

ASSESSMENT AND ACCREDITATION PROCESSES: CONTRIBUTION TO IMPROVE A QUALITY ASSURANCE SYSTEM OF HIGHER EDUCATION IN PORTUGAL

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Abstract

The purpose of this paper is to contribute to the assessment and accreditation process of the Master in Integrated Management Systems (MIMS) offered by the Technology and Management Higher School of the Polytechnic Institute of Guarda (Portugal), in the past, now and in the future. In Portugal, the Agency for Assessment and Accreditation of Higher Education (hereinafter referred to as the A3ES) is the institution that has as mission to contribute to improving the quality of Portuguese higher education, through the accreditation and assessment processes of higher education institutions (HEI), in general, and their study programmes, in particular, ensuring the integration of Portugal in the European quality assurance system of higher education. The methodology of the paper takes the form of an editorial review and argument, based on the MIMS study programme undergone a formal assessment and accreditation process by an External Assessment Team, including foreign experts, who visited the HEI in order to produce a report supporting the resolutions of the assessment and accreditation process, ensuring the assessment of the study programmes quality. Thus, the paper evaluate the impact of main principles of the assessment and accreditation process: specificity of the Technology and Management Higher School of the Polytechnic Institute of Guarda and the type of teaching/learning; all stakeholders are asked to participate and their contribution is taken on board; and self-evaluation is a key element in the process. The paper provides an empirical research based on information to scholars in the interdisciplinary social field of research about the assessment and accreditation process of study programmes to ensure the integration of Portugal in the European quality assurance system of higher education. Indeed, the results of the paper prove that the MIMS programme is designed to train senior staff in integrated management systems, such as: Environment (ISO 14000), Quality (ISO 9000), Occupational Safety and Health (OHSAS 18000) and Social Responsibility (SA 8000; NP 4469-1). The students get the knowledge and skills, techniques and scientific information, necessary for develop the professional activity in these areas, and strengthen the capacity of analysis, planning, implementation and management control, individually or integrated, these systems, both mandatory (legally) as a volunteer. Other result show that the Master's degree meets what is defined on the mission of the HEI, which is "to train highly skilled professionals with an entrepreneurial spirit and solid humanist bases, and contribute to the cultural, social and economic development of the region and the country through quality service training, supported by academic programmes with an appropriate educational model based on competence". Another result of the paper demonstrate that the A3es have produce a positive report of the assessment process which had contribute to the highly skilled training that Technology and Management Higher School of the Polytechnic Institute of Guarda aspires by helping students to differentiate them from the market and be recognized for its contribution to regional development by economic and social promotion, as well as, the competence in the training it offers.

Keywords: Assessment process, Accreditation process, Higher education, Portugal.

1 INTRODUCTION

The implementation and development of the higher education institutions (HEIs) are centred in a society of intensive knowledge that the demands in relation to the landing of qualifications and competences grew considerably, and in that the formation of higher level carries out a strategic function. Effectively, the strategic function of higher education demands a constant adaptation of the conceptual field, especially in the social, economic and technological perspectives that will bring sustainable development [1].

In this context, the implementation of the Bologna process has ensured that higher education systems present a greater economic efficiency, quality of the results, student access facilities and accountability. All these objectives in higher education allowed greater mobility, improving the ability to

compete and the quality [2]. So, the purpose of this paper is to contribute to the assessment and accreditation process of the Master in Integrated Management Systems (MIMS) offered by the Technology and Management Higher School of the Polytechnic Institute of Guarda (Portugal), hereinafter referred to as the ESTG-IPG since the same for operation had to be preliminary accredited by A3ES.

A3ES aims to contribute to the improvement of the quality of Portuguese higher education, through processes of assessment and accreditation of the HEI and their study programmes. Thus, the paper provides an empirical research based on academics information in the interdisciplinary social field of research about the assessment and accreditation process of study programmes that ensures the integration of Portugal in the European quality assurance system of higher education.

The structure of the paper is organized as follows. Section 2 gives an overview of the Portuguese Agency for Assessment and Accreditation of Higher Education. Section 3 argues about the Master in Integrated Management Systems and the assessment and accreditation process offered by the Technology and Management Higher School of the Polytechnic Institute of Guarda (Portugal). Finally, the section 4 presents the conclusions and makes some recommendations.

2 THE AGENCY FOR ASSESSMENT AND ACCREDITATION OF HIGHER EDUCATION

The Portuguese higher education consists of a binary system which includes university and polytechnic education that can be public or private. The university and polytechnic subsystems are mainly differentiated by their formative role in research: the polytechnics are vocationally or professionally oriented and do not carry out fundamental research as the universities do; and the universities conducted applied research [3]. Specifically, the polytechnics institutions have as main objectives the regional development and a close interaction with its operational environment that provided a flexible reaction to changes in its environment [4].

In Portugal, before the implementation of the Bologna process the university system was based on tree-cycle diplomas: first cycle (5 years for *Licenciatura*), second cycle (2 years for *Mestrado*), and third-cycle (3 or more years for *Doutoramento*); and the polytechnic system was based on two-cycle diplomas: first cycle (3 years for *Bacharelato*) and second cycle (2 years for *Licenciatura*). Therefore, the *Bacharelato* was a degree offered exclusively by the polytechnic system and the *Mestrado* and *Doutoramento* degrees by the university system [1].

Subsequent the official changes requisite by the Bologna process, the Portuguese Government approve the Decree-Law 42/2005, 22th February [5], that aim to introduce principles and instruments for the creation of the European higher education area. This regulation applies to all HEIs and the degree programmes offers three official graduation levels: license (*Licenciatura*), master (*Mestrado*) and doctor (*Doutoramento*). The duration of these levels change according with the degree and field of study. On average, the license degree has 3 years (or 180 credits), but in fields of study such as engineering, law and architecture could be 5 years and in medicine till 6 years; the master degree has 2 years and doctor degree has 3 years [6].

Thus, the implementation of the Bologna process in Portugal originated the adoption of key measures to promote equal opportunities in accessing higher education, to improve student support systems, to attract new publics in the context of lifelong learning and to guarantee the qualifications of Portuguese citizens in Europe framework. [7] states that the Bologna process obliges the European countries, including Portugal, to developing instrumental objectives, such as [8]:

- Adoption of a system of easily readable and comparable degrees;
- Adoption of a system essentially based on two main cycles, undergraduate and graduate;
- Establishment of a system of credits such as in the European Credit Transfer System (ECTS), as a proper mean for promoting student mobility;
- Promotion of mobility by overcoming obstacles to the exercise of free movements of students, teachers, researchers and administrative staff;
- Promotion of the European Dimension in higher education;
- Promotion of European cooperation in quality assurance with a view to developing comparable criteria and methodologies.

A series of political actions are inherent to Bologna process, which can be interpreted and analysed using the terms of strategic planning and quality assurance at the European level [9]. The central concept of the process is the assumed causal relationship between quality and autonomy, the result of which is the introduction of a system of retrospective quality control combined with substantial increases in the autonomy of the HEI by establishes new regulations equal in all countries. In this sense, the HEIs should cooperate in depth and consolidate, in Europe, the idea of networks as a mechanism to optimise the resources and scientific and technological European knowledge [10].

In this sense, following the development of quality assurance systems the Portuguese Government has decided to create the A3ES, by the Decree-Law 369/2007, 5th November [11], with the objective of promoting and ensuring the quality of higher education. A3ES is a private law foundation, established for an indeterminate period of time, with legal status and recognised as being of public utility, being independent in its decisions while take into account the guidelines prescribed by the State. Law 38/2007, 16th August [12], defines the general principles to be adopted in the procedures of quality assessment and accreditation of higher education.

Therefore, the A3ES has the mission to contribute to the improvement of the quality of Portuguese higher education, through the accreditation and assessment processes of HEI, in general, and their study programmes, in particular, ensuring the integration of Portugal in the European quality assurance system of higher education [13]. Decree-Law 74/2006, 24th March [14], amended by Decree-Law 107/2008, 25th June [15], Decree-Law 230/2009, 14th September [16] and Decree-Law 115/2013, 7th August [17], establish the conditions for accreditation of study programmes.

The main objective of A3ES is to promote the improvement of the performance of higher education institutions and their study programmes and to guarantee the fulfilment of the basic requirements for their official recognition. This objective is pursued through the accreditation and assessment activities carried out by the A3ES, and the promotion of an internal quality assurance culture within higher education institutions. The specific objectives of A3ES are [18]:

- To develop the quality assessment of the performance of higher education institutions and their study programmes;
- To determine the accreditation criteria in order to translate their results into qualitative appreciations, as well as to define the consequences of assessment for the operation of study programmes and institutions;
- To promote the accreditation of study programmes and institutions, for the purpose of ensuring the fulfilment of the legal requirements for their recognition;
- To provide society with information on the quality of the performance of higher education institutions;
- To promote the internationalisation of the assessment process.

Consequently, the main activities of A3ES in developing its mission are [18]:

- To define and enforce the quality standards of the HE system;
- To assess and accredit study programmes and higher education institutions, as well as, to audit and certify the internal quality assurance systems of institutions;
- To promote the public disclosure of the assessment and accreditation results;
- To promote the internationalisation of the Portuguese higher education system;
- To participate in the European Quality Assurance Register – EQAR.

To accomplish this, the employees Agency's should follow a code of ethics oriented by the subsequent principles, values and standards: neutrality and impartiality; integrity; confidentiality; transparency; responsibility; sobriety; non-conflict-of-interest; cooperation and team work; professionalism; and intellectual property [18]. The codes of ethics ostensibly are developed as tools for bringing some degree of uniformity and propriety to citizens' performance of organizational roles [see 19].

So, the first regular cycle of accreditation and assessment of study programmes, which included every study programme that had obtained preliminary accreditation, began in the school year 2011/2012 and it will be applied till the school year 2015/2016, because at the end of 2016 the database will be rebuilt to include data obtained from the completion of these processes. The initial number of study programmes with preliminary accreditation was 3,623. Although, HEI have been adjusting their educational offer and have withdrawn 239 of those programmes of their own accord. Table 1 shows,

with data referring to January 31, 2013, the distribution by each of the years of the cycle, remaining 3,384 study programmes with preliminary accreditation.

TABLE 1. Annual distribution of regular accreditation of study programmes, 2011/12 to 2015/16

<i>Year</i>	<i>1st cycle</i>	<i>Integrated. Master's</i>	<i>2nd cycle</i>	<i>3rd cycle</i>	<i>Total</i>
2011/2012	260	10	229	34	533
2012/2013	267	26	278	94	665
2013/2014	216	34	383	134	767
2014/2015	360	6	364	71	801
2015/2016	179	50	272	117	618
Total	1,282	126	1,526	450	3,384

Source: Adaptation of [18]

Table 2 presents the areas covered by the first year of the cycle and the number of study programmes submitted for assessment within each of these areas, in the academic year of 2011/2012.

TABLE 2. Scientific areas covered in the 1st year of the regular assessment/accreditation cycle, 2011/12

<i>Year</i>	<i>1st cycle</i>	<i>Integrated. Master's</i>	<i>2nd cycle</i>	<i>3rd cycle</i>	<i>Total</i>
Training of Pre-school Teachers and Primary School Teachers (1st/2nd cycle)	18	0	20	0	38
Psychology	22	5	49	10	86
Marketing and Publicity, Polytechnic Education	22	0	11	0	33
Marketing and Publicity, University Education	10	0	15	1	26
Accountancy and Taxation	26	0	23	1	50
Management and Administration, Poly. Educ.	24	0	11	0	35
Management and Administration, Uni. Educ.	20	0	29	4	53
Civil Engineering, Polytechnic Education	20	0	10	0	30
Civil Engineering, University Education	4	5	8	8	25
Social Work	24	0	12	2	38
Hospitality, Tourism and Leisure, Poly. Education	41	0	9	0	50
Hospitality, Tourism and Leisure, Uni. Education	5	0	6	2	13
Sports, Polytechnic Education	17	0	4	0	21
Sports, University Education	7	0	22	6	35
Total	260	10	229	34	533

Source: Adaptation of [18]

For the subsequent years of the cycle the deadline for the submission of self-assessment reports will be in late December of each year. Thus, the reports concerning the 2nd year of assessments of the study programmes related to the academic year of 2011/2012 were presented by 28th December, 2012. Table 3 traduces the scientific areas and the number of study programmes involved

TABLE 3. Scientific areas covered in the 2nd year of the regular assessment/accreditation cycle, 2012/13

<i>Year</i>	<i>1st cycle</i>	<i>Integrated Master's</i>	<i>2nd cycle</i>	<i>3rd cycle</i>	<i>Total</i>
Training of Pre-school Teachers and Primary School Teachers (1st/2nd cycle)	14	0	47	0	61
History and Archaeology	17	0	34	20	71
Political Science and Citizenship	18	0	21	13	52
Communication Studies	26	0	13	4	43
Finance, Banking and Insurance	8	0	15	2	25
Public Administration	5	0	5	1	11
Management and Administration, Poly. Educ.	26	0	6	0	32
Management and Administration, Uni. Educ.	24	0	29	5	58
Law	15	0	21	10	46
Applied Legal Studies	7	0	1	0	8
Computing and Computer Engineering, Pol. Educ.	34	0	14	0	48
Computing and Computer Engineering, Uni. Educ.	35	3	36	16	90
Electrical Engineering, Electronics and Automation, Polytechnic Education	25	0	13	0	38
Electrical Engineering, Electronics and Automation, University Education	12	9	17	14	52
Architecture and Urban Planning	1	14	6	9	30
Total	267	26	278	94	665

Source: Adaptation of [18]

In this context, the methodology following in the next section takes the form of an editorial review and argument, based on the study programme of the Master in Integrated Management Systems (MIMS) of the ESTG-IPG which undergone a formal assessment and accreditation process by an External Assessment Team of the A3ES, including foreign experts, who visited the HEI in order to produce a report supporting the resolutions of the assessment and accreditation process, ensuring the assessment of the study programmes quality.

3 THE MASTER IN INTEGRATED MANAGEMENT SYSTEMS

A brief overview of the Polytechnic Institute of Guarda allows concluding that it is an institution of higher education oriented to students, formation, research and investigation activities, services to the community and cultural, scientific and technical exchange. The Decree-Law 303/80, 16th August [20], founded it in 1980, but its statutes were recognised only in 1985. Thus, with the publication of the Government Decree 46/85, 22th November [21], the Technology and Management Higher School (ESTG-IPG) opened its doors in 1986.

Throughout its existence, ESTG-IPG developed its education and research activities through numerous courses of 1st and 2nd cycle, as exemplified by the MIMS approved by the Order 10490, 19th August [22]. The globalization and the increase of the business competitiveness have raised the need for organizations to select qualified technicians with expertise in different but complementary

areas, particularly in terms of Environment, Quality, Occupational Safety and Health, and Social Responsibility.

In this sense, the MIMS aims to train senior staff in integrated management systems, such as: Environment, Quality, Auditing, Occupational Safety and Health, Ergonomy, Information, Risks and Social Responsibility and giving them the knowledge and skills, techniques and scientific information, necessary for develop the professional activity in these areas, and strengthen the capacity of analysis, planning, implementation and management control, individually or integrated, these systems, both mandatory (legally) as a volunteer.

The cycle of studies leading to Master's degree includes: first year - school part consisting of an organized group of curriculum, giving a specialization diploma with a total of 60 credits (Table 4); and second year - preparation of an original Scientific Applied Project or Professional Training report specially made for this purpose (Table 5), conferring the two years the Degree of Master with a total of 120 credits.

TABLE 4. Study plan in the 1st year of the MIMS

1 ST Year / 1 ST Semester		1 ST Year / 2 ND Semester	
Curricular Units	ECTS	Curricular Units	ECTS
Research Methodologies	3	Audit of Management Systems	6
Data Analysis	6	Ergonomy	6
Quality Management	7	Social Responsibility Management	6
Occupational Safety and Health Management	7	Management and Security of Information	6
Environmental Management	7	Prevention and Risk Management	6
Total	30	Total	30

Source: Adaptation of [22]

TABLE 5. Study plan in the 2nd year of the MIMS

2 ND Year / 1 ST Semester		2 ND Year / 2 ND Semester	
Curricular Units	ECTS	Curricular Units	ECTS
Applied Project / Professional Training	30	Applied Project / Professional Training	30
Total	30	Total	30

Source: Adaptation of [22]

With this Master's degree, it is expected that the student [23]:

- Use tools, concepts, methodologies and techniques of environment, quality, occupational safety and health, and social responsibility, in support of current business management systems;
- Strengthen the capacity of analysis, planning, implementation and management control systems of environment, quality, occupational safety and health, and social responsibility;
- Integrate the different systems of management, specifically of environment, quality, occupational safety and health, and social responsibility, with the prevention and management of risks in order to take advantage of synergies;
- Perform audits on an individual basis or integrated management systems;
- Know the rules, as well as, recent regulatory developments and trends in the implementation of environment, quality, occupational safety and health, and social responsibility;
- Gain the expertise required to perform duties in the area of integrated management systems.

A Management System to be effective must: provide an organized approach, be based on business needs, be based on how the entity works, be clearly defined and be helpful to all staff, and help entity to improve. Following this, integration benefits upgraded business focus, reduced duplication and bureaucracy, and more effective/efficient audits. However, the level of integration depends on complexity of current management systems and the entity motivation.

Thus, this paper evaluate the impact of main principles of the assessment and accreditation process: specificity of the Technology and Management Higher School of the Polytechnic Institute of Guarda and the type of teaching/learning; all stakeholders are asked to participate and their contribution is taken on board; and self-evaluation is a key element in the process.

Firstly, the polytechnic teaching, in general, and the ESTG-IPG education, in particular, presents some potentialities, as: the innovative and dynamic capacity relatively to the traditional structures; the flexibility and adaptation capacity to the social-economic context [24]; the engagement with productive and social organizations on the area where it is located; the strategy of diversification of the professed study programmes; and the rehearsal of pedagogic methods that motivate the creativity, the initiative, the risk and the collaboration inter-specialties [25]. Effectively, the ESTG-IPG by offering this new Master's degree will [23]:

- Adapting and diversifying training supply - the differentiation strategy of IPG and the ESTG is essential to the sustainability of the institution, thus it has to adapt the training offers to the needs of the student market and grasp the opportunities of development and differentiation that arise;
- Development of projects aimed to address regional needs - the region Euro-border of the Guarda, like all regions of the interior of the country, has problems of desertification business, so that the IPG and the ESTG promoting, initially, the local and regional development, and, at a later stage, the national and international development;
- Attracting potential employers - through partnerships and protocols established under this cycle of studies, increases the attractiveness of the skills acquired by students who attend and attractiveness to other employers to collaborate with the institution;
- Specialize offers to geographical needs - although if you bet on differentiation at the national level, this course of study aims to fill specific needs of the region where the IPG and the ESTG, are inserted;
- Communicating student relationship and proximity - the IPG and the ESTG, as it is located in an interior region of the country, far from large urban centers, and for being an institution Polytechnic focuses on close relationships with students, based on trust and recognition of skills;
- Innovation in teaching methods - through partnerships, national and international, and new technologies (as exemplified by the e-learning platform), directs the institution to curricular activities based on creativity and innovation;
- Maintain and improve facilities and equipment - the continuing inflow of students into the IPG as well as ESTG passes through differentiation and quality of acquired knowledge and skills, as well as by facilities and updated facilities and high technology.

Secondly, the participation and the contribution of all stakeholders are taken on board. For example, the Master's degree had a partnership with the Bureau Veritas - Registre International de Classification de Navires et D'Aeronefs – in the academic year of 2011/2012, that allowed all students approved on the curricular unit “Audit of Management Systems” and participated in all activities of this curricular unit was awarded a certificate of “*Internal Auditor - Quality Management System*”. In the academic year of 2012/2013 this partnership has been changed to the SGS - *Société Générale de Surveillance, SA*, with the same objective. Also the enterprises and other entities where the students made their Applied Project or Professional Training are important stakeholders, particularly in this last case who aims to provide students with skills in the field objective of the MIMS and strengthen the competitiveness of a business organization or other institution, either public or private. It is intended that students develop applied research in the area of Integrated Management Systems, with application to concrete situations, case studies, development of specific activities and problem solving within their professional situations.

Thirdly, the self-evaluation is a key element in the process. For this, it is necessary to analyse the study cycles offered by other HEI on the European area with similar duration and structure to the MIMS. For example: Máster Universitario en Sistemas Integrados de Gestión de la Prevención de Riesgos Laborales, la Calidad, el Medio Ambiente y la Responsabilidad Social Corporativa - Universidad Internacional de la Rioja (Spain); Máster en Sistemas Integrados de Gestión - Universidad de Huelva (Spain). These two examples, at the level of curricular structure, objectives, skills and also the work and effort required students to the Master's degree, fit and match the same level of skills of the Master in Integrated Management Systems of ESTG-IPG. Also, in the MSs

Integrated Management Systems - University of the West of Scotland (United Kingdom), the Master's degree lasts for 33 months and a curriculum structure with common modules of the MIMS [23].

In conclusion, based on the facts and fundamentals prior, the A3ES believed the Master in Integrated Management Systems for a period of five year (maximum period) beginning on July 4, 2011.

4 CONCLUSIONS

The first result of this research shows that the Master in Integrated Management Systems is designed to train senior staff in integrated management systems, such as: Environment, Quality, Auditing, Occupational Safety and Health, Ergonomics, Information, Risks and Social Responsibility giving them the knowledge and skills, techniques and scientific information, necessary for professional activity in these areas.

The second result of this research demonstrates that the A3es have produced a positive report of the assessment and accreditation process which has contributed to the highly skilled training that ESTG-IPG aspires by helping students to differentiate them from the market and be recognized for its contribution to regional development by economic and social promotion, as well as, the competence in the training it offers.

The third result of this research, and beyond the quality assessment, shows that the aim of the accreditation process includes continuous improvement of the quality of professional education and training to respond to evolving community need and professional practice. In Portugal, the quality of the assessment and accreditation procedures have been designed in such a way that they are appropriate to the aims and objectives of assessment, as well as, the contributions of all interested parties are openly asked for and taken into consideration in the decisions to be taken. Indeed, the A3es ask for the collaboration of any institution, public or private, national, foreign or international, within the scope of assessment and accreditation procedure [26]. At the end, all the process is hard, but the final decision with five years of accreditation of the Master in Integrated Management Systems allows to recognize all the work that has been developed in the ESTG-IPG.

The fourth result of this research proves that the MIMS meets what is defined on the mission of the HEI, which is *"to train highly skilled professionals with an entrepreneurial spirit and solid humanist bases, and contribute to the cultural, social and economic development of the region and the country through quality service training, supported by academic programmes with an appropriate educational model based on competence"* [23].

And the last result demonstrates that, indeed, the future of the MIMS is to foster communities of practice in which the full, reliable and relevant participation of all the stakeholders (students, professors, A3ES, organizations, Government, European Union, society and global community) is a fundamental value to develop the society, in general, and life of each student, in particular. The emphasis on the continuous improvement process will help to build stronger, more cooperative and more prepared organizations, society and global community to face crises and failures.

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REFERENCES

- [1] David, F. & Abreu, R. (2007). The Bologna Process: Implementation and Developments in Portugal. *Social Responsibility Journal*, 3 (2), 59-67.
- [2] Dittrich, K, Frederiks, M. & Luwel, M. (2004). The Implementation of 'Bologna' in Flandres and the Netherlands. *European Journal of Education*, 39 (3), 299-316.
- [3] Caseiro, T.A. Conceição, P.; Durão, D.F.G. & Heitor, M.V. (1996). The Development of Higher Engineering Education in Portugal and the Monitoring of Admissions: A Case Study. *European Journal of Engineering Education*, 21 (4), 435-445.

- [4] Kettunen, J. & Kantola, M. (2006). The implementation of the Bologna Process. *Tertiary Education and Management*, 12 (3), 257-267.
- [5] Ministério da Ciência, Inovação e Ensino Superior (MCIES, 2005a). Decreto-Lei nº 42/2005 - aprova os princípios reguladores dos instrumentos para a criação do espaço europeu de ensino superior. *Diário da República*, 37, I Série-A, 22 de Fevereiro, 1494-1499.
- [6] Assembleia da República (AR, 2005). Lei nº 49/2005, segunda alteração à Lei de Bases do Sistema Educativo. *Diário da República*, 166, I Série-A, 30 de Agosto, 2122-5138.
- [7] Cabrito, B.G. (2005). *El proceso de Bolonha: desarrollo de las poblaciones o la respuesta a los imperativos económicos*. Oviedo: XIV Jornadas de la Asociación de Economía de la Educación (Spain).
- [8] Ministério da Ciência, Inovação e Ensino Superior (MCIES, 2005b). *Processo de Bolonha*. Lisboa: MCIES.
- [9] Neave, G. (2002). Anything goes: Or, how the accommodation of Europe's Universities to European integration integrates an inspiring number of contradictions. *Tertiary Education and Management*, 8 (3), 181-197.
- [10] Marçal-Grilo, E. (2003). European Higher Education Society. *Tertiary Education and Management*, 9 (3), 3-11.
- [11] Ministério da Ciência, Tecnologia e Ensino Superior (MCTES, 2007). Decreto-Lei nº 369/2007 - instituiu a Agência de Avaliação e Acreditação do Ensino Superior e aprovou os seus Estatutos. *Diário da República*, 212, I Série, 5 de Novembro, 8032-8040.
- [12] Assembleia da República (AR, 2007a). Lei nº 38/2007 - aprova o regime jurídico da avaliação do ensino superior. *Diário da República*, 157, I Série, 16 de Agosto, 5310-5313.
- [13] Santos, S.M. (2011). *Análise Comparativa dos Processos Europeus para a Avaliação e Certificação de Sistemas Internos de Garantia da Qualidade*. Lisboa: Agência de Avaliação e Acreditação do Ensino Superior.
- [14] Ministério da Ciência, Tecnologia e Ensino Superior (MCTES, 2006). Decreto-Lei nº 74/2006 - aprova o regime jurídico dos graus e diplomas do ensino superior. *Diário da República*, 60, I Série-A, 24 de Março, 2242-2257.
- [15] Ministério da Ciência, Tecnologia e Ensino Superior (MCTES, 2008). Decreto-Lei nº 107/2008 - altera o Decreto-Lei nº 74/2006, de 24 de março, relativo ao regime jurídico dos graus e diplomas do ensino superior. *Diário da República*, 121, I Série, 25 de Junho, 3835-3853.
- [16] Ministério da Ciência, Tecnologia e Ensino Superior (MCTES, 2009). Decreto-Lei nº 230/2009 - altera o Decreto-Lei nº 74/2006, de 24 de março, e Decreto-Lei nº 107/2008, de 25 de Junho, relativo ao regime jurídico dos graus e diplomas do ensino superior. *Diário da República*, 178, I Série, 14 de Setembro, 6310-6312.
- [17] Ministério da Educação e Ciência (MEC, 2013). Decreto-Lei nº 115/2013 - altera o Decreto-Lei nº 74/2006, de 24 de março, o Decreto-Lei nº 107/2008, de 25 de Junho, e o Decreto-Lei nº 230/2009, de 14 de Setembro, relativo ao regime jurídico dos graus e diplomas do ensino superior. *Diário da República*, 151, I Série, 7 de Agosto, 4749-4772.
- [18] Agência de Avaliação e Acreditação do Ensino Superior (A3ES, 2013). *Manual da Qualidade*. Lisboa: A3ES.
- [19] Gatewood, R. & Carroll, A. (1991). Assessment of Ethical Performance of Organization Members: A Conceptual Framework. *Academy of Management Review*, 16 (4), 667-690
- [20] Ministério da Educação e Ciência (MEC, 1980). Decreto-Lei nº 303/80 - cria os Institutos Politécnicos da Guarda, Leiria, Portalegre e Viana do Castelo. *Diário da República*, 188, I Série, 16 de Agosto, 2216.
- [21] Ministério da Educação (ME, 1985). Decreto do Governo nº 46/85 - adopta medidas relativas à expansão do ensino superior politécnico, nomeadamente nas suas vertentes de tecnologia e gestão. *Diário da República*, 269, I Série, 22 de Novembro, 3890-3891.

- [22] Instituto Politécnico da Guarda (IPG, 2011). Despacho nº 10490, aprova a estrutura curricular e o plano de estudos do ciclo de estudos conducentes ao grau de mestre em Sistemas Integrados de Gestão (ambiente, qualidade, segurança e responsabilidade social). *Diário da República*, 159, II Série, 19 de Agosto, 34337-34338.
- [23] Instituto Politécnico da Guarda (IPG, 2010). NCE/10/01876 - Apresentação do pedido - Novo ciclo de estudos. Guarda: IPG.
- [24] Abreu, R.M., David, M.F., Silveira, M.C. & Marques, P. (2003). Contributo para a Avaliação, Revisão e Consolidação da Legislação do Ensino Superior. In: Amaral, A. (ed). *Avaliação, Revisão e Consolidação da Legislação do Ensino Superior*. Matosinhos: Cipes, 46-50.
- [25] David, F. & Abreu, R. (2006). *Proceso de Boloña: el nuevo paradigma de la enseñanza superior*. Logroño: XVII Jornadas Hispano-Lusas de Gestión Científica (Spain).
- [26] Agência de Avaliação e Acreditação do Ensino Superior (A3ES, 2009). *Regulation no. 504/2009 - Regimen for the assessment and accreditation procedures of higher education institutions and their study programmes*. Lisboa: A3ES.