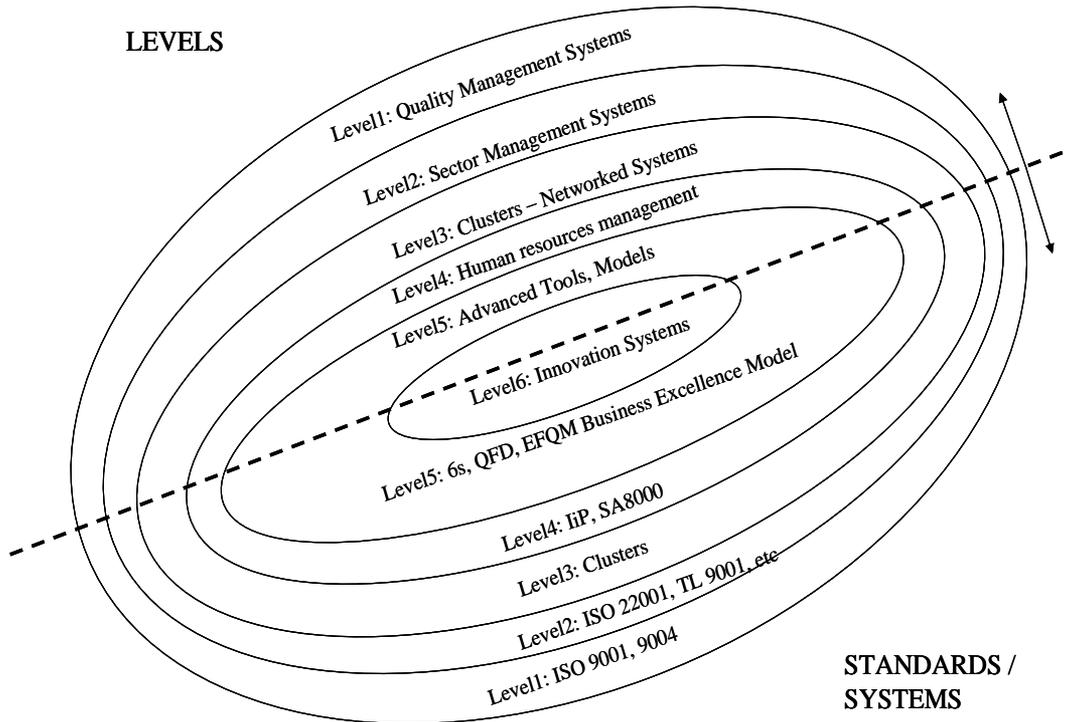


Figure 4: Structure of levels and examples of each level implementation  
 Source: V. Mavroidis [2]

An analysis of the proposed business excellence system is given in a published article [2] of the same author. This article makes reference on the application of Systems Dynamics to support measurement performance and computation of the total score or index of the system variables.

#### 4 System Structure and Levels Definition

The proposed system is structured in six levels of excellence and a general level of business results as shown in Figure 5.

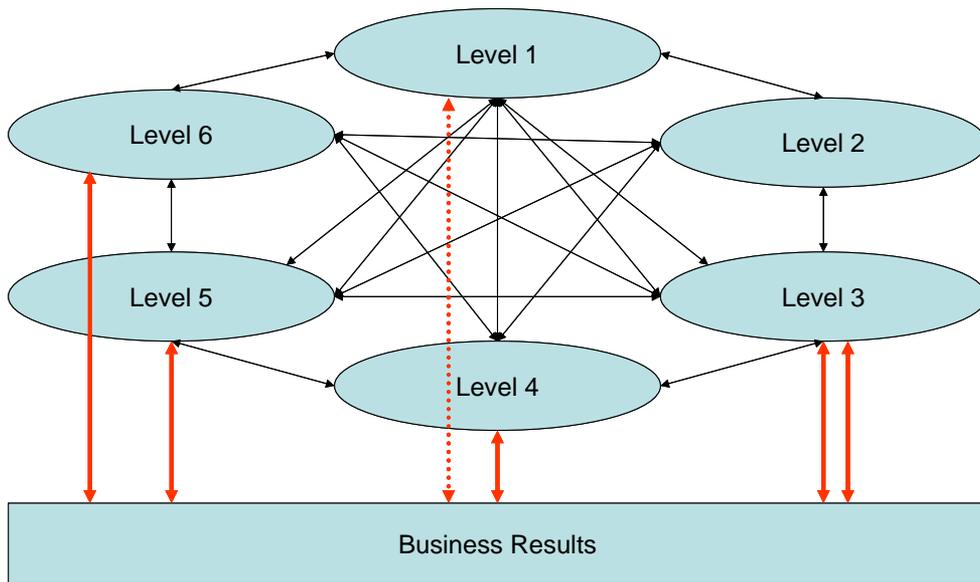


Figure 5: Levels of excellence and business results

Source: V. Mavroidis [2]

The levels are defined as follows:

*Level 1, "Organising and Managing Quality Management Systems" as refers to the international standards ISO 9001 and ISO 9004 (latest edition).*

This level implements the demands for an efficient and effective operation of Quality Management Systems considering the international standards:

- ISO 9000:2000,
- ISO 9001:2000,
- ISO 9000 – 1,2,3,4,
- ISO 9004:2000

This level of excellence does not audit an ISO 9001 system but it assesses how much ISO 9001 or other relative standards affect the efficiency and effectiveness of an enterprise and how much a mature Quality Management System leads to business results and vice versa.

*Level 2, “Organising and Managing Sector specific and advanced (Quality) Management Systems” as refers to the international standards ISO 14001, ISO 22000 or other documented national initiatives.*

This level implements the demands for an efficient and effective operation of (Quality) Management Systems which are sector oriented or business field considering the international standards:

- TL 9000, for telecommunication sector,
- QS 9000, for automotive sector,
- IWA-1: ISO 9001, for health sector,
- Etc (current or future standards or sector practices).

Sector or specialized standards adopt the structure of international standards, such as ISO 9001 and add new demands of the sector that represent or adopt good practices.

The logic of level 2 is more open than level 1 since it is less descriptive as far as the sector standards and is flexible regarding the definitions of the sector standards or initiatives.

*Level 3, “Managing and Supporting Clusters or Networked Enterprises”*

This level implements the demands for an efficient and effective operation of clusters and networked organisations. Up today, there are not specific standards of creating and managing a cluster or networked companies, however there is a clear tendency in EU of forming this kind of business and better managing competition in regional or sector level.

*Level 4, “Managing Human Resources”, either through a recognized standard or a documented national practice (such as the Investors in People initiative.*

This level implements the demands for an efficient and effective operation of managing the “internal part” of an enterprise which has to do with people, systems, knowledge, relations. This level is close to the demands of a Human Resources Management system. An initiative in EU which has been adopted by some northern countries is the Investors in People (iP) standard. Also, this level includes the demands for an efficient and effective operation of corporate social responsibility (CSR) and secure management systems.

*Level 5, “Managing Advanced TQM Tools or Business Excellence Models”, such as the EFQM Model or other national or sector specific initiatives or other recognized TQM initiatives such as 6 sigma where appropriate*

This level implements the demands for an efficient and effective operation of TQM Advanced tools or business excellence models (EFQM, sector initiatives). This level is open as far the best tools or models identified by an enterprise.

*Level 6, “Managing and supporting Innovation”*

This level assesses the ability of an enterprise to address innovation and differentiation using the plethora of initiatives, tools, systems or models available in market. This ability is measured and assessed for its efficiency and effectiveness.

Innovation is a European Union priority and there are plenty of activities running currently to address it.

The “Business Results” level is defined as the area of measuring the effectiveness of the following sub sectors:

- Customer Satisfaction,
- People Satisfaction,
- Community Satisfaction,
- Financial / Quality Business Results

## **5 Development of the Hellenic National Business Excellence Award**

The Hellenic National Business Excellence Model is developed on the proposed business excellence system considering the following constraints:

- There were not other National mechanisms of business excellence in Greece apart from private initiatives with limited diffusion.
- Total Quality Management practices and business excellence systems were less known to SMEs especially those with local management (not international business units).
- Most of Greek enterprises are focused on the development of ISO 9001 or other ISO standards, less on the development of efficient and effective ISO 9001 systems.
- Human resources management and satisfaction, clusters / networks management, quality or advanced tools and innovation are not yet developed to assess their effectiveness and efficiency.

Also, the Hellenic National Business Excellence Award was supported by the third EU framework considering the rule of “de Minimis” for financial contribution.

Considering the above constraints, as well as the flexibility of the dynamic proposed business excellence system, the Managing Organization of the Hellenic National Business Excellence Award (which, in this case, was the Hellenic Ministry of Development) proposed only the first 2 levels of excellence to be applied for the first implementation of the award scheme which are:

- Level 1: “Organising and Managing Quality Management Systems”,
- Level 2, “Organising and Managing Sector specific and advanced (Quality Management Systems” as well as managing clusters – networks, and the “Business Results” general level.

The rest levels of excellence were noticed to be applied in following cycles of the National Award scheme where more mature systems will arise.

The Hellenic National Business Excellence Model is considered as a national platform to support the development and management of the Greek enterprises and to reinforce the implementation of good practices in the fields of the active levels of excellence. It is considered as the next phase of integrating national and European programs of competitiveness and an Award scheme was implemented to support this new national initiative.

As stated by the Minister of Development, it is expected that this new initiative will:

- Reinforce the competitiveness of the Greek Industry and especially the SMEs,
- Encounter the characteristics and culture of the Greek enterprises and market trends,
- Gain a national point of reference to compare performances and support barometer tools,
- Improve customer and employee satisfaction,

- Contribute to the development of Business Excellence tools or models in local level and in international level.

The Hellenic National Business Excellence Award scheme was first announced in September of 2007 and eligible enterprises for this scheme were only industries which apply the new rule of *de Minimis*. In these terms, plenty of the Greek businesses were forbidden to apply for the Award scheme, however it was the only way to financially support the Award scheme through the 3<sup>rd</sup> Framework of EU contribution.

Three Hellenic National Business Excellence Awards are given for each category of an enterprise (Big companies, Medium ones and Small ones). The National Awards are given to these enterprises which gain the best comparative score in both 'levels of excellence' and in 'business results'.

Six Hellenic National Business Excellence Distinctions were to be given for each category of an enterprise and for each level of excellence:

- Big companies, level 1
- Big companies, level 2
- Medium companies, level 1,
- Medium companies, level 2,
- Small companies, level 1,
- Small companies, level 2

Only five National Distinctions are given. Those are given to these enterprises which gain the best comparative score in one 'level of excellence' and in 'business results'. Therefore, it is encouraged and supported to improve in one field of excellence (or level) considering the impact on business results.

Twenty-five Hellenic National Business Excellence Recognitions are given to the rest of enterprises to encourage their efforts on the diffusion of good business practices and business excellence. Taking into consideration the development of a national point of reference for an annual Award scheme which will provide enterprises with reliability and clarity, certain mechanisms were developed to assure this concept, such as:

- The initiation of new activities in the department of Quality Policy, in the Hellenic Ministry of Development which are:
  - Selection and training of Assessors,
  - Management of proposals of the candidate enterprises,
  - Promotion and information of the new initiative
- The establishment of a Commission of Business Excellence with members from market and Public Administration with the leadership of the General Secretary of Industry.
- The establishment of a Commission of pre-assessment of candidate proposals.
- The establishment of a list of assessed Assessors, most of them coming from the European Assessors of the EFQM.
- The obligation of conducting site visits in the candidate enterprises.
- A blind assessment by 2 (or 3 in some cases) assessors for each proposal.

In this year of running the Award scheme, 44 in total, industries made a proposal. Three of them are given an award, five of them are given a distinction and twenty-five are given recognition. Some interesting statistics are being processed as far as the number of Assessors occupied with this project, the performances of the candidates and the maturity of their systems and readiness to new initiatives.

## 6 A Concluding Proposal

A new Business Excellence System is proposed based on studying both past literature and the European trends. The authors' perception is that the proposed system will be able to integrate current practices and business excellence models to support the European nations' effort to manage competition and innovation schemes.

The proposed system was implemented as the Hellenic National Business Excellence Award gaining the interest of both the academic and market community.

This new Business Excellence System could be considered as an initial framework to better set business systems or excellence in EU countries considering both dynamic issues and business mentality of EU nations. A challenge arises: Could this excellence system be considered as a reference point to further develop EU National Quality Awards?

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