UNIVERSITY OF THESSALY

SELF – EVALUATION REPORT

(SECOND DRAFT)

VOLOS – MAY 2004

A note from the Rectorate of the University of Thessaly

The Senate of the University of Thessaly decided to participate in the Institutional Evaluation Programme of the European University Association for the academic year 2003-2004. The long-term objectives of this voluntary Program are to strengthen the autonomy of the University and to support needed change. While quality of teaching and learning or research will not be evaluated for accountability purposes, we expect that this evaluation will contribute to the development and improvement of mechanisms in our University's strategic and quality management.

After the approval by EUA of the University's application for participation in the program, the Senate assigned a self-evaluation steering group consisting of members of the academic staff of the University. Each of these members was responsible to coordinate the selection of information from a number of administrative and academic units. The self-evaluation steering group was assisted by task forces led by members of the staff of the University. Members of the steering group and the staff prepared this draft of the self-evaluation report, as well as the documentation and the analysis provided in the appendices.

The self-evaluation is the first step in the evaluation process and through the self-evaluation report we hope that the evaluation team will get a good description and analysis of our University. The ultimate purpose of the self-evaluation is to give ownership to all members of the academic community of the improvements introduced. Independent advice from the evaluators will enhance the positive effects of the self-evaluation. In addition, the evaluation team will validate the content of the self-evaluation report, look deeper into our Institution's internal quality management, give recommendations on areas that could be further developed, and provide an opportunity for dialogue between evaluators and the University in order to strengthen the self-knowledge which will be developed during the evaluation process.

The evaluation team made their first visit in mid March 2004, during which they tested their understanding of the University, its mission, ethos and context, while the University community became more familiar with the process and focus of the Evaluation Program. As a result, the first draft of the self-evaluation report was modified to become more complete and accurate. During the main visit in the end of May 2004, the evaluators will validate the accuracy of the self-evaluation report and any special additional reports. Based on their findings and on their knowledge of other universities in other countries, the evaluators will establish a diagnosis in order to advise the University. The institutional evaluation will result in a final report that will describe the findings and draw conclusions of the evaluation team regarding the University's capacity to improve its performance, and the internal processes and mechanisms of quality assurance that monitor its performance.

Key terms such as strategic management, quality assurance or even organization hold a variety of meanings in universities. We are convinced that the complex and sometimes turbulent higher education landscape requires universities to act as coherent and cohesive units in order to uphold academic norms and values of excellence. While evaluation procedures in various forms are present in the University of Thessaly, this is the first time that a formal self-evaluation will be implemented. We expect, therefore, that this Program will help in defining and implementing efficient evaluation processes that fit better to the character and the specific conditions of the University of Thessaly, in establishing efficient mechanisms of change, and in developing a Quality culture in our academic community.

Volos – 21th May 2004

Professor Constantinos Bagiatis – Rector
Professor Constantinos Gourgoulianis – Vice Rector Financing
Professor Napoleon Mitsis – Vice Rector Academic Affairs

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FORWARD

The present Self-Evaluation Report for the University of Thessaly was prepared in the context of the Institutional Evaluation Programme of the European University Association (EUA) for the academic year 2003-2004. Following the guidelines given by EUA for the self-evaluation, we have tried to present a comprehensive statement of our University's view of quality management and strategic planning, and to analyse the strengths and weakness of our University in a frank and honest manner. During the period of preparation of the first draft of this report, a few meetings were organized (e.g. by students on 4 December 2003, and faculty on 28 January 2004) to discuss the objectives of the evaluation program, to obtain the views of faculty, students, and support staff, and to formulate a consensus for a plan of action of the University community in supporting the present evaluation. While there were positive elements in these discussions there were also difficulties encountered in understanding the self-evaluation process.

The evaluation team made their first visit in mid March 2004, during which they tested their understanding of the University, its mission, ethos and context, while the University community became more familiar with the process and focus of the Evaluation Program. As a result of this visit, the first draft of the self-evaluation report has been modified accordingly. Data were completed as much as possible and new material was added, as requested by the EUA evaluators or made available to the steering committee by the administrative and academic units. During the main visit in the end of May 2004, the evaluators will validate the accuracy of the self-evaluation report and any special additional reports. Based on their findings and on their knowledge of other universities in other countries, the evaluators will establish a diagnosis in order to advise the University. The institutional evaluation will result in a final report that will describe the findings and draw conclusions of the evaluation team regarding the University's capacity to improve its performance, and the internal processes and mechanisms of quality assurance that monitor its performance.

It is hoped that this self-evaluation report will indeed provide a framework for the assessment of our University by the evaluation team and will result to a specific action plan for improving its performance. While evaluation procedures in various forms are present in the University of Thessaly, this is the first time that a self-evaluation will be implemented in a formal manner. It is expected, therefore, that the EUA Institutional Evaluation Programme will help in defining and implementing efficient evaluation procedures that fit better to the overall character and the particular conditions of our Institution, in establishing efficient mechanisms of needed changes, and in developing a sound Quality culture in our academic community. We would gladly provide the evaluators with whatever additional information will be required to accomplish their evaluation task.

Submitting this report to the Rectorate and the Senate who assigned us to this rather difficult but very interesting task, we would like to express our sincere thanks to all the people who contributed to the collection and analysis of an enormous amount of data. In particular, we would like to thank the Rector for his continuous interest, the Vice Rectors for their support, the Chairmen of the academic Departments for many useful comments, the Academic Secretaries for their positive response to our numerous requests, the Directors of the Administrative and Technical services for timely information, the Secretary of the Research Board for providing a global picture of research, and the Director of the University Library for his clear description of the mission and functions of the Library system. Mrs M. Karnava of the School of Agriculture helped to compile the text for the Region of Thessaly. Ms Z. Zoupi, Mrs E. Tsironi and Mr N. Xolevas of Mechanical and Industrial Engineering and Graduate students D. Fidaros and C. Dritselis of the coordinator assisted in the compilation of this report and to overcome the technical difficulties.

While our weakness is still the understaffing of the academic units and services, the positive and rather inquisitive response of personnel and students alike, is one of the strengths of our University that has encouraged us in completing this tedious and far-reaching task.

Volos – 18th May 2004

The Self-Evaluation Steering Group
Vice Rector Napoleon Mitsis – Dean Stavros Perentidis, School of Human Sciences
Prof. Nicholas Vlachos, School of Engineering, Co-ordinator & EUA Liaison
Prof. Paschalis Molyvdas, School of Medicine - Prof. Constantine Kittas, School of Agriculture
Assist. Prof. Marios Goudas, Department of Physical Education & Sport Sciences

CHAPTER 1. INTRODUCTION

1.1 Reasons for Self-Evaluation of the University

The long-term objective of the EUA Institutional Evaluation Programme is to strengthen autonomy and to support change in universities. In a special approach it takes account of the specific context of each university, its needs, mission and culture. EUA has been working with UTH to set the framework for this evaluation by selecting the issues, faculties, activities, and categories of staff deserving special attention. Therefore, this Program seeks to contribute to the development and improvement of UTH strategic and quality management rather than to pass judgement for accountability purposes. It does not aim at judging the quality of teaching and learning or that of research but to reinforce institutional development by disseminating examples of good practices in internal quality management and strategic planning.

The evaluation will be carried out in three steps: a) the Self-Evaluation process undertaken by the staff of UTH, the findings of which are summarised in this Report with the necessary Appendices, b) the External Evaluation carried out by EUA evaluators, aiming to enhance the positive effects of the UTH self-evaluation, and c) the Evaluation Report prepared by the evaluators with the purpose to serve as a record of the present state and a foundation of future developments and improvements of the University. The Final Report will detail the evaluation team findings and conclusions regarding UTH's capacity to improve its performance, and the internal processes and mechanisms of quality assurance that monitor its current performance. The evaluation team will note good practices, point out difficult issues and recommend practical improvements.

The self-evaluation is the first step in the process and serves three major purposes: a) to present a succinct but comprehensive statement of UTH view of quality management and strategic planning, b) to analyze the strengths and weaknesses of UTH and to propose a specific action plan, and c) to provide a framework against which UTH will be assessed by the evaluation teams. The self-evaluation process is a collective institutional reflection and an opportunity for quality enhancement of any aspect that is part of the self-evaluation process. The self-evaluation report provides information to the evaluation team, with emphasis on UTH's strategic and quality management activities. The goal is to confirm and enhance the University's capacity for improvement. The Program wants to help the University to achieve that goal. While a total evaluation of all activities of the institution is not necessary, results of any other evaluations of UTH activities can be used.

The self-evaluation addressed four strategic questions: What is UTH trying to do? How is it trying to do it? How does it know it works? How does UTH change in order to improve? The self-evaluation started three (3) months ago and resulted in the present report, which is hoped to convey essential information about UTH. More importantly, it has provided the opportunity for a critical reflection of how UTH manages itself and handles quality as a central value in its strategic decision-making. This Self-Evaluation Report tries to assess strengths and weaknesses in the context of constraints, opportunities and threats and to show the relation of the various elements of strategic planning and quality management. The analysis takes into account the changes of the recent past and those anticipated in the future.

1.2 The Self-Evaluation Team and the Task Forces

The present self-evaluation report was prepared in the context of the EUA Institutional Evaluation Programme for the academic year 2003-2004. After the approval by EUA of the UTH's application for participation in the programme, the Senate of the University assigned a

self-evaluation steering group consisting of members of the academic personnel of the University. Professor of Education and Vice-Rector for Academic Affairs Napoleon Mitsis chaired the steering group. Professor of Mechanical Engineering Nicholas Vlachos, served as coordinator and liaison person with the EUA. The other members of the steering group were Professor of Agriculture Constantine Kittas, Professor of Medicine Paschalis Molyvdas, Professor of History Stavros Perentidis, and Assistant Professor of Sports and Physical Education Marios Goudas. Each of these members was responsible to coordinate the collection of data from their corresponding Schools.

The steering group was selected to represent a broad view of UTH rather than the partial view of its management. The group was fairly small to ensure that it is efficient and its members are in a good position to judge strengths and weaknesses. The responsibilities of the coordinator were to plan and coordinate the work of the self-evaluation group (e.g. tailoring the needs to the national context and the particular subject area, gathering and analysing the data, and coordinating the work of the task forces), to provide opportunities for a broad discussion of the self-evaluation within the University and promote a broad identification with the report, and to act as a contact person with the evaluation group and the EUA Secretariat.

The leadership of the Institution clarified the responsibility of the steering group towards staff members who are not on the team, i.e. the steering group did not work in isolation but sought, through institution-wide discussions, to present as broad a view as possible of UTH. It also supported the process by explaining its worth and allaying fears. The self-evaluation resulted in this report submitted to the evaluation team by the leadership of UTH. This does not imply that the leadership, or all actors in the Institution, agrees with all statements in the self-evaluation report. It was essential to the success of the self-evaluation that information be circulated widely in the University about the procedure, goals and benefits of the evaluation.

The group was assisted by task forces led by members of the academic and administrative staff of the University. The chairmen of the academic Departments supplied data, directly or by associates. In particular, data was provided by: Prof. N. Mitsis of Primary Education, Prof. V. Anagnostopoulos with Assoc. Prof. D. Evagelou and Assist. Prof. A. Vidali of Pre-School Education, Prof. A. Karapetsas and Mrs V. Fragou of Special Education, Assoc. Prof. A. Mazarakis-Ainian of History-Archaeology & Social Anthropology, Prof. G. Petrakos and Mr I. Pappas of Planning & Regional Development, Prof. C. Papadimitriou and Mrs E. Tsironi of Mechanical & Industrial Engineering, Prof. A. Liakopoulos and Assist. Prof. E. Mistakidis of Civil Engineering, Prof. P. Lazaridis and Assoc. Prof. F. Oreopoulos of Architecture, Prof. E. Houstis with Lecturer P. Bozanis and Mrs. A. Grantza of Computer & Communications Engineering, Prof. N. Stathakis and P. Molyvdas of Medicine, Assoc. Prof. Z. Mamouris and Mrs D. Kandylari of Biochemistry-Biotechnology, Assist. Prof. G. Fthenakis of Veterinary Science, Prof. M. Sakellariou-Makrantonaki of Crop Production & Rural Environment, Prof. C. Neofytou of Animal Production & Aquatic Environment, Prof. I. Theodorakis of Physical Education & Sports Science, Prof. Sp. Vliamos and Assoc. Prof. M. Zouboulakis of Economics. Prof. N. Dalezios and Assoc. Prof. S. Bonanou provided data for the Elective Studies Programs. The Administration also supplied data as follows: Director of Personnel Mr C. Costopoulos and his associates Mr G. Kafetzopoulos and Mrs E. Balabani, Director of Finance Mr A. Papadopoulos and his associate Mr G. Katsaros, Director of Sudents Affairs Mr P. Alexandropoulos, Director of Publications Mr A. Karatzas, Director of the University Library Dr I. Clapsopoulos, Secretary of the Research Committee Mrs. A. Petrakou and her associates Mr A. Moraitopoulos and Mrs D. Volioti, Director of Technical Services Mr V. Spanos and his associate Mrs Th. Kyrtsaki. Data for the International Relations Office & European Educational Programs were provided by Director Mrs E. Kourti and her associate Mrs A. Athanasiou and Mrs P. Dalli.

CHAPTER 2. THE NATIONAL AND INSTITUTIONAL CONTEXT

2.1 The Higher Education System in Greece

According to the Greek Constitution (Article 16 – see ***Appendix I***), higher education is offered exclusively by the State and, hence, it is prohibited for higher education services to be offered on a private basis. All higher education institutions in Greece are autonomous, subjected to State supervision.

After the educational reforms in 2001, the Greek higher education system consists of two sectors: The University sector, with twenty two (22) Universities (including the Higher School of Fine Arts and the Hellenic Open University), and the Technological sector, with fifteen (15) Technological Educational Institutions (TEI) and the Higher School of Pedagogical Technological Education. The institutions of the technological sector are considered as equivalent to the Fachhochschuelen in Germany and the Polytechnics in Britain. Three of the above Universities and one of the TEIs have been founded during the last three years in the context of the regional development policy followed in higher education by the Greek Government. According to this policy, each Region of the Greek Territory should in general have one University and one TEI with complementary functions at the regional level.

There is significant variety with regards to the features of the Greek Universities. There are multi-disciplinary as well as unidisciplinary or specialized Universities. There are Universities located at one campus, but there are also multi-campus Universities. There are Universities with large numbers of active students (e.g. Aristotle University of Thessaloniki with more than 30.000 active students), and small Universities (e.g. Harokopion University and Higher School of Fine Arts in Athens with 2500 active students each). The technological sector is more homogeneous than the university one.

With the population in Greece being 10.940.000 habitants, the density of Universities (excluding the Hellenic Open University) is about 1,9 per one million habitants and the respective density of the overall higher education institutions is about 3,4. These figures are still somehow lower than the current EU average. The total number of active students in Greece is estimated to be 360.000 (200.000 in Universities and 160.000 in TEIs). The number of students in Greece has almost doubled since 1996, as a result of a policy that combined an increase of the number of new entrants in higher education every academic year since 2001, the establishment of new higher education institutions (mostly on a regional basis) and new Faculties in the already existing institutions. As a result, Greece has now one of the highest participation ratios in higher education throughout Europe. Indeed, the percentage of young people in the age 18-21 years registered in higher education institutions in Greece now exceeds 58%. For further details the reader is referred to ***Appendix II*** and for the regulations of universities in Greece to ***Appendix III.***

2.2 The University of Thessaly

2.2.1 Brief historical overview

The University of Thessaly was founded in 1984 in the city of Volos located in the Region of Thessaly (see ***Appendix IV-VI***) in east-central Greece, 300 km from Athens and 200km from Thessaloniki. It should be noted that prior to the foundation of UTH, there were meetings and conferences, organized locally with the aim to define the purpose, the character and the major academic disciplines of the new Universities in Greece (*Proceedings of Intl Scientific Symposium: "The role of the Universities in the transformation of regional cities – Volos, June 27-30, 1980*) and in particular the University of Thessaly *("The regional Universities and the case of the University of Thessaly", Proceedings Centre of Research & Studies of Volos, October 4-6, 1991, ISBN 960-7175-37-9*).

Initially the University of Thessaly included the Departments of Agriculture - Crop and Animal Production, Physical Education and Sport Science, Primary School Education, Nursery School Education, and Planning and Regional Development. In 1985 the School of Human Sciences (two Pedagogic and a General Department), and the School of Production Sciences (Departments of Agriculture - Crop and Animal Production, Planning & Rural Development, Mechanical & Industrial Engineering) were founded. Also, the Department of Medicine and the Department of Physical Education and Sport Science were founded as independent Departments.

Thus, the first phase of the organization and operation of the University of Thessaly involved eight (8) Departments, all of which were in Volos with the exception of the Department of Medicine, which was seated in Larissa. The two Pedagogic Departments and the Department of Agriculture admitted students in the academic year 1988-1989, the Department of Planning and Regional Development in 1989-1990, while the Departments of Medicine and of Mechanical and Industrial Engineering started their operation in 1990-1991. The General Department, which did not directly accept students, began offering educational services to the other Departments.

In 1994-1995 the Department of Civil Engineering started its operation in Volos, the Department of Veterinary Science in Karditsa, and the Department of Physical Education and Sport Science in Trikala. In 1998-1999, the Departments of Special Education and of History-Archaeology - Folklore started in Volos. In addition, three Elective Studies Programs started in 1998, including the Museum Pedagogic Education, and Management of Rural Environment and Natural Resources in Volos, and the Medical Biochemistry Program in Larissa. The Departments of Economics and Architecture were founded in Volos and started in 1999-2000. Finally, the Departments of Computer Engineering - Telecommunications and Networks, in Volos, and Biochemistry - Biotechnology, in Larissa, started in 2000-2001.

During academic year 2000-2001 the School of Technological Sciences was renamed to School of Engineering. In addition, the School of Agricultural Sciences was founded, which included the Department of Agriculture - Crop Production and Agricultural Environment and the Department of Agriculture - Animal Production and Marine Environment. In addition, the Department of History - Archaeology - Folklore was renamed to Department of History, Archaeology and Social Anthropology.

Courses of study are based on a four-year undergraduate curriculum for humanities, five-years for Agriculture and Engineering, and six-years for Medicine, leading to a Degree in the corresponding discipline. Graduate programs provide studies leading to advanced PhD and Master's degrees. More details of the history, structure, teaching and research activities of the University of Thessaly are provided in ***Appendix VII***.

2.2.2 Academic profile of the University

The University of Thessaly has primarily evolved with an emphasis to Humanities, Agriculture, Engineering and Medicine and this is naturally reflected in its academic profile. The recent introduction by the Ministry of Education of EU funded programs (EPEAEK) for the reform of undergraduate and especially graduate studies, has somehow helped to strengthen the academic profile of UTH. With these funds, the University established the following new Departments: Special Education, Computer Engineering - Telecommunications and Networks, Architecture, Biochemistry-Biotechnology, and Economics. The academic structure UTH as a whole and for each Department is given in ***Appendix VIII***. Briefly, the academic organization of UTH is as follows:

School of Humanities, (4) Departments in Volos: Primary School Education, Pre-School

Education, Special Education, History-Archaeology and Social Anthropology.

School of Engineering, (5) Departments in Volos: Planning and Regional Development, Mechanical and Industrial Engineering, Civil Engineering, Architecture, Computer Engineering, Telecommunications and Networks.

School of Health Sciences, including (3) Departments: Medicine (Larissa), Veterinary Science (Karditsa), Biochemistry and Biotechnology (Larissa).

School of Agricultural Sciences, (2) Departments (Volos): Agriculture-Crop Production and Agricultural Environment, Agriculture-Animal Production and Aquatic Environment.

Independent Departments: Physical Education and Sport Science (Trikala), Economic Studies (Volos)

Elective Studies Programs: Museum Pedagogic Education (Volos), Management of Rural Environment and Natural Resources (Volos), Medical Biochemistry (Larissa)

2.2.3 Organisational profile of the University

A proper balance between central administration and relatively autonomous functioning of the Departments is usually difficult to achieve. In addition, the University of Thessaly has a considerable dispersion of activities in four cities making central control more difficult than in many other Greek Universities. On the other hand, Departments would rather prefer more autonomy than direct monitoring or dependence on the central administration. However, a balance should be born in mind when considering the ability of the Institution to develop and implement a central policy regarding important academic matters, such as strategic planning, quality management, representation in the community etc. The administrative structure of UTH and useful data for the evolution of its activities are presented in ***Appendix VIII***.

The administration of the University of Thessaly was initially assigned to an *Administrative Committee*, appointed by the Presidential Decree 83 of 1984. Its mission was the founding and staffing of the University administration and management as well as the preparation of its academic functions until the election of the first Rectorate. The first Committee seated in Athens, but in September 1994 it was transferred to Volos, which is the administrative seat of the UTH. As is the case with all universities in Greece, UTH is a legal entity of public law with complete autonomy, supervised and funded by the State.

2.2.4 Concluding remarks

In conclusion, the University of Thessaly is a young university with an enthusiastic academic community supported by well-qualified personnel. In its 15-years history it has managed to develop very high teaching standards and promising research activities. Its major weakness is the dispersion of its academic units in a rather wide region that is still lacking in infrastructure (high-speed roads, trains, good bus service, etc.). This is imposing a burden on the administration, the technical services and finally the faculty and the students who cannot enjoy the everyday life of a large campus like those in other European countries or the USA.

However, the University recognizing its weaknesses has developed a good Intranet system, which together with the Internet has become an important means of rapid communication between administration, faculty, researchers and students. It is also developing carefully a decentralized system of administration. To this effect, the Senate recently enacted the positions of School Deans by organizing elections in its three Schools in Volos (Agriculture, Human Sciences and Engineering). It is expected that the newly elected Deans will assist the central administration and the Chairmen of the Departments to manage better their everyday activities.

CHAPTER 3. INSTITUTIONAL NORMS AND VALUES

3.1 Introduction

In this Chapter the focus is placed on the standards that the University of Thessaly has set for itself. Therefore, in the following paragraphs the norms and values will be described in an effort to explain what is the University trying to achieve.

3.2 Mission and Goals of the University

The mission of the University of Thessaly, like all universities in Greece and in many other countries, is to transmit critical knowledge through teaching, generate new knowledge via research, and provide expert know-how services to the wider society. According to Article 16 of the Greek Constitution, *Art* and *Science*, *Teaching* and *Research* in the Greek Universities are conducted freely and no secret research can be conducted in a university. The Greek University system is in the public domain and remains academic in character.

Because of the fast changes brought by new scientific and technological achievements, the organization of studies must be flexible, to allow for the introduction of new ideas. Following the international trends in education, unity of scientific disciplines was emphasized through the introduction of appropriate courses. Closely connected fields were grouped into Schools while departmentalization is such to avoid academic structural rigidity. Another aspect of the University's mission is to set an example of a highly qualified Institution and serve as a stimulus for improving the whole Greek higher education. To achieve this goal, academic standards both for students and for academic staff are kept high and no increase of student numbers is encouraged without a corresponding staff increase.

UTH originally concentrated on health, human and production sciences. Its main goal, therefore, was to educate young scientists in the above disciplines, to promote a research culture and provide expert advice to community and industry of the wider region. In order to respond to these goals, it established proper mechanisms and processes, with the help of international scientists who assisted in developing the University and in realizing its national and international role. In its 15-years history, these objectives were often adapted to new conditions arising from the fundamental role of *knowledge* and *technology* in promoting economic, social and cultural growth, and the contribution the University is expected to make in solving major regional, national and even international society problems.

Research in the University of Thessaly plays an important role because it creates an atmosphere of intellectual stimulation in which students and academic staff are motivated and remain at the frontiers of current achievement in their respective fields. In addition, research provides opportunities to obtain the necessary funds for acquiring research facilities and apparatus and allows for the interaction with (and contribution to) the local, regional, national and international scientific community and economy.

UTH is a regional University having an advantage because of its good geographic position in central Greece. Therefore, it aims to interact with its environs on scientific, cultural, social and economic issues, both on Institution-based (centralized) and School-based (decentralized) level. The Departments can have diverse but equally important impact on the Region. UTH is taking initiatives to increase and strengthen its activities and to enhance its functions, mechanisms and processes that will allow it to play a central role among the other Greek universities, and achieve international reputation. These goals must be adapted to the new prospects and the roles arising for universities worldwide. However, while the extent of adapting remains an open issue, special reference should be made to the concepts of the *knowledge-based society* and *lifelong education*, which are imposing new demands.

The main instruments for UTH to achieve its mission and major goals are the following: a) Establish effective strategic management and planning processes, b) balance collective participation and efficiency in decision-making, c) establish effective mechanisms of quality assessment, and d) create a *Quality Culture* within the academic community.

3.3 Local, Regional, National and International Interaction

The University of Thessaly is a fast growing University with about 5.500 undergraduate students, 1000 graduates and a staff of approximately 800, 40% of which are faculty members and 40% visiting teachers. UTH is having a good impact on the cultural and economic life of the four cities it operates (Volos, Larissa, Karditsa, Trikala) and their surroundings. The Region of Thessaly is undergoing a change from mainly agricultural activities to industrial production and mainly services. However it has some strategic advantages being located in central Greece, having a University and a TEI, and a long tradition in culture. The main characteristics of the Region of Thessaly, which constitute the environment of UTH and the relevant development prospects, are described in *Appendix V*.

The Region expects the University to play a coordinating role in scientific, technological, economic, social and cultural development. Therefore, the impact of the University on the Region has the following main directions: a) Improvement of the cultural and educational level of the population, and b) technological development and economic growth of the Region. The academic staff of the University is involved in national, European and international research activities and academic exchanges, making thus contributions and developing slowly its profile in the world of university education, research and contribution to society. It should be pointed out, however, that UTH must overcome the traditional academic attitude of simply bringing additional financial resource to the Region without necessarily participating in any other external business.

3.4 Balancing Teaching, Research and Services

Universities are involved in both *teaching* and *research* by their very nature, which distinguishes them from other kinds of educational or research institutions. While UTH will preserve and promote this fundamental principle, it must strike a balance in order to avoid the possibility of domination of research over teaching. In this respect, special attention should be given to scientific areas where external funding is good and produces a significant income for the personnel involved, which in turn gradually decreases their teaching activities. The importance given to *publications* when considering faculty promotions should not be underestimated, as this tendency often is reflected in the academic programs, where faculty research interests rather than real educational needs are considered. Favouring research is perhaps more evident in engineering, medicine and science, and less in the social sciences and humanities. The opposite threat is the possibility of depriving teaching from new ideas and discoveries, which often come via research, especially in scientific areas where research docs not lead to any additional income for researchers.

3.5 Academic Priorities and Didactic Approaches

The University of Thessaly originally gave priority to humanities, agriculture, medicine and engineering but in the last years has founded an economics program and interdisciplinary programs such as biotechnology, telecommunications etc. While there are no preferred areas of research as yet, it appears that 60% of funding comes from Engineering and another 25% from Agriculture. Most teaching is done via class lectures case studies, and problem-based learning is encouraged especially for your faculty. Some Departments also are giving weekly seminars attended by undergraduate and postgraduate students.

3.6 Degree of Centralisation and Decentralisation

The University recognizing its weaknesses because of its wide dispersal in four cities has developed a good Intranet system, which together with the Internet has become an important means of rapid communication between administration, faculty, researchers and students. It is also developing carefully a decentralized system of administration. To this effect, the Senate recently enacted the positions of School Deans by organizing elections in its three Schools in Volos (Agriculture, Human Sciences and Engineering). It is expected that the newly elected Deans will assist the central administration and the Chairmen of the Departments to manage better their everyday activities.

3.7 Relationship with Funding Agencies

The relationship of UTH with national and European funding agencies has been good and the number of research and development projects executed by faculty members is increasing. However, in recent years the funding rules by national and European agencies have changed drastically. On one hand, universities are usually required to join industrial partners in joint projects and, on the other, faculty members are no longer paid for the extra work they do in these research projects. The funds are mainly used to support graduate students and postdoctoral researchers. This adverse situation has deprived many faculty members from incentives and needed extra income.

Concerning the services to industry and to public or private bodies, the University of Thessaly should indeed participate with caution. It should not provide services that could be offered by outside professionals or engage in studies of low scientific or educational value. However, it should be stretched that industry has many needs in the area of high-tech testing, which can be provided by the existing laboratories of the University.

3.8 Relations with the National and Local Government and the Region

The relations of the University with the Ministry of Education is determined by the Constitution but is characterized by the state-supported Institution trying to operate with the autonomy. It is hoped that the new law concerning the administrative and financial autonomy of the Universities, which is currently under preparation, will make the above task easier.

Relations with the Region have been good and most of the Government-appointed General Secretaries of the Region of Thessaly have been supportive of its efforts for development. Faculty members serve as special advisors or take active role in shaping regional policies as members of various committees. University academic departments, especially the Departments of Planning & Regional Development and Mechanical & Industrial Engineering, and the School of Agriculture have contributed significantly in Regional initiatives and proposals for development.

The University can play a key role in the economic development of the Region primarily through: a) providing expert know-how to public organizations and private enterprises, b) assisting in developing the infrastructure for technology transfer to local industry, c) training unemployed personnel to meet industrial needs, d) providing the means for life-long education, and e) assisting in initiatives aiming at enhancing quality of life in the Region of Thessaly.

UTH has being also playing an important role in the cultural development of the Region. Apart from providing a stable scientific backing and expertise in many aspects of civilisation, the University has taken many initiatives in cultural development. Events often take place, including lectures, seminars and workshops on topics of general as well as specific local interest. UTH places special emphasis in helping identify, express and promote the cultural character of the wider Region in Central Greece. It is forming special ties with the cities of

Volos, Larissa, Karditsa and Trikala and has supported cultural groups of students.

Another aspect of University cultural policy is the recent development of extramural activities with appropriate instruction and training, through special programs open to any interested citizen. Thus, there have been courses in dance, sports, sailing, etc. There have also been efforts to collaborate with local TV and radio channels in presenting the various academic activities of UTH. Students have been particularly active in this respect.

The University is trying to raise money from possible donors and has established a Committee to propose measures to this effect. In a speech on the occasion of a donation of 300.000 Euros to the Orthopaedics Clinic of the Medical School, the Rector appealed for donors to come forward and support the University.

3.9 European and International Relations

3.9.1 Relations with Europe

The University of Thessaly is participating actively in educational programs of the European Union (Socrates, Tempus etc.) and has started sending students abroad or receiving students who wish to spend a semester in Thessaly. The Career Office in cooperation with the Office of International Relations is becoming active in this respect. In addition, the recently introduce ECTS system in many academic units is helping our students and those from abroad to identify and select courses of their own interest.

Many members of the academic staff from all the Departments of UTH are successfully competing for EU grants. Through joint European projects, opportunities often arise for faculty and graduate students to interact with their peers from other European countries, to pay short visits to universities and research institutes and to host similarly their colleagues from other countries. Finally, the University is a member of EUA and other of European organisations. The current initiative of UTH evaluation by EUA, the eighth in Greece, represents an excellent opportunity for the young University to interact closer with EUA, to become acquainted with established European university norms, and to get to be known to the wider European university community.

3.9.2 International Relations

The effective interaction with its international environment is one of the principal goals of the University of Thessaly. The internationalisation efforts of UTH are reflected in a number of activities, such as:

- UTH is a member of EUA and other European and international organisations.
- ICA – Inter-university Committee Agrarian
- There are many bilateral agreements with Universities in non-EC countries, such as Albania, Georgia, Armenia, Bulgaria, Romania, Hungary, etc.

International culture is another significant filed that the University can play a role. Given the fact that a number of collaborating faculty and international exchange students spend a good amount of time at UTH, the University is starting to have an international community that potentially can help the local society get a better understanding of other cultures. This may be very important, since internationalisation is presently a key cultural issue. This perspective has not yet adequately been explored, but there is good hope that it will become more and more significant in the future. All these efforts show that UTH is breaking the psychological barrier that has separated the City from the University in the past. The University is indeed more and more realising that it should not be isolated but it should take the risk of opening up to society.

CHAPTER 4. THE CONSTRAINTS FOR THE UNIVERSITY

4.1 Institutional Autonomy

4.1.1 Introduction

A major issue of concern is the control that the Ministry of Education imposes upon Universities in Greece. This is due both to the existing legislation and to the fact that the State is the main funding source for the Universities. The main restrictions arising from the current legislation are outlined in the following paragraphs.

4.1.2 Selection and appointment of staff

The balance between academic autonomy and State control, regarding the selection and appointment of academic staff is analysed in ***Appendix III***. Briefly, each Department sets its priorities and provides every year a planning for new positions for academic staff. The Rector's Council has the right to propose additionally a limited number of positions, which are not requested by the Departments. The propositions are sent to the Ministry of Education and the new positions are directly assigned to the Departments, which have full responsibility for the electoral process.

Almost similar processes are usually followed for the selection and appointment of technical and administrative staff, although the State often decides to transfer temporary to permanent staff positions. In the University of Thessaly, however, most of the temporary staff is recruited through a vigorous selection process and, thus, usually the permanent technical and administrative staff is of high standards.

4.1.3 Selection of students

According to the existing system of access to higher education in Greece, the Universities have no authority at all regarding the selection of their students. The entrance procedure is based on a mixed system of national examinations and priority of demands of the candidates, and is carried out centrally by the Ministry of Education. It is evident that this situation does not leave any degree of freedom to the Universities in order to develop specific policies concerning the composition of their students' body. It should be noticed, however, that the top Universities and Departments are high in the priority lists of students.

Greek universities have only full-time undergraduate and postgraduate students. In the last (5) years, new concepts such as Electives Studies Programmes and Lifelong (Continuing) Education have been proposed by the Ministry of Education. Three (3) Elective Studies Programs: Museum Pedagogic Education, Management of Rural Environment and Natural Resources, and Medical Biochemistry were created in UTH. However, all Elective Studies Programmes in Greece will be terminated by 2005.

Finally, the Ministry of Education using EU funds in the form of its Operational Programme for Education, Initial Vocational Training (EPEAEK) has approved a large number of reforms of existing Undergraduate and Postgraduate programmes and the creation of new postgraduate ones. The active participation and interaction of academic staff and students in developing and evaluating these programs has strengthen the relationship and has revived the dialogue between these two major groups of the academic community in Greece.

4.1.4 Teaching and Learning

As stated in ***Appendix III***, the establishment of the undergraduate and postgraduate curriculum is a responsibility of the Departments, although approval by the Senate and the Ministry of Education is needed for the latter. The creation of new undergraduate programs is

almost synonymous with the establishment of new Departments, although the law permits the functioning of undergraduate programs leading to degrees with the co-operation of academic staff from existing Departments in a University. The recent introduction of European Union funded undergraduate programs for students, who were not selected with the traditional entrance procedure (Elective Studies Programs), have created serious problems in some Greek Universities. The Senate of UTH has accepted in 1998 the establishment of this category of undergraduate programs but will definitely terminate them by 2005. Finally, it should be mentioned, there has been a EU funded action that aims at the creation of new Departments on a competitive basis between Universities.

Another major issue is related with the existing legal provision, according to which free textbooks are given to the students. This results in an excessive dependence of the overall teaching process on the corresponding textbook, which is further strengthened as students are not obliged to attend physically the didactic activities (with the exception of those with experimental, clinical or practice requirements).

4.1.5 Research activities

The management of research in the Greek university is done via the Research Board (or Committee) and its Secretariat. The Research Board follows laws and regulations that are much more flexible than those for the other financial activities of the University, resulting to a more efficient management for research.

The responsibility for the development of research policy belongs in theory to the General Assemblies of the Departments and to the Senate, but usually the principle of academic freedom of the staff is implemented. It should be pointed out, however, that the easiest external funding for applied over basic research creates a significant danger for the Universities worldwide. The financial management of research projects with external funding by the Research Committee produces additional resources for the University, which can be used in turn for financing specific educational, development and research activities.

4.1.6 Development of entrepreneurial activities

The national legislation allows the Greek Universities to develop entrepreneurial activities, both in the areas of research and services, by providing the legal framework for a financial management much more flexible than the one existing for the other current expenses. The UTH Industrial Liaison Office, working closely with industrial partners and public organizations, is helping to develop appropriate policies in this direction. The Industrial Liaison Office is aiming to facilitate information flow and contract procedures between outside parties that need specific University services (e.g. lab analyses, testing, software development etc.) and the appropriate University laboratories.

Flexible financial management can he carried out either the Research Committee or the Company for Management of University Property. The parallel existence of these two mechanisms gives the Greek universities the opportunity to develop entrepreneurial activities in co-operation with outside partners, which may belong to the public or the private sector.

In the area of *research* and *technology transfer*, the University of Thessaly has supported the establishment of (and has an expressed interest in) the Thessaly Technology Park, an organization founded more than five years ago in order to stimulate technology transfer and spin-off entrepreneurial activities

4.1.7 Finance

Details concerning financing of the Greek universities and the relative financial management mechanisms are also presented in ***Appendix III***. It can be seen that these

mechanisms limit considerably the financial flexibility of the Universities. The problem of financial autonomy of the Universities in Greece is a crucial point in the discussions about higher education reforms. In fact, the Ministry of Education has prepared a new law concerning the financial and administrative autonomy of the Universities.

In addition to the State funds, the Universities can obtain extra funding for research activities and for supply of services via the framework law for the University Research Boards (or Research Committees). This framework, establishes a more flexible mechanism that allows the efficient and competitive management of university funds and encourages their extramural activities.

4.2 Regional and National Labour-Market Situation

4.2.1 Introduction

The local environment in which a University operates naturally influences its function. UTH is located in a region with a decline in industrial activities and unemployment problems which are reflected in the relationship with the local society. On the other hand Volos and the Region of Thessaly (see ***Appendix IV***), have many advantages, as it is in the middle of Greece, with substantial economic development, as well as proximity to sea and ski resorts. In the following paragraphs we are describing the main difficulties that the UTH is facing when trying to fulfil its mission, but also some very promising areas of possible collaboration and contribution to the development of the area.

4.2.2 Current labour market conditions

Thessaly and especially the area of Volos has been a major industrial centre since the middle of the 19th century. There are still a number of industrial enterprises, mainly in the areas of food processing, textiles, cement, and metal. In addition, there are a good number of service enterprises. During the last decades, several industrial units have shut down, leading lo a significant rise in local unemployment, which is currently estimated to exceed 15%. This fact has had a negative impact on the whole economic life of the area. Apart from industrial and service enterprises, the agricultural sector is very significant, although it is also going through difficult times. Finally, tourism represents another source of economic life, although Thessaly is rather difficult to be reached by European tourists.

Several new major public works are now in the process (the Olympic Stadium, the city by-pass road, the new harbour) expected to change significantly the City and its environs, in the years to come. Most local authorities and people expect the University to play a key role in helping the city define its new role with the dawn of the 21st century.

Regarding employment of university graduates, the fields that provide graduates with the option to work as free professionals (doctors, lawyers, and engineers) are in greater demand, although competition has become very stiff in these professions as well. Unemployment is mostly a problem of the young people (less than 30) and women. The most difficult situation is the long-term unemployment primarily of older people that have lost their jobs as a result of a company shut down.

Meanwhile, employers find that there is not very good diversification and in-depth student training. There is a well-spread belief that new academic programs are needed that would correspond better to the emerging production needs. On the other hand the University has to defend its academic structure and mission and to provide a well-founded curriculum. Finally, local characteristic, advantages and disadvantages, should be accounted for. All this rather emphasises again the need for long-term planning. To this end, UTH has established the Career Office with the aim to provide help to students and University graduates for job opportunities, both in the area and in more general context. It also aims in providing the

necessary information for graduate studies in Greece and abroad. Among others, a major objective of the Career Office is the development of necessary channels between the University and prospective employers, which will allow correct assessment of the trends of the job situation.

4.2.3 Interaction with the Region

The whole situation regarding the environment of University of Thessaly has been described in ***Appendix IV***, where a number of significant prospects seem to emerge, concerning the economic, social and cultural development in the Region of Thessaly. UTH has indeed all the right academic disciplines that may substantially help the economic development of the Region and has already contributed significantly to proposals for the development of the Region of central Greece. UTH has contributed to the development of the Technology Park of Thessaly (see ***Appendix V***) and has supported MIRTEC S.A., the national metals centre (see ***Appendix VI***). Most of government development funding to the region and substantial EU funds are handled by the Secretariat of the Region of Thessaly. The University receives substantial governmental funds for its development (there is currently a significant building construction) program.

The University is becoming a large employer in the Region as it provides permanent jobs or temporary work positions on research and development programs. A large number of these people do not come from Thessaly originally, a fact that helps enrich the local culture significantly. A large number of people in the areas of building construction and maintenance, as well as in several services (cafeterias, bookshop etc.) are also dependent on the University in getting jobs. The University graduates also look for a job in the area, even though they may not come from Thessaly originally. UTH is hoping that more of its graduates will become self-employed and create more jobs through entrepreneurial activities.

The University is having an impact on local investment as a whole, since significant spending accompanies its rapid development. It is hoped that the technology transfer and spin-off activities will attract investment in the area. In addition, the University plays to some extent a role in tourism. Long and short-term visitors to the University certainly benefit the local tourist economy. It is anticipated that with the completion of the University Library Centre (summer of 2004) a good number of international meetings will take place in Volos.

The presence of the University has substantially increased the demand for apartment renting. Thus in its 15-years history, an increase in apartment and house rentals has been observed. Also a significant number of entertainment places (bars, cafeterias, restaurants, etc.) have been meeting places student and university personnel. Another impact of the University and the University Hospital, which is located in the campus of Larissa, is on transportation where a number of buses have been commissioned to connect the University with the City.

In the area of communications, the University has installed a complete optical fiber networking. It is also in the process of setting up video conferencing facilities. Finally, the University library has acquired all necessary facilities for electronic access to information. All academic units currently have Internet access. Concluding, there are a number of enterprises that have sprung up in the area some of which are spin-off companies from the University.

4.3 Infrastructure of the University

The infrastructure of the University of Thessaly is described in ***Appendix VII*** and is presented in the form of Tables in ***Appendix VIII***. In relation to number of students and staff the University infrastructure is not the desired. The dispersion of facilities over a large

geographical area (four cities of Thessaly) instead of being concentrated on a single campus is one of the great problems for the administration and the technical support people. However, most buildings of the University of Thessaly are new and in good condition. The campuses have not been completed yet, although the rate of completion is high. The completion and full operation of the facilities depends mainly on the rates of financing by the State. Therefore, one of the main concerns of the University in its short-term planning has to be the efficient handling of this kind of problems.

4.4 Student-to-Staff Ratio

The small number and size of buildings, laboratories, libraries, etc. are only compensated by the fact that the number of student intake remains low in an effort to uphold quality of teaching and learning. The student/staff ratio on average is about 10 to 1, the highest being 18 to 1 for the Department of Planning & Regional Development and lowest 6.5 to 1 for the Department of Economics.

4.5 Student Aid

UTH has been providing subsidies for rentals to about 8% of its students. This is undertaken by the state from 2003 onwards. Almost 30% of UTH students have the right to free meals, while the rest have an opportunity for low-cost food at campus restaurants. Furthermore, students have the right to low cost access to the urban transportation media and they enjoy full medical care. Finally, it must be noted that the legislation provides for a number of student grants and loans for every Department and for each academic year, depending on the performance and the financial situation of the student's family. The above assistance to the students exists in context of free-of-tuition fees university studies in Greece. According to the legislation, provision for student fees exists only for postgraduate studies.

4.6 Personnel Policy

The responsibility for personnel and student belongs mainly to the Ministry of Education. Universities submit their proposals and the Ministry allocates the number of places directly to the Departments. The overall situation concerning personnel and students in UTH is given in ***Appendix VIII*** where the evolution of the relative numbers during the years is presented.

4.7 Institutional Planning and Development

When the Ministry of Education is considering a change of new student enrolments or the establishment of a new department or a new university, it usually tries to strike a balance among the several social, local or institutional pressures. Although this is discouraging, UTH has made some steps in establishing mechanisms of planning and evaluation. A *Committee for Academic Development and Strategic Planning* is operating and will submit its proposal to the Senate. The participation of UTH in the EUA evaluation program should be considered in this context.

CHAPTER 5. CURRENT ACTIVITIES OF THE UNIVERSITY

5.1 Introduction

This Chapter describes the ways the University of Thessaly carries out its activities (teaching, research, and other services) and its management which embody its mission and goals, taking into account the existing constraints.

5.2 Academic Activities

5.2.1 Academic units

All teaching, research and the supply of services in the University of Thessaly are carried out by the sixteen (16) Departments grouped in four Schools and three (3) independent Departments. A description of the Schools and the Departments is given in ***Appendices VII*** and ***VIII***. At the start of each academic year in September, each Department issues a Student Guide (available mainly in Greek) containing all necessary information about study programs, research, educational approaches, rules etc.

5.2.2 Postgraduate programs

Studies in organized postgraduate courses leading in advanced Diplomas of specialization were introduced with the Law 2083 in 1992. Before this, graduates of Greek Universities could only work on a doctoral research thesis leading to the PhD degree. This procedure usually lasted for at least three years and did not require attendance of specialised courses. However, most departments have gradually introduced postgraduate courses leading to a Master's degree. Some Departments have obtained funds by EU programs (EPEAEK) to establish their postgraduate programs. Some of these programs are interdepartmental or are running in collaboration with departments from other universities.

It should be noted here that the first *international postgraduate program* in Greece is organised by the Department of Regional Planning and Development. In addition, the first *web-based distance postgraduate course* is run by the Department of Physical Education and Sport. It should also be added here, that a new law concerning the overall structure, the regulations, along with a system of quality evaluation of the postgraduate studies in Greece is under preparation by the Ministry of Education.

5.2.3 Internal balance between teaching, research and supply of services

The balance between teaching, research and services varies among the Departments of the University depending mainly on their scientific nature. Although they correspond to a variety of scientific areas, there exist almost similar conditions in regard to the teaching load for their students. The mean number of weekly teaching load for every student ranges from 20 to 32 hours. Of course, the attendance is not obligatory with the exception of the laboratory, practice and clinical courses.

The weight given to teaching is rather similar to all Departments. Diversification can be observed in research and service activities. Technological Departments can certainly ensure outside funding much more easily than others like, for example, Humanities. Recently however there is a growing interest in Research in these fields. It is reasonable to suppose that the whole system is directed to a rather satisfactory balance among leaching, research and supply of services and this is due partly to the policy adopted by the University to allocate funds to research in areas that cannot secure easily outside funding.

5.2.4 Internal balance between central and decentralised activities

The degree of centralisation and decentralisation depends largely on the nature of the activities themselves. Thus the Departments enjoy complete freedom in deciding matters

concerning selection and promotion of teaching staff, course curriculum, distributing funds to different activities within the allocated funds, authorising expenditure up to certain level etc. On the other hand strategic matters concerning the University are decided at the centrally. The balance between these two poles is very delicate and depends on the particular issues.

5.2.5 Innovative development and quality improvement

Since 1995, a number of innovative projects were set up in UTH partially supported by EU funds. These projects aim mainly at the quality improvement of key activities associated with the overall teaching and research process: a) development of the Central University and School Libraries, b) effective networking of all UTH's activities, c) development of new postgraduate programs, and d) upgrading of the undergraduate programs with special emphasis on practice and scientific computing. Some of these projects have been already and have given the opportunity to enhance the University's infrastructure considerably.

The University participates actively in the Socrates Program, as well as in other European programs and exchange networks. These programs aim at the quality improvement of the undergraduate study programs of UTH, mainly through the active collaboration with similar Departments from other European countries and the implementation of ECTS (European Credit Transfer System). The establishment of joined curricula undergraduate and postgraduate programs will hopefully lead to quality improvement of teaching and learning.

5.3 Finance

The total budget of the university, excluding salaries, is given in ***Appendix VII*** and the income from research contracts in the Tables of ***Appendix VIII*** as well as the manner in which funds are allocated to its Departments. The inflexible and time-consuming processes that rule the Greek public sector regulate also the financial management of the University. The only exceptions to this are the financial management rules of the Research Committee and the Company for the University Property Management.

The allocation of financial resources to the faculties or to the activities of the University (i.e. University budget) is a very important process. UTH is trying to establish a systematic approach to the problem of financial management and allocation criteria, through the development of an appropriate algorithm. Resource allocation to the individual Departments is based on number of teaching staff, number of students and on whether they have clinical, laboratory or practice hours in their curriculum.

5.4 Management Activities

The management practices in the Universities in Greece are described in ***Appendix III***. In general the management practices and the respective roles of central-level administrators, offices and faculties is fairly balanced. Coordination among faculties takes place via the Department Chairmen who meet regularly to decide on such issues. The recently elected School Deans will now undertake this coordinating duty. The powers of the Rector, the Deans and of the Chairmen is defined by the framework Laws 1268/82 and 2083/92 with respect to the selection of academic and administrative staff, the selection of students, finance, academic activities (teaching and learning, research), development of entrepreneurial activities, and research policies.

CHAPTER 6. QUALITY MANAGEMENT

6.1 Introduction

Quality control or quality monitoring does not refer to rigid, "managerial" processes but to any mechanism (from individual course evaluation by students to national quality evaluation of research, teaching, international programs, etc.) that includes data gathering and evaluation of the institution's activities. Therefore, the major issues are: What are the available quality control mechanisms and how are they used? When needed, how does the institution change in order to improve?

6.2 The Framework of Quality in Greek Universities

Although faculty and students in Greek universities are selected through very tedious procedures, Quality Assessment is not widely or systematically practiced. The Law 2083 of 1992 introduced for the first time an evaluation procedure for universities. According to this, the responsibility for the overall evaluation belonged to a *national evaluation committee* consisting of nine members and assisted by several thematic sub-committees of experts. Five members were to be nominated by the Rectors' conference and four appointed by the Minister of Education. The law provided that the results of the evaluation process would be taken into account for the allocation of additional public funds to the universities. However, this committee was never formed and the details concerning the whole evaluation procedure, the evaluation criteria and the performance indicators to be used were never determined.

Another evaluation mechanism was set up in 1995 through the National Council of Education. However, at present, neither the formation of the National Council of Education nor any evaluation mechanism has been applied. The attitude of universities in Greece, and indeed of broader parts of the society, towards Quality Assessment was reflected in the way universities received the OECD review of the Greek educational system. This review was carried out during 1995-96 by experts of OECD on the request of the Greek Ministry of Education. It was received negatively by the student unions as well and by the unions of teachers on all educational levels of education, primary, secondary and higher.

Quality assessment procedures are applied to the research activities of universities, especially activities subject to the strict assessment procedures imposed by the competitive nature of national and international funding. The existing evaluation mechanisms are quite specialised, but this situation has promoted the concepts of quality in the Greek universities. Such *Quality Culture*, being directly related to external funding mechanisms that could not be opposed or disputed by the universities, was in a sense forced upon the universities but at the same time provided the motivation for generating broader internal assessment procedures.

Analogous conditions do not apply to the other functions of the universities, such as teaching and management, or even to the part of the research that is not supported by external funding. In the absence of external control or even monitoring of the university performance, the improvement of quality relies almost entirely on the professional or academic values of the individuals and on their sense of moral obligation to society. It should be noted that there is no qualitative or quantitative review of undergraduate programs by an external official body. Moreover, there is no accreditation system for the undergraduate or the postgraduate programs offered.

With the funding of the Ministry of Education a few universities have initiated some quality assessment procedures. The participation of the UTH in the present EUA institutional evaluation program together with other universities during the academic year 2003-2004 is in

this context. It is hoped that the conclusions to be drawn from this procedure will help to establish systematic evaluation procedures in the University.

6.3 Quality Management in the University of Thessaly

Quality assessment is becoming an issue of priority in UTH with the emphasis being placed on a systematic approach to create the proper conditions for its acceptance by the University community. Some Departments (eg. Mechanical & Industrial Engineering) have already set up a special Office of Quality Management that is developing slowly the necessary procedure to monitor Quality and promote mechanisms of change when needed.

Many Departments have introduced a *course evaluation* procedure based on student input that is being continued in the current academic year. In addition, the Research Committee has decided to develop database on research quality and productivity for the academic staff. Moreover, data on standard quality indicators such as fund allocation to the academic Departments are collected continuously.

Elements of quality assessment are of course used for the selection or the promotion of academic staff. Such elements are introduced by the respective legislation mainly in the form of quantitative criteria (number of papers, years in service etc.). Nevertheless, within the actual selection procedure the weight usually shifts from quantitative to qualitative criteria. Furthermore, quality assessment criteria are in principle invoked in the context of academic procedures such as the selection of the courses for the undergraduate and postgraduate curricula, the approval of the corresponding teaching methods and textbooks and the assignments of teaching duties. Such procedures are decided upon by the general assembly of the corresponding Department or sector thereof, as the law stipulates. However, there is no legislation defining the criteria to be used or even requiring any justification or documentation of whatever criteria are eventually used. In general, the academic departments use different approaches of quality assessment for the selection or promotion of their staff, the implementation of their curriculum etc.

6.4 Evaluation of Teaching

The evaluation of teaching by the students was defined for the first time in the framework Law 1268 of 1982. However, the initiative remains incomplete and without supporting action from the Ministry of Education. Some of the Departments of the UTH actually implement a course evaluation procedure through a questionnaire addressed to the students.

Student representatives also participate in the selection/promotion of the academic staff and have the right to express their opinion on the teaching ability of the candidates. In principle, the formation of opinion is a collective process and is based either on the classes the students have attended for candidates belonging to the teaching staff or on lectures given by external candidates.

CHAPTER 7. STRATEGIC MANAGEMENT OF CHANGE

7.1 Introduction

In this chapter, the role of quality management as a lever for change is outlined. Questions to be addressed include: How responsive is the institution to the demands, threats and opportunities present in its external environment? How are representatives from its external environment involved in the institution's strategic management? Which changes can be expected to the institution's aims? How can a better match be attained between, on the one hand, the current and future missions and aims and, on the other hand, the means (study programs, research, etc.)? How do quality, quality control and quality management play a role in these developments?

7.2 Expected Policies and Practices

The increasing number of universities, enrolment and graduates is expected to make job finding and security more problematic in the near future. With the present worldwide trend to decouple university degrees from professional rights, there is an effort to consider university education as a means of simply becoming more cultured rather than more employable. There is also a clearly increasing tendency for pursuing postgraduate studies. This does not imply that more people with advanced degrees are necessary. It simply seems that having a graduate degree will soon become important in competing for a job. It is also anticipated that graduate and continuing education will play an increasingly important role in the educational process, in the future.

It is generally accepted that Universities should play an increasingly significant and multifaceted role in the emerging era of change. They should become a lot more extrovert, and without deserting or compromising their academic character, they should play a pioneering role in meeting the challenges of tomorrow. The Universities, in this process, should not allow deviation from the free moulding of ideas and initiatives, a role that has traditionally been their privilege. The key challenge, we believe, is precisely how to find the means and procedures for adapting to modern needs, without giving up the ideals of academia.

The necessity for the University's opening up and responding to society needs, is becoming even more urgent for the University of Thessaly, which is located in the periphery. The Region depends on the University for identifying and implementing solutions that will permit an economically viable future.

7.3 Regional Inter-Institutional Linkage Mechanisms

The Career Office of the UTH aims at helping both its students and University graduates of the area locate appropriate career opportunities. It also aims to provide information on graduate studies in Greece and abroad. Among others, a major objective of the University Career Office is to develop communication channels between the University and prospective employers, which will allow correct assessment of the job market trends.

It is broadly accepted that curriculum development should be primarily a faculty responsibility, but suggestions and feedback from perspective employers should be taken into account together with students' input. There ought to be a good balance between fundamental and applied research at the Universities. Research directions arc primarily the responsibility of the faculty, but they are strongly influenced by funding opportunities and therefore input from enterprises, funding agencies and the state should be welcome.

Enterprises would like the University to evaluate its own graduates and take an active role in job placement. This is not very likely to happen, since it faces very strong objections

from student organisations. It seems that companies will have to look for themselves in making such decisions. On the other hand, the development of the Career Office is anticipated to help the students assess job opportunities and possibilities. The industry is also looking for effective means of screening potential employees.

7.4 Long-Term Goals of the University

7.4.1 Undergraduate education

Preparing graduates that have an excellent background in a scientific field is conceived to be the University's primary obligation to society. Graduating students, thus, should be capable of adapting to the changes in their scientific fields and professional careers. They should also get exposed to the procedures and issues involved in solving real life problems. It is important, therefore, that academic curricula include practical training, field studies and visits to industry, as well as visits and seminars of industrial people to the University. The Career Office may significantly help graduating students in making right decisions in locating and evaluating job and professional career opportunities, and in giving academic Departments useful feedback messages from the job market.

Decisions on new academic Departments and units, should lake into account the ability of graduates to find a related job, the need for integrating the University, and the advantages, needs and cultural and economic character of the wider Region.

An interesting aspect of the University - Government relationship is that of the new Department of Medical Technology announced recently by the Ministry of Education without prior approval of the University, and although the University Senate had recommended to the contrary.

These criteria will help obtain the most out of the investment that accompanies University expansion. In this regard, the University of Thessaly has recently planned to expand with the Departments of Architecture, Economics and Biotechnology. It is generally believed that the State should have the decisive role in founding new Departments. However, Universities should be given more autonomy and take the responsibility in deciding on academic expansion.

7.4.2 Postgraduate programs

The universities in Greece face an increased demand for postgraduate education. Quite often the main driving force is not the need for in-depth specialisation, but rather the need for additional qualifications that may give graduates a competitive edge in the job market. Also there is an urgent need for securing the existence of appropriate research and development positions that will absorb PhD graduates. In recent years, a lot of postgraduate programs were founded in Greek universities. This was carried out rather hastily, in response to pressure from the society and the State. As a result there is significant overlap of programs and spread University resources.

Graduate studies, by distance learning, is one of the goals of the University of Thessaly. The Department of Physical Education participates in a Graduate program that involves partially distance learning through synchronous and asynchronous web-based applications. Also, the Department of Mechanical & Industrial Engineering is involved in joint distance learning programs funded by national and European Union funds.

7.4.3 Research policies

Research should be the second key issue of the University mission, because it generates new knowledge. The academic community believe that there should be more spending in basic research, since most of the current funding goes for applied and very often purely

industrial research. There ought to be a good balance between basic and applied research carried out at a University, and the research should address scientific problems mainly of international, but also of national, and perhaps of local priority. Faculty members should have the ability to decide on the kind of research carried out, taking into account input from public and private enterprises, the government, various funding agencies and the students.

7.4.4 Continuing education

An increasingly important aspect in present days is that of continuing education. The University should keep its graduates up-to-date with the most recent scientific developments. This will secure a scientific force that is best suited to meet the ever-changing needs of society. The University should exploit all possible means to this end including distance learning, special seminars and publications, etc.

7.4.5 Services to society

Another important function of the University is its services to society and industry. The University has the expertise and the infrastructure to solve many practical problems, offering thus a direct service to public and private organisations. There are many opportunities and possibilities in the direction of services where the Liaison Office, working closely with industrial and public organisation partners, could play a central role. However, the University should not offer services that could be offered by private professionals, as this represents unfair competition.

7.5 Expectations and Perspectives

In the area of cultural development the University is expected to play a leading role. Special emphasis should be placed in high quality lectures, in researching the cultural heritage and character of the Region and in supporting cultural activities of the academic and the wider community. The University is also expected to take initiatives for the economic development of the Region, especially in the areas of industrial change and modernisation, intellectual property protection and serving as a centre for communication technologies. It has many untapped capabilities and the know-how to play a central role for the development of the Region. The success of any such endeavour to meet societal needs ultimately depends on the will of its personnel, especially the faculty.

The authors of this report believe that the University of Thessaly should establish a total quality approach in its activities and a quality culture in its academic community. The place where new knowledge is every day generated via critical teaching and open research could serve better its society needs by keeping high standards of academic quality. Striving always to uphold the values of human dignity and endeavour, it should not be afraid to evaluate itself and to open up to outside judgement and possible criticism.

The Greek society has a high esteem for the Universities and expects them to continue to play a central role as well as become instrumental in coordinating action with the other social partners. They should all work closely and with honesty to determine the best ways to solve pressing society needs by integrating their efforts in the most effective manner. By promoting a *Quality Culture* the University can lead the way to a better world of tomorrow.

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APPENDICES

APPENDIX - I

THE 2001 GREEK CONSTITUTION

(Article 16: Art and Science)

1. Art and science, research and teaching are free· their development and promotion constitutes an obligation of the State. Academic freedom and the freedom of teaching do not exempt from the duty of obedience to the Constitution.
2. Education constitutes a basic mission of the State and aims to the moral, intellectual, professional and natural education of Greeks, the development of national and religious conscience and their forming into free and responsible citizens.
3. The years of obligatory study cannot be less than nine.
4. All Greeks have the right to free education, in all stages, in state schools. The State supports students that are distinguished, as well as those who need help or special protection, depending on their faculties.
5. Higher education is provided exclusively by institutions that constitute legal entities of public law, with complete self-government. These institutions are under the supervision of State, have the right to financial subsidy by it and function according to the laws concerning their organizations. Fusion or segmentation of institutions of higher education can happen as deviation from any contrary provision, as law states.
   Special law defines what concerns student associations and the participation of students in them.
6. Professors of institutions of higher education are public functionaries. Their other teaching personnel carry out also a public function, as law determines. All matters relating to the condition of these persons are determined by the organizations of the institutions.
   The professors of institutions of higher education cannot be ceased before expiration, according to the law, of their time of service but only with the essential conditions provided in article 88 paragraph 4 and after decision of a council constituted in majority by high judicial functionaries, as law fixes.
   Law fixes the age limit of professors of institutions of higher education. Until the publication of this law, the professors that serve withdraw ipso jure as soon as the academic year expires in which they reach the sixty-seventh year of their age.
7. Professional and any other special education is provided by the State and in schools of higher rank for a time period no longer than three years, as it is provided more specifically by the law that also fixes the professional rights of the graduates of these schools.
8. Law fixes the conditions and terms of issuing permissions for the foundation and operation of schools that do not belong to the State, the maters relating to the supervision exerted on them, as well as the service conditions of their teaching personnel.
   The foundation of higher education faculties by private individuals is prohibited.
9. Sports are under the protection and the high supervision of the State. The State subsidises and audits the unions of athletic associations of any kind, as law fixes. Law fixes also the distribution of grants that are provided each time in the subsidised unions, according to their mission.

APPENDIX - II

THE GREEK HIGHER EDUCATION IN BRIEF

1. Introduction

After the recent structural reform of 2001, the Greek higher education system consists of two sectors: The university sector, which comprises twenty two (22) Universities (including the Higher School of Fine Arts and the Hellenic Open University), and the technological sector, which comprises fifteen (15) Technological Educational Institutions (TEI) and the Higher School of Pedagogical Technological Education.

The institutions of the technological sector are considered as equivalent to the fachhochschulen and the polytechnics. All higher education institutions in Greece are state run. According to the Greek Constitution, higher education is offered exclusively by the state and, hence, it is prohibited for higher education services to be offered on a private basis. Three of the above Universities and one of the TEIs have been founded during the last three years in the context of the regional development policy followed in higher education by the Greek Government. According to this policy, each Region of the Greek Territory should in general contain a dipole composing of one University and one TEI with complementary functions at the regional level.

There is significant variety with regards to the features of the Greek Universities. There are multi-disciplinary as well as uni-disciplinary or specialised Universities. There are Universities located at one site, but there are also multi-site Universities. There are Universities with huge numbers of active students (e.g. Aristotle University of Thessaloniki with 30.000 active students), but there are also very small Universities as well (e.g. Harokopion University and the School of Fine Arts in Athens with 2500 active students each). The technological sector is however much more homogeneous than the university one.

The population in Greece is 10.940.000 habitants. Therefore, the density of Universities in Greece (not including the Hellenic Open University) per one million habitants is about 1,9 and the respective density of the overall higher education institutions is about 3,4. These figures are still somehow lower than the current EU average.

The total number of active students in Greece is estimated to 360.000 (200.000 in the Universities and 160.000 in the TEIs). The number of students in Greece has almost doubled since 1996, as a result of a policy which combined on the one hand the increase of the number of the new entrants in higher education every academic year until 2001, and on the other hand the establishment of new higher education institutions, mostly on a regional basis, and new Faculties in the already existing institutions. As a result of this policy, Greece has now one of the highest participation ratios in higher education throughout Europe. Indeed, the percentage of young people in the age cohort between 18 and 21 years registered in higher education institutions in Greece now exceeds 58%.

2. Current Situation in Greece

2.1 Recognition of Degrees

Adoption of a system of easily readable and comparable degrees Greece is one of the countries that have not ratified or signed the Lisbon Recognition Convention yet. Furthermore, the Diploma Supplement is not issued in the Greek higher education institutions yet, while the existing system of the recognition of foreign degrees, primarily of the university

sector, faces significant problems with regards mainly to its complexity and its efficiency. Therefore, the establishment of a new legislative framework is under consideration by the Greek Government, aiming on the one hand at improving the rationalisation and the efficiency of the procedures for the recognition of degrees and on the other hand at issuing the Diploma Supplement in a standardized and integrated way in both sectors of higher education. Obviously, the ratification of the Lisbon Recognition Convention will be a substantial part of this policy.

2.2 Degree structure

The degree structure in Greece is already based on two main cycles since the beginning of the eighties. The first cycle leads to the first degree, called "ptychio" or "diploma", obtained in principle after four years of studies in both sectors of higher education. The second cycle leads to the second degree, which is called "postgraduate specialization diploma", and to the third degree, which is called "doctorate diploma". The "post-3 graduate specialisation diploma" is equivalent to the master's degree and is obtained after one or two years of studies, while the "doctorate diploma" is obtained after at least three years of original research work, including the preparation and writing of the consequent thesis. Second cycle programmes are carried out only at the university sector. However, there is legal provision for the TEIs to cooperate with Universities in the realization of postgraduate programmes leading to the second degree.

The first cycle degree is relevant to specific employment areas, depending on the discipline, the content of the respective study programme and the corresponding qualifications of the graduates. The first cycle degree gives also the right for access to the second cycle irrespective of the sector (university or technological). However, access to the second cycle is not free, since it depends on the number of places available in each postgraduate programme. Holding a "postgraduate specialisation diploma" (i.e. a degree equivalent to master's) is not in general a prerequisite for someone to be accepted for a doctorate, except in the cases where this is stipulated by the regulations ruling postgraduate studies in a University or even in a Faculty. This means that in general the first cycle degree may give the right for access directly to the doctorate level.

As in most European countries, different degree structures exist for specific study fields in the university sector, like medicine (where the first degree is obtained after six years of studies) and engineering, agricultural sciences, dentistry, veterinary science and arts (where the first degree is obtained after five years of studies).

However, as everywhere in Europe, there is an on going debate in Greece too, concerning the degree structure in the specific study fields of engineering and agricultural sciences in the university sector. The Greek Universities and the students claim the recognition of the degrees in the above fields obtained after five years of studies as equivalent to master's degrees. At the same time, the above five-year studies are considered as unified, integrated and inseparable, this consideration leading to a structure which does not contain a first cycle degree. The Greek Government has in general a positive stance on this point, being however cautious in realising it, as the question of equivalence will emerge as a consequence when related to the first cycle degrees which are already or will be offered in other European countries in the study fields of engineering and agricultural sciences.

As a matter of fact, the above debate is part of the general debate in Greece with regards to the Bologna degree structure. There is a wide consensus in Greece on the currently existing degree structure. This consensus comprises the Government, all the political parties and the higher education institutions, as well as the students of both sectors.

According to this consensus, the first cycle degrees should continue to be obtained in Greece after at least four years of studies, and any ideas for first cycle degrees obtained after three years of studies are totally rejected. The basic argument is the same as in other European countries: Restricting the duration of first cycle studies to three years will have a negative impact on the academic nature and content of the 4 first cycle studies. The requisite restructuring of the curricula will result to the restriction of the academically oriented courses and to the preservation of those courses that have a more or less direct relevance to the employment needs. This development will lead to the "professionalisation" and "de-academisation" of the first cycle studies.

This argumentation refers mainly to the university sector of higher education, but it also covers the technological sector, since the minimum duration of studies in the TEIs now keeps up with the one of the Universities.

The degree structure currently existing in Greece is considered as consistent with the Bologna structure. So, the Greek Government is not going to change it. However, the Greek Government realises that a satisfactory solution has to be found for the problem which will arise in the near future relating to the equivalence between the Greek first cycle degrees and those obtained after three years of studies in other European countries.

There will inevitably appear problems of recognition that the Greek Government will have to handle in a satisfactory way, which has to be consistent to the Bologna approach.

An issue related to the degree structure is the one concerning the reform of the existing legislative framework for the postgraduate studies in Greece, covering both the master's level and the doctorate level. This reform aims on the one hand at the rationalization of the master's courses and the conceptualisation of the master's degrees and on the other hand at the introduction of structured advanced courses at the doctorate level, thus introducing the concept of "doctoral studies". There is an on going debate with the Greek Universities on these issues lasting for more than three years, but the Government has not yet introduced the related Bill before the Parliament.

2.3 Establishment of a System of Credits

In Greece, a system of credits exists in both sectors of higher education since the beginning of the eighties. This is actually an accumulation system which however does not have any common characteristics with ECTS as concerns the university sector. In fact, it is a rather simplistic system, where the credits are directly equivalent to the weekly hours of instruction. However, the ECTS is applied in the Greek higher education institutions of both sectors as a transfer system with regards to the European mobility programmes (Erasmus and Socrates), but even in that case this occurs in a non systematic way and it is left in the discretion of the institutions to define its characteristics. On the other hand, in the technological sector an accumulation system of credits is in use, based on the "workload" approach, which means that it may prove to be compatible to the ECTS. In order to clear up the landscape, the Greek Government intends to start a debate with the higher education institutions aiming at the development of ECTS as an accumulation system as well in both sectors.

2.4 Promotion of Mobility

The figures concerning the participation of Greek students and teaching staff in European mobility programmes have improved during the last three years. The enhancement of mobility by removing the obstacles and creating the proper conditions for it to reach its full potential constitutes one of the objectives set by the Greek Government. In that context, the

Greek Government intends to introduce an efficient policy aiming at further improvement of the related mobility figures, by exploring the ways to increasing the available funding and by introducing the necessary legislative provisions and taking the appropriate measures in order to help overcome the obstacles to mobility for incoming and out-going students and staff. However, any kind of policy like this needs to be based on the active involvement of the higher education institutions themselves, which will be invited to take the appropriate initiatives to that end.

2.5 Quality Assurance

Greece is one of the few European countries without a national system for quality assurance and assessment in higher education. However, during this summer, the Greek Government is introducing before the Parliament a Bill concerning the establishment of the National Council for Quality Assurance and Assessment (NCQAA) in higher education.

This Bill is the result of a debate with the higher education institutions which lasted for more than two years. The National Council is founded as an authority which is independent of both the Government and the higher education institutions and covers both sectors of higher education. According to the Bill, the Council comprises the President and twelve members. The President and ten of the members of the Council will be elected through the Parliamentary processes stipulated in the Greek Constitution which require a consensus or an increased majority among the representatives of the political parties in the Parliament. The election of the President and the ten members will be based on nominations proposed on the basis of competence by the higher education institutions. The remaining two members of the Council are student representatives (one from each sector of higher education).

The system of quality assurance and assessment which is to be established in Greece aims at supporting higher education institutions in their efforts to continuously improve their quality and at advising the Government on the necessary actions and policies to be taken to that end. At the same time, it aims at improving transparency, comparability and accountability of the Greek higher education system. Therefore, the Greek system of quality assurance and assessment does not contain accreditation characteristics, nor does it aim at ranking or grading the Greek higher education institutions. At the same time, it does not have either any penal or reward characteristics.

The system of quality assurance and assessment in Greece will apply the main types and methods used in most European countries, except accreditation. This means that in principle four main evaluation types are to be used in Greece: Institutional evaluation, programme evaluation, subject evaluation and audit.

Apart from the establishment of the National Council, the Greek system of quality assurance and assessment is integrated through the development of the internal quality assurance and assessment mechanisms and procedures inside each higher education institution.

Fostering quality culture throughout the higher education system is one of the major objectives of the national system of quality assurance and assessment in Greece.
The development of this kind of quality culture is under way for the last five years in Greece. It is important to note that since the academic year 1996-97, six Greek Universities have participated in the Institutional Evaluation Programme of EUA and two more are going to participate in the new round of the Programme during the academic year 2003-04. This means that eight out of the eighteen Greek Universities (without including the Hellenic Open University and the three Universities founded during the last three years) will have participated in the EUA Programme until the end of the coming academic year 2003-04. In

other words, almost half of the Greek Universities will have been involved in quality assurance and assessment procedures when the national system will get into function in Greece.

2.6 Promotion of the European dimension in higher education

For the Greek Government, the development of joint programmes between Greek and other European Universities leading to joint or double degrees is one of the most important steps on the way towards the construction of the European Higher Education Area.

Immediately after Prague in 2001, the Greek Government intensified its efforts, encouraging the Greek Universities to undertake initiatives to that end and promoting such co-operations.

The first step was the Greek-French inter-university cooperation, undertaken between the Greek and the French Ministries of Education and between the Greek and the French Rectors' Conferences. The result of this cooperation was the establishment of three joint master's programmes between Greek and French Universities which are going to get into function from the academic year 2003-04 on. The Greek Government has already provided for the extra funding of these joint programmes. Apart form the cooperation between Greek and French Universities, the Greek Rectors' Conference has already started discussions with the German Rectors' Conference in order to promote analogous cooperation with the German Universities as well.

At the same time, the Greek Government is introducing during this summer before the Parliament the Bill with the necessary legislative provisions to cover all the details related to the establishment and the operation of joint master's programmes. The same Bill will provide for the co-supervision of doctorates by academics from Greek Universities and from other European Universities.

The general concern in Europe is to explore in a first phase the legal and organizational requirements in order to develop the joint programmes at the master's level. It is clear that the first cycle level will follow, but everybody realises that things are more complicated at that level. In this context, Greece is going to follow the general European trends as regards the extension of the joint programmes to the first cycle level.

2.7 Lifelong learning

The only substantial policy in Greece concerning lifelong learning at the higher education level so far is implemented by the Hellenic Open University which now runs both first cycle (undergraduate) and second cycle (postgraduate) programmes addressed to people aged 25 years and above. Being only in its fourth year of operation, the Hellenic Open University cannot respond to the existing demand in a satisfactory way. Indeed, the demand for the next academic year exceeded 50.000 applications, while the available places are only 5.000.

The Greek Government has included the establishment of lifelong learning processes in higher education in the Bill which is to be introduced before the Parliament during this summer. According to the provisions of this Bill, one Lifelong Learning Institute will be founded in every University and TEI and will develop and carry out study programmes of lifelong learning type. These programmes will be developed either through conventional learning methods or through distance learning methods, analogous to those used by the Hellenic Open University.

However, this legislative initiative of the Greek Government contains a weak point as compared to the situation existing in other European countries. The above mentioned Lifelong Learning Institutes will not provide study programmes leading also to formal degrees. They will only offer programmes aiming either at training adult people through short study programmes in order to improve their skills or at refreshing, updating and upgrading the knowledge, the competences and the skills of adults who already hold a degree from a higher education institution. The reason for this weakness of the system is due to the opposition raised by the Greek Universities and students against the development of such programmes leading to formal degrees.

2.8 Higher Education Institutions and Students

2.8.1 Higher education institutions

Upgrading and strengthening the role of higher education institutions on the way towards the establishment of the European Higher Education Area is one of the major concerns of the Greek Government. According to the Greek Constitution, Universities and TEIs are autonomous institutions within a system of "input-based" state funding.

The Greek Government intends to launch a dialogue with the higher education institutions in the coming academic year, aiming at the establishment of a system of state funding "by objectives", which will consequently result at the increase of the autonomy and the degrees of freedom of the institutions.

This new system will be based, as in many European countries) on a consultation procedure between the Government and each institution, which will result in a four-year agreement comprising mutual commitments. The Government's commitment will refer mainly to the resources, while the institution's commitment will refer to the achievements of the agreed objectives. This development, in combination with the establishment of the national quality assurance and assessment system, is expected to improve the overall accountability of the Greek higher education institutions as well.

2.8.2 Students

The higher education system in Greece is considered as one of the most participatory systems in Europe, especially as regards student participation. Students in the Greek Universities participate at a percentage which varies between 35% and 40% in the Senates of the Universities, and reaches almost 30% in the Assemblies of the Faculties, while it exceeds 40% in the bodies which elect the Rector and the Vice Rectors of the University and the Head of each Faculty. In the TEIs, the respective percentages are somehow lower than in the Universities. However, the actual involvement of students in higher education governance is much weaker than what it could be expected taking these high participation percentages into consideration.

The Greek Government has a constant policy as regards the students, considering them as full partners in higher education governance. In that context, the participation of students is stipulated by the Greek Laws not only at the institutional level but also at the national level. Therefore, official representation of students is provided for the scheduled National Council for Quality Assurance and Assessment in higher education as well as for the National Council for Education and the separate Councils for the university and the technological sectors of higher education, which are consultative bodies to the Government for issues concerning the development of policies in education in general and in higher education more specifically.

2.9 Promoting the attractiveness of the European Higher Education Area

The Greek Government encourages the higher education institutions to establish cooperative relations with institutions from third countries, but this policy has not led to substantial results so far. Greece happens to be in a preferential geographical position as regards the establishment of relations with third countries, especially within the wider Mediterranean area. The Greek Government has now realised the need for a specific policy addressing that aim, and this policy has to contain elements which will make the Greek higher education system attractive for the students and the academics from that region.

However, and apart from the geographical area in its vicinity, Greece is in close contact with the EULAC (European Union, Latin America and the Caribbean) Initiative, aiming at the active involvement of Greek higher education institutions in the projects in development.
Finally, the Greek Government intends to start a dialogue with the Greek Universities focusing on their readiness to develop joint master's programmes with Universities of other European countries, so that they will be in a position to submit strong joint applications in the framework of the "Erasmus Mundus" Programme when being initiated.

2.10 Social dimension of the European Higher Education Area

From the very first steps of the Bologna Process, Greece was among the countries that underlined the importance of the Social Dimension of the Bologna Process. Consequently, one of the priorities of the EU Greek Presidency during the first half of 2003 was to bring the "Social Dimension" issue high in the agenda of the debate towards the construction of the European Higher Education Area. And it is in that context that Greece was entrusted with the organisation of the official Bologna Seminar on the Social Dimension of the European Higher Education Area (February 2003) on the way from Prague to Berlin.

The sensitivity and awareness of Greece regarding the issues of the "Social Dimension" is also reflected in the higher education policy in Greece, one of the objectives of which is to reduce the "social gap". The main characteristics of this policy may be described as follows:

1. Free and fair access to higher education, irrespective of social and economic background of the people, is a major component of the Social Dimension of the Bologna Process. As mentioned already, Greece has one of the highest ratios in Europe (58%) as regards the participation in higher education of the age cohort between 18 and 21 years.
2. According to the Greek Constitution, higher education is provided free of charge. In consequence there are no tuition fees in Greece, with the only exception of a small number of postgraduate programmes, mainly leading to second cycle degrees equivalent to MBAs.
3. Apart from access, appropriate studying and living conditions are provided for those already studying in higher education, so that they can finalise successfully their studies in time without being prevented by obstacles related to their social and economic background. In that context, the Greek Government has developed a concrete policy for student support directed to all students, but primarily to those with a weaker social and economic background, making thus a further contribution to reducing the social gap. The main characteristics of this policy are as follows:

    - Provision of a system of grants which is performance based.
    - A system of loans exists currently only for the second cycle studies. Its extension to the first cycle studies is under consideration by the Greek Government.
    - Provision of health insurance and free medical care (all students).
    - Provision for lower transportation fares in all means of public transportation except airplanes (all students).

- Provision for lower entrance fees for cinemas, theatres, cultural events and institutions (all students).
- Provision of free board in student canteens and restaurants. This measure covers almost 50% of the student population.
- Provision of free lodging in student dormitories and in rooms rent by the higher education institutions. This measure covers about 6% - 7% of the student population. At the same time, there is provision for subsidies to students renting rooms themselves, which further covers about 5% - 6% of the student population.
- Every student is supplied free of charge with two textbooks for each course of the study programme that he or she has registered in.

However, reconsidering the existing policy for student support is among the short/ medium-term plans of the Greek Government. This reconsideration will be directed to two major aims: To the establishment of a generalised and efficient policy for student loans and to the considerable raise in the percentage of students offered lodging either completely free of charge or at a very low price.

4. The already existing possibility for vertical mobility inside the Greek higher education system, although in rather restricted rates, makes some contribution to reducing the social gap. Students with weaker social and economic background can move to institutions located close to their family residence, thus avoiding the costly student life away from home which sometimes results in drop-outs.
5. Widening the geographical base of the higher education system. As mentioned in the beginning, according to the developmental plans of the Greek Government, each one of the Regions which constitute the Greek territory will eventually have a dipole consisted of at least two higher education institutions, one of the university sector and one of the technological sector. This means that the higher education system in Greece is being developed on a more or less regional basis. The harmonious distribution of higher education institutions throughout the Regions will help the institutions to establish closer links with the surrounding area, this proximity being particularly beneficial for the weaker socio-economic groups of local population in terms of access.
6. In the emerging European environment, removing the obstacles to the free movement of students and staff should be considered as a prerequisite for provision of equal mobility opportunities, i.e. irrespective of the economic or social background of the students or of the staff.
7. Developing lifelong learning processes through flexible learning paths in the Greek higher education system is expected to make one of the strongest contributions to reducing the social gap, as it widens the target group of higher education to nontraditional students and to adults as well. As mentioned already, the respective new legislation, as mentioned before, is scheduled to pass this summer from the Parliament and it will complement the only lifelong learning option existing today in Greece, which is the Hellenic Open University.
8. The issue of the “Social Dimension” can be considered also as referring in general to the relationship between higher education and society. In that context, the issues of accountability and quality assurance concerning the autonomous higher education institutions should be two further prerequisites guaranteeing the enhancement of the “Social Dimension”. Therefore, the establishment during this summer of the national system for quality assurance and assessment will further improve the relationship between higher education and society at large.
9. The issue of the graduates’ employability is another aspect of the relationship between higher education and society. The Greek Government cannot of course adapt the number

of the higher education students to the employment places available in the labour market. Nevertheless, it tries to take into consideration the real needs of the labour market, either by increasing the number of students in specific disciplines (as for example in disciplines related to information technology and computer science), or by encouraging the establishment of new disciplines addressing the needs of the labour market. The higher education institutions on their side offer their students employment services through their career offices and the organisation of activities such as career weeks and seminars, industrial experience opportunities and various practice programmes in general.

10. The need for closer links between higher education policies, society needs and expectations and employment opportunities is expected to be met in Greece through the establishment of the National Council for Education, which will be a forum for a continuous debate between representatives of the world of education and the various social partners, including the world of work and employment.
11. A last but not least parameter, according to Greece, has to do with the role of students.

As mentioned in the Prague Communiqué, the need to take account of the 'Social Dimension' in the Bologna Process was 'recalled by the students'. This was not an accidental wording. Students are the primary link between higher education and society. Their role is therefore to assure for the "Social Dimension" of higher education. In this context, students have to play an actively participatory role in higher education institutions, concerning decision-making, governance, strategic planning and quality assessment.

As was mentioned already, the existing Greek University Law (No. 1268/1982) provides for one of the strongest participatory roles of the students as compared to the other European countries, while the new Bill for quality assurance takes this need into account as well.

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APPENDIX – III

LAWS AND REGULATIONS FOR GREEK UNIVERSITIES

1. The Constitutional and Legal Framework

Universities in Greece are regulated by Article 16 of the Constitution and by the framework Law 1268 of 1982. This Law introduced significant reforms in Greek Higher Education and with the succeeding Laws (2083/1992 and 2517/1997), has strengthened the management of Universities by making it more flexible and introduced postgraduate studies. They also provided for the establishment of research institutes associated with Universities.

According to the Constitution (see Appendix 1), Universities enjoy full autonomy and academic freedom of teaching and research. The article also provides for the State supervision exercised upon the Universities by the Minister of Education. The State control arises mainly from the fact that Universities are public entities financed by the State. As in most countries, the balance between State control and University autonomy is a quite delicate question.

The Constitution states that University studies are free of charge, and, therefore, students do not pay any fees. A recent legislation, however, provides for the possibility of fees to be charged for postgraduate studies. The Constitution also provides that University education is in the public interest and is offered by Institutions that are public entities. Therefore, private Universities are not allowed to function in Greece. However, a number of private schools offer courses of post-secondary education, in cooperation with foreign Universities, which they claim to be of University level, but they are not recognized by the Greek State.

2. Access to University Education

Access to University Education in Greece is through competitive entrance examinations conducted every June by the Central Committee of Entrance Examination. The success of candidates and their entrance to the University depends on the grades they obtain in the examinations, the number of places available and their preference. The number of new entrants to be accepted by the Universities is determined by the Minister of Education. The Law provides that Universities should submit to the Ministry of Education proposals of the number of new entrants, but these proposals usually are not taken into account.

3. Academic Structure

The framework Laws provide for four distinct levels of Institutional structure: Institution, School, Department, and Sector. Departments correspond to a University discipline area and are the principal academic units in each University. They are the academic units where the main teaching staff belongs and the corresponding academic degrees are granted. Departments are divided into Sectors corresponding to smaller and distinct parts of the major scientific discipline of the Department. Departments covering related discipline areas constitute a School, the Dean of which has mainly coordinating authority. The teaching and research activities of a Department or a Sector may be grouped and concentrate in even smaller operational units, the Laboratories (or Clinics in the case of Medicine).

The authority for founding new academic units (Universities, Schools, Departments, Sectors, Laboratories) and for renaming, merging, splitting or closing existing academic units belongs to the Minister of Education. While the Minister has the sole right to propose the founding of a new University, the Universities usually propose the establishment of new Schools, Departments, Sectors, or Laboratories, pending Ministerial approval.

4. Personnel Structure

The University staff consists of the following three major categories: teaching staff, special administrative and technical staff, and administrative staff. The teaching staff consists of the following categories:

- Main teaching staff (professors, associate professors, assistant professors, lecturers)
- Visiting professors, special scientists and teaching staff (normally PhD, employed on a temporary and contractual basis)
- Assistant teaching staff (usually graduate students of doctoral candidates)
- Special teaching staff (they do not hold a PhD and are teaching special subjects, such as foreign languages, drawing, fine arts or subjects related to physical education)

Only the members of the two upper levels (professors and associate professors) are elected in permanent (tenured) positions. The opportunity for promotion within the four levels depends on the level and on the date of appointment of the members. Law 2517 of 1997 provides that members of the main teaching staff (lecturers, assistant and associate professors) are promoted to the next level upon completion of certain prerequisites by open competition. The associate professors who were appointed before this Law are promoted to the rank of professor by decision of an electoral body formed by the General Assembly of the Department to which they belong. In case they fail, they have the possibility to be promoted to the next rank only by open competition.

The administrative staff handle the administration of the University both in centralized (Institutional) and in decentralised (Departmental) level. The special administrative and technical staff is solely oriented to the direct and close administrative and technical support of the teaching and research activities in each Department.

Departments have full autonomy regarding the selection of their academic staff of all ranks and also the determination of the scientific area of each post to be filled. But, the Ministry of Education has the authority to determine the number of positions to be filled every academic year by each University Department. Briefly, the Universities have full autonomy and responsibility for the academic side of the selection process, but the Minister of Education has control of the financial and legal side of the selection and appointment process.

5. Decision-making and Leadership

The framework Laws established the principles of collective participation, accountability and transparency in Greek Universities. These principles are reflected on the regulations concerning decision-making.

Each academic unit (Department) have their own hierarchical and decision-making structure. There is a hierarchical relation between the four ranks of institutional structure concerning leadership and decision-making, with the Institution lying at the top and the Sector at the bottom. The role and the responsibilities of the School are simply coordination. The structure of leadership and decision-making in the four levels of University hierarchy is as follows:

The *Rector* and the two *Vice-Rectors* are elected for a 3-year mandate by an electoral body consisting of: a) all members of the main teaching staff of all Departments, b) representatives of undergraduate students (80% of category (a)), c) representatives of all other categories of personnel (25% of category (a)).

The *Department Chairman* is elected for a 2-year mandate by an electoral body consisting

of: a) all members of the main teaching staff of the Department, b) representatives of undergraduate students (80% of category (a)), c) representatives of all other categories of personnel (15% of category (a))

The *School Dean* is elected for a 3-year mandate by an electoral body consisting of the electoral bodies for the election of the Chairmen of all the Departments constituting the School. Finally, the *Director of a Sector* is elected for a 1-year mandate by the General Assembly of the Sector.

The University Senate consists of the following members:

1. The Rector and the two Vice-Rectors
2. The Deans of the Schools and the Chairmen of all Departments
3. Eight (8) representatives of the main teaching staff belonging to the ranks of associate professor, assistant professor and lecturer
4. One (1) representative of the undergraduate students of each Department
5. Two (2) representatives of the postgraduate students of the Institution
6. Four representatives of all the other categories of personnel

The *Rector's Council* consists of the Rector, the two Vice-Rectors, one representative of the students, and the registrar/secretary general of the University.

The *Department General Assembly* consists of: a) all members of the main teaching staff of the Department up to the number of 40, b) representatives of undergraduate students (50% of category (a)), and c) representatives of postgraduate students (15% of category (a)). The *Administrative Council* of the Department (only for Departments where Sectors are operational) consists of: a) the Chairman and the deputy Chairman of the Department, b) the directors of all the Sectors, c) two representatives of undergraduate students, and d) one representative of postgraduate students.

The *School General Assembly* consists of the GAs of all the Departments belonging to the School. The *Dean's Council* consists of the Dean, the Chairmen of the Departments, and one representative of the undergraduate students from each Department. The *Sector General Assembly* consists of all the members of the main teaching staff of the Sector, two-to-five representatives of undergraduate students, and one representative of postgraduate students.

6. Teaching and Learning

The academic year in the Greek Universities is divided into two-semesters. The courses of the *Programs of Studies* are, therefore, organized on a semester-basis. Each Department offers the corresponding Degree, which may have a distinct specialization, if provided by Law. The responsibility for undergraduate programs belongs entirely to the Department, without any superior control either at Institutional or Governmental level. This responsibility concerns the establishment of course curriculum, credit units and distribution of teaching load among the teaching staff.

The degrees granted by the Greek Universities reflect directly the names of the corresponding Departments. Therefore, when the Ministry of Education establishes a new Department, it also determines the degree to be granted. The Ministry has also an authority on the determination of a specialization within a program of study, in case that this specialization will be shown in the title conferred.

The establishment of a program of Postgraduate studies in a Department must be approved first by the University Senate and then by the Ministry of Education.

Finally, the Departments and the teaching staff of a course have total responsibility for the teaching methods and practices used, both in at the undergraduate and postgraduate level.

7. Duration of Studies

Studies leading to a first degree in the Greek Universities have a minimum duration of:

- Four (4) years for the majority of disciplines
- Five (5) years for Engineering, applied disciplines such as Agriculture, Forestry, Dentistry, Veterinary, Pharmacy, and disciplines of Arts (Music, Plastic Arts)
- Six (6) years for Medicine

Postgraduate studies leading to a Specialization Degree (equivalent to a MSc) last at least one (1) year, while to obtain a PhD degree a minimum of three (3) years is required.

8. University Financing

Greek Universities are financed by the State, especially staff salaries and current expenses. The State also provides the Universities with an amount of money for the purposes of capital investment (infrastructure, equipment, etc). The allocation of funds to Universities to meet their current expenditure follows slightly the number of student population. In fact, there is no approved system of allocation of funds to Universities in Greece.

After Universities are informed by the State of the funds they were allocated for current expenses, they have to assign them to their budget, which then has to be approved by the Ministries of Education and of Economics. This procedure is time-consuming and often causes financial problems when the Universities are informed late about the allocated funds. Meanwhile, the University until the final approval of its budget is allowed to spend up to half of the amount provided into the items of its budget of the previous year.

The State control, however, is not exhausted in the approval of the University budget. Every provision or expenditure made by the University must follow strict procedures and is audited in advance by the State Audit Council. Investment funds, especially for procurement of equipment, are usually allocated in July or August each year. This creates usually problems of efficient spending by the Universities.

9. Specific Issues of Financial Management

In addition to State funding, Universities can obtain funds from research projects, the supply of services to the public or private sector, or the activities of the *Company for Management of the University Property*. This additional funding usually constitutes a significant resource for Universities. The management of these funds is done by the *Research Board* or the Company for Management of the University Property independently of the State control. Their accounts are audited by certified accountants who are appointed by the University Senate.

10. The National Council of Education

The National Council of Education was introduced in June 1995, replacing the Council of Higher Education established in 1982. The new National Council of Education was scheduled to operate both in centralized and in decentralized level, according to the various levels of education. The legislation for the new Council provides major responsibilities concerning the issues of educational planning, educational documentation, quality evaluation, allocation of resources etc. This council was inaugurated in January 2004 by the Minister of Education in a ceremonial meeting, in the presence of the Prime Minister, but has yet to produce some policy.

APPENDIX - IV

THE REGION OF THESSALY

1. Regional Indicators

1.1 Geography and morphology

The Region of Thessaly occupies the central-eastern part of continental Greece and consists of the prefectures of Karditsa, Larissa, Magnesia and Trikala. Its area is 14.036 km2 (10,6% of Greece). It borders to the north with the Regions of western and central Macedonia, south with the Region of Sterea Hellas, west with the Region of Epirus and to the east with the Aegean Sea.

A 36,0% of its terrain is plain, 17,1% half-mountainous, while 44,9% is mountainous. Its morphology is such that tall mountains surround the Thessalian plains, which constitute the largest plains of the country, where the river Pineos, the third longest river, runs from west to east. The mountains are Olympus, the southern part of the mountain range of Pindos, Itamos, Pilion and Orthrys. Of particular importance is the artificial lake Tavropos, created in the watercourse of Tavropos, tributary of river Acheloos.

The Region Thessaly has appreciable mining wealth such as chromite, sulfur minerals, asbestos, ilmenite and lignite discovered lately.

1.2 Population

According to the estimates of the Greek National Statistics Organization for 1998, the population of the Region of Thessaly is 743.075 residents, representing 7,1% of total population of the country (third largest region in Greece). The rate of growth of the population of the Region (0,55%) is slower than the average rate of Greece for the period 1993-98 (1,56%). The population density is 52,9 inhabitants per square kilometer compared to 79,7 per sq. km of the country. The urban population amounts to 44% of total population (1991) and shows an increasing trend compared to 1981. The rural population amounts to 40% of the total and shows a fall, while the semi-urban population is progressively increasing and amounts to 16% of the total.

1.3 Regional Gross National Product

The per capita GNP of the Region of Thessaly is lower compared to the average of Greece (90% in the year 1994). The Region produces 6,6% of the Gross Domestic Product of the country. In the primary sector production is 35,5%, in the secondary 22,4% and in the tertiary sector 43,1% of the regional Gross Domestic Product. The corresponding percentages for the country are 15%, 25%, and 60% respectively. In the long term, a small tendency is observed of the regional economy towards the tertiary sector, as is shown by its increased share in total regional GNP, and small retarding of the primary and secondary sectors.

With regard to the productivity, the Region is found in a lower level than the national average. The productivity of Region is 68% of the EU average for 1996, while in 1993 it was 69%, marking a small reduction.

1.4 Workforce

1.4.1 Employment

The workforce of Thessaly amounts to 299,300 with 273,900 employed in 1997. The long-term development of the active population and the employment of last years (1993-1997) show an increase. A 38,7% was working in the primary sector, 17,4% in the secondary, and 43,9% in the

tertiary sector. The corresponding national percentages are 19,8%, 22,5% and 57,7% (in 1997). In the period 1993-1997 there appears to be a tendency of increase of the tertiary sector and a reduction of the secondary, while the primary sector remains in the same level.

The high concentration of workforce in the primary sector indicates production models that imply structural delays. To the extent that reformation of agriculture will be combined with workforce exit, an important problem of planning of structural policy is imposed. This policy should aim at the absorption of the redundant workforce into alternative (or additional) activities of local scale, in order to avoid depletion of rural regions and the deterioration of the problems of development.

A special problem is the large reduction of industrial employment in the industrial regions, mainly Volos but also Larissa. This employment reduction, though to some degree compensated by the increase of activities in the tertiary sector, is creating serious problems in retraining of the workforce, which shows or is forecast to show an increasing demand.

1.4.2 Unemployment

The rate of unemployment in the Region reaches 8,5% and is lower than the national average (10,25% in 1997). The long-lasting unemployment in Thessaly was 65,6% in 1997, while in the country 57,1%. The percentage unemployment of women and young persons were 14,5% and 30,3%, while in the national were 15,9% and 32,3%, respectively.

The long-term unemployment in Thessaly in the last years shows a tendency for stabilization. In particular, the rate of unemployment in the year 1993 was 7,9%, in 1995 went up to 8,9% and in 1997 fell to 8,5% (the national rates of unemployment are 9,7% for 1993, 10,0% 1995 and 10,3% for 1997).

1.4.3 Level of Education

The workforce with primary education is 52,2% of the total and is considerably higher than the corresponding percentage of the country (38,1% in 1997). The workforce of high school education is 9,8%, and of secondary school education 21,5% of the total. The workforce with high and higher education amounts to 16,6% of the total of the workforce of the Region. In general, although the level of education is less than that of the national average, the Region has generally high quality human potential, which creates the conditions for growth as well as for attracting high activities in the region.

2. Production Sectors

2.1 Primary sector

The primary sector is important for the economic development of the Region as well as of each Prefecture separately, because of its contribution to the GNP and to employment, and because it provides raw materials in an important part of manufacturing. Comparative advantages include the Thessalian plain (the larger plain of the country) and the adaptability of producers to the new developments of technology and market. It is characteristic that, during the last 10-15 years, that agriculture contributed 66% to the income of the Region in the primary sector, there were important changes in mass of production, as well as in the structure of cultivation of wheat and cotton. The type of cultivation reforms that happened allowed the direct maximization of the agricultural income, but not the adaptation in medium and long-term prospects of balancing the offer and demand.

Livestock farming shows also development tendencies indicated by the increase of animal production (pigs and cattle) during the previous decade. Furthermore, it shows big margins of improvement, mainly in the sector of sheep and goat breeding. Forestry also shows

important margins of further growth. The fact that the forest regions coincide with the problem areas of the Region, is one of the factors of non-sufficient growth of this sector (mainly because of the lack in infrastructure). The newer forms of fishery do not show particular growth, although there exist the conditions for the growth of this sector. An important part of fish catches comes from the Pagasitikos Gulf, whose reduction of pollution combines environmental with the economy concerns.

2.2 Secondary sector

The focal points of manufacturing growth in Thessaly are the Prefectures of Magnesia and Larissa (dipole Larissa - Volos), mainly for the bigger units, which are located more in the first. The small production units however, mainly family owned, that function in traditional sectors are scattered in the whole of Thessaly, mainly in the larger urban areas and in the road axes. The course of industry in Thessaly was particularly positive during the period 1970-1985, when the rates of increase of production and employment were higher than those of the country.

However, in the last years and especially during the period 1988-1995, de-industrialization has become particularly perceptible in the Region, and mainly in the two more developed Prefectures. During this period, it is estimated that there has been loss in Magnesia of only 7.000 jobs with the closure of big enterprises and the shrinkage of positions in others. It is remarkable that this climate of de-industrialization has begun to be reversed and to be replaced by a climate of retained but real optimism for the prospects of the industry in the Region. This optimism is supported by the dynamism that the Region shows in the sector of private investments.

The industrial base of the Region includes three groups of activities: a) industries that are installed in the Region because of the adjacency with raw materials, b) units directed in the internal market and markets of abroad, mainly Europe and the Balkans, and c) industries that were installed in the Region because of geographic or other advantages (port of Volos, workforce etc) but have no relation with the local markets of raw material or final products. The future of the first two groups is more easily foreseeable. The changes that should be expected in the primary production will create new possibilities of manufacturing of products, mainly in the agri-foodstuff sector. Furthermore, the internal and external demand will grow with corresponding prospects for the relative units. With regard to the third group, their prospects will depend on the general course of the sector in which they belong and on the total industrial development.

2.3 Tertiary sector

The component "*services to enterprises*" is not developed to a high degree, despite the total augmentative tendency of the tertiary sector. Given the strategic role of these services, the attracting and support of such activities will have to be sought through the Regional development program and through other programs and policies. It should be noticed, however, that important improvements are expected in this sector, as the growth of the University of Thessaly, and mainly of its technological disciplines, constitutes an important pole of benefit to the services, which should be strengthened. This moment the University has 103 laboratories, of which approximately 70 provide already services to private and public institutions in local and national scale. In addition to the University of Thessaly that has important research activities, a Technological Educational Institution functions in Thessaly. The research centers and institutes reach 7% of the total research centers and institutes of the country (1993), and classify Thessaly as 4th between the 13 Regions of the country.

The Region has important tourism resources (natural environment, traditional settlements, archaeological sites etc) that are located mainly in the eastern coastal area, the islands and the mountainous areas. The biggest tourism growth is observed in the wider region of Volos (Pelion and Sporades islands, with phenomena of saturation in the case of Skiathos and less of Skopelos), the region of Tempi and the coastal area of Larissa, the region of Kalampaka-Meteora and the Lake Plastira.

In the last years an increase of hotel beds is observed. Nevertheless, the growth of tourism in the Region remains limited (compared to the existing possibilities) and simultaneously unequally distributed in space and seasons. Main negative factors are: a**)** the insufficiencies of supra-local transport connections, b**)** the low level of offered tourist services, c**)** the insufficient tourist infrastructure, and d**)** the absence of growth of new forms of tourism, despite its appropriateness for it (curative tourism, periigitic tourism, ecotourism, mountainous tourism, conference tourism etc.).

3. Infrastructures - Quality of Life

3.1 Transportation

The role of the Region in the Traffic and Transportation sector is particularly important. Because of its geographic place, Thessaly has comparative advantage being in the centre of the country and crossed by the main national road axis of development, which is included in the *Transeuropean Network of Transportation*. However, the Region does not have direct contact with the newer road axes of development in Greece. This is in the northern part of the country, which is emerging and is expected to be strengthened and acquire cohesion with the building of *Egnatia Road*. The facilitation of contact with the western European space will increase the dynamism of the regions along this axis. This means that an essential strategic choice is the connection of the Region with Egnatia Road that will contribute to the lifting of isolation of western Thessaly and will connect it with the main economic axes of the country and the Transeuropean Networks, consecrating Thessaly as a strategic "node of networks" and a modern transport centre. The Region is connected also with the Regions of Sterea Hellas, Central Macedonia, Western Macedonia and Epirus, with smaller importance road axes.

With regard to railway transportation, the following railway lines operate in the Region: a) Athens-Thessaloniki, b) Larissa-Volos, and c) Paleofarsala-Karditsa-Kalampaka (under renovation). In the basic railway network of Athens-Thessaloniki, important improvements have taken place and there is provision for electrification. The local lines are not satisfactory for the rational utilisation of existing equipment.

With regard to the marine transportation, the most important port of the Region is the port of Volos, which could become (with the suitable improvements) the basic port of central Greece to the markets of S.E. Mediterranean and of the regions around the Black Sea. Other ports of the Region are the harbor of Skiathos, Skopelos, Glossa, Allonisos, and Agiokampos (Prefecture of Larissa).

Air transportation has small participation in the total passenger transport. In the Region there operate three airports: Skiathos, N. Achialos and Larissa (the last two are military). The airports of Skiathos and of N. Achialos serve charter flights for the needs of the tourist period with increasing tendency.

3.2 Energy

With regard to the energy networks, the central pipe of natural gas goes through the Region and the infrastructure in the networks of medium and low pressure in Larissa and Volos has progressed considerably. Some big enterprises have been already connected to the network and

operate with natural gas. The completion of the network and the generalization of the use of gas in rural exploitations (eg. greenhouses), in industrial enterprises and in domestic consumption, constitute an overbearing target with positive prospects for the development of the Region.

3.3 Health and welfare

In the sector of health, the Region of Thessaly falls short in comparison to the national average. The hospital beds per 1.000 residents hardly reach 67.4% of the corresponding national average in 1994. Doctors per 1.000 residents are hardly 61,1% of the corresponding national in 1995. Today the situation has improved considerably with the operation of the Regional Hospital of Larissa, the improvement of the General Hospital of Larissa. The situation will be improved more with the completion of the Hospital of the Prefecture of Trikala.

3.4 Education

The infrastructures of education have been completed to a large extent during the previous decades. Nevertheless the program still remains to be completed, with the integration of School buildings mainly in the large urban centers, and the completion of the infrastructure in the primary education. In the Region, 93.146 students attended school in the school year 1996-97, distributed in 1.946 units.

In the primary education the proportion of the students per classroom is 15,5 with the Region being in a better place than the country average (17,3). In addition, 73,8% of the elementary schools function exclusively in the morning, without double shift (national average is 81,4%). In high schools, the proportion of students per classroom is the 25,0 and the Region is in better position than the country with 25,4. A percentage 83,3% of high schools operate exclusively in the morning (69,4% in the country). With regard to the general Lyceums, the ratio of students per classroom is 24,8 (national is 24,4). Of the Lyceums, 86,6% function exclusively in the morning while the average of the country is 66,9%.

In the Region of Thessaly, the University of Thessaly operates with four (4) Schools and sixteen (16) Departments in Volos, Larissa, Karditsa and Trikala, and the Technological Educational Institution in Larissa.

3.4 Environment

Thessaly has an appreciable variety of ecosystems and an environment with particularly high aesthetics, cultural and historical value as well as natural beauty. A long list of regions of protection of nature and of cultural heritage and landscapes of natural beauty (Marine Park of Sporades, Olympus, Valley of Tempi, Ampelakia, Pelion, Skiathos, Skopelos, Meteora, Plastira Lake, Aspropotamos, Pindos, Pertouli etc.) confirms the importance of the environment for the life and identity of Thessaly, marking simultaneously the possibilities of exploitation and the increased responsibilities for protection.

In general Thessaly is characterized by satisfactory conditions of environment and quality of life in the residential areas, by good conditions in the natural environment and on the whole competitive conditions of environment with international criteria, if we take into consideration the possibilities of further improvement.

For the problems of the environment, there is a need to confront the deterioration of natural ecosystems (mainly water and land) from the excessive use of pesticides and fertilizers (eutrophy, pollution, reduction of fauna etc), as well as the need of optimization of management of water resources and solve the problem of waste (and other inconveniences) from the operation of veterinary surgeon units.

3.5 Other categories of infrastructures

In the sector of telecommunications, Thessaly is found in a lower level than the national average. More specifically, the number of telephones/1000 residents for the year 1997 was 42,7 for the Region and 51,7 for the country. The percentage of electric energy consumption is particularly high in the industry (1997) where it reached 37,9% (33,6 in the country), while for the domestic use was 24,3% (national is 33,7). Two organized Industrial Regions (Volos and Larissa) operate in the Region of Thessaly.

4. Intra-Regional Inequalities

4.1 Inter-Prefecture inequalities

Thessaly is a Region that is characterized by differences in the indicators of prosperity, production structure and development between its eastern parts that include the prefectures of Larissa and Magnesia and its western that include the prefectures of Karditsa and Trikala. These differences are obvious in the demographic indicators, where the rate of increase of the eastern part is more than double in comparison to the western part, as well as in the structural indicators. For these reasons basic goals and decisions of the Regional Council are:

a) Smoothing of intra-regional inequalities
b) Recognition of the particular development hysteresis of the western part of Thessaly and of the need for acceleration of development in these regions
c) Recognition of specific problems encountered in the regions with high unemployment and the need of promotion of special developmental actions in these regions.

The most developed prefecture is Magnesia, the per capita GNP of which exceeds the average per capita GNP of the country, despite the reduction during the last years. The remaining prefectures, except the prefecture of Karditsa that maintains a relative stability, had also a reduction in per capita GNP. From the calculation of Factor of Variability depending on the change of distribution of GNP for the years 1989-1994, there appears to be an increase of inequalities (from 35,8 in 1989, reached 36,3 in 1994). The Larissa has increased its rate of contribution to the total regional GNP, confirmed by other indicators, as shown in the table.

Prefectures	GNP (Country=100)		% Distribution of GNP		% Distribution of the population		% Distribution of the urban population		% Distribution of employment in secondary sector		% Distribution of employment in tertiary sector	
	1989	**1994**	**1989**	**1994**	**1991**	**1996**	**1981**	**1991**	**1981**	**1991**	**1981**	**1991**
Karditsa	95,1	95,3	17,5	18,5	17,3	17,4	9,5	9,4	11,6	11,3	13,9	14,1
Larissa	90,4	89,0	35,7	36,1	36,8	36,7	38,6	39,1	37,5	39,5	37,3	37,2
Magnesia	111,1	104,2	31,9	31,4	27,0	27,1	36,4	36,2	36,0	32,2	31,5	31,2
Trikala	73,6	66,6	14,9	14,0	18,9	18,8	15,5	15,3	14,9	17,0	17,3	17,4

In addition to the intra-regional inequalities, there exist intense intra-prefectural inequalities, because of the existence of important percentage of mountainous and disadvantageous regions.

♦*Mountainous /Internal zones*

The mountainous area covers 45,6% of the total area of the Region. The population is 109.660 residents and cover 14,9% of the total population of the Region.

♦*Insular space*

The insular cluster of Northern Sporades with the islands of Skiathos, Skopelos, Alonnisos as well as smaller ones belongs to the Region. The basic characteristic of these islands is the intense tourist development with tendencies of saturation, mainly in Skiathos.

♦*Urban Centers*

The urban population of Thessaly amounts to 44% of the total population of the Region. According to census of 1991, the urban centers are Larissa (113.090 residents), Volos (Municipality of Volos 77.192, urban area of Volos 110.000), Trikala (48.962), Karditsa (30.289) and Tyrnavos (12.197). However, from 1991, the tendency of urbanization has been increased with the development of other dynamic urban centers of small and medium size.

For the exploitation of urban centers in the developmental process, it is required: a) specialization of their developmental role, b) exploitation their enterprising and developmental infrastructures, c) improvement of urban under-structures and super-structures, and d) support and development of their "promotional activities". These factors are taken into consideration in the determination of the goals of the development strategy of the Region.

Urban Centers	Developmental Role	Enterprising and Development Infrastructure	Promotional Activities
Larissa	Regional Pole of Development	PATHE Rail network	Commerce services Regional services Agricultural sector Industry-Small industry Higher education
Volos	Regional Pole of Development	Harbor Connection with PATHE Rail network Technological Park	Commerce– sea transport Highest education Special types of tourism Education, Research activities Industry-Small industry
Trikala	Prefecture Pole of Development	Connection with Egnatia Rail network	Agricultural sector Local products Special types of tourism
Karditsa	Prefecture Pole of Development	Connection with PATHE Rail network	Industry-Small industry Agricultural sector Special tourism
Other centers			
Tyrnavos	Local Centre of Development	Connection with PATHE	Services to agricultural activities Local agricultural products

4. Axes of Priority

4.1 The new development strategy

The priorities for Thessaly constitute the specific axes of the new strategic development of the Region for the period 2000-2006, as a sequence to the programs of 1986-1999 that covered to a degree the developmental hysteresis and set the bases for the new prospects of the Region.

The process of development of the Region during the last 25 years was based mainly on the soft and progressive differentiation of an oversized primary sector to the secondary and mainly tertiary sector. This process was not completed, so that the current status of the Region presents a mix of sectors where rural communities have an important size, compared to other rural regions of the country and Europe. On the contrary, the secondary and tertiary have not managed to exceed the critical size and degree of development, and as a result are still characterized as traditional.

The rural sector was the blood donor for the development of the Region, supporting the high percentage of GNP (35,5%), the high employment (39%), as well as the development of the manufacturing sector, based on agricultural raw materials, and the development of services sector. Fundamental reason for this development is the guaranteed prices and the protection mechanisms

of CAP as well as the orientation of producers to increase their production without important increase of productivity and, consequently of agricultural income. Despite the reformation of CAP in 1992 and the adoption of mechanisms for production increase, the rural sector continued the same model of development with minimal improvements. It had as result, on one hand, the non-increase of income despite the intensifying production and, on the other hand, the rapid deterioration of the environment (pollution of aquatic resources, reduction of forests, diminution of soil etc).

The high degree of dependence of agricultural income on the subsidies of EU maintained high price of land and, in turn, it deterred so much the enlargement of agricultural exploitations to viable sizes. This caused the accumulation of population in urban centers, formed in high blocks of flats instead of along the road axes.

The manufacturing sector was developed in regions that were encouraged either by motives or by large works of infrastructure or in regions where industrial delivery preexisted (port of Volos). This development happened considerably in eastern Thessaly and mainly along the axis Larissa –Volos, in contrast to the traditional form of western Thessaly

As it concerns the services, the tertiary sector was particularly encouraged by the central geographic position of the Region, the urban centres of Larissa and Volos that were enlarged and developed to important administrative centres. Tourism, despite the rich tourist resources of the Region, was developed in the islands of V. Sporades, Pilion and Meteora in contrast to other regions where this growth was small or null.

In the near future the Region should increase its developmental ability, shape a new viable sectoral mix incorporating modern sectors of high technology and modern organisation, develop the specialisations of its regions, the faculties and the accumulated know-how of its human potential, create critical sizes and develop new markets open to globalisation, but also to the new hinterland that is shaping in the northern borders of Greece. This objective should be achieved without stopping the efforts of lifting the inequalities, the protection of natural environment, natural resources and the regions of particular beauty, and the maintenance of social cohesion.

The development program should consequently have a more complete approach, better focus in sectors with important comparative advantage or particular problems that have not been solved, and be focused selectively in concrete geographic areas that will constitute poles of attraction with their growth.

The program should aim at the creation of one powerful urban-industrial and mainly administrative and technological centre that it will support and profit from the growth of the northern Greek Arc, consisting of the Regions of western Macedonia, central Macedonia and eastern Macedonia and Thrace. This centre will constitute a pole of growth attracting investments and basically supporting intervention of Greek infiltration in the arc Eastern Europe - Balkan - Black Sea - Middle East. The objective should be the "economic incorporation" (collaborations, networking etc) of the Region in an extended geographic entity in order that it will be developed. In this development choice they should participate equivalently all the regions and all the sectors of the Region with particular contribution of those that have already created the support mechanisms or have comparative advantages.

In the frame of the development program particular accent is given to three "special" types of action that aim at the growth and diffusion of innovation in the Region:

1) In the growth of innovation - the Region in collaboration with the state and the economic and social partners will select innovation and creation of forms of collaboration and networks between the most dynamic and modernizing elements of the enterprising world of the Region. For the promotion and growth of the Society of Information in the Region, the plan of action

forsees action that aims at the particular needs of the region for the achievement of the following strategic objectives:

a) modernisation of the educational system and promotion of Greek culture with the import and use of new technologies of information and communication

b) social growth with promotion and use of new technologies and applications in the benefit of services to the citizens for open government, with action for the improvement of quality of life in the region via applications of technologies of information and communication in the health, the transports and the environment

c) economic growth of the region with promotion and use of this new technologies in the SME, corresponding new methods of operation, electronic trade, and the growth of infrastructure of communications, particularly in remote and inaccessible regions

d) social cohesion and fighting of phenomena of social exclusion with the growth of action of training in the new technologies of information and communication on excluded social teams ph. Unemployed, young persons, immigrants etc supported from proportional action for the guarantee of access in the information

Specifically in the sector of services, that despite its augmentative tendency of growth continues falling short, will be sought to support and differentiate in the frame of strategic innovation and the new economy.

2) Particular accent is given to the complete urban growth of downgraded regions in local areas of small scale of urban centres where the urban environment is downgraded and/or where there exists concentration of non-privileged individuals. This action will be materialized with a complete approach of confrontation of problems from local authorities in collaboration with the national and regional authorities and the social partners.

3) With the action of complete growth of mountainous and removed regions of countryside, the attention will be focused in local initiatives and in a complete approach of resolution of their problems.

With regard to the Environment, basic priority for the period 2000-2006 is to harmonize the Region with Community Legislation (Directives 271/91 on the waste, 889/91 for the dangerous litter, 31/99 for disposal site, 442/75 as have been modified with the 156/97 for solid waste) and the international obligations with regard to sustainable growth. Also the region is committed to apply the provisions of directive 60/2000/EE in all the action that concern the management of water resources.

The investments in the sector of infrastructures will be supported by a complete national environmental policy. In the strategy of management of solid waste will be included preventive actions for the reduction of volume of waste and the encouragement of recuperation and recycling. All the action that concern solid waste will be based on the Prefecture/Region planning which will conform to the national planning of management of solid waste.

As for the application of directives 79/409/EOK (birds) and 92/43/EOK more specifically, regarding the work that could influence considerably regions that are probably included in the network Natura 2000 since the list of these regions already has been published, the national authorities commit to allow the devalorisation of the situation of regions in question in the frame of interventions of the structural funds.

Particular attention in the tertiary sector should be given to the sector of Tourism that has important comparative advantage in Thessaly because of the natural environment, the tradition and her history. In this sector will be sought the lifting of disadvantages through the complete

integration in the development process, in synergy with the corresponding action of the sectoral program for the Competitiveness.

The Region aims, on one hand, to upgrade the competitiveness of basic tourist products (Islands of V. Sporades, Pilion, Meteora, seashore of the prefecture of Larissa), to preserve its share in the international market, and to strengthen the advantages in the development of young persons, and alternative forms of tourism. Particular accent will be given to the development of soft forms of tourism in the mountainous and unfavorable regions that will avoid the conditions of over-concentration and saturation that is present the island and coastal regions. To achieve these objectives accent it will be given to the following sectors:

- aiding of competitiveness of existing tourist enterprises so that they can correspond to the drastically changing exterior environment
- modernization of existing tourist lodgings and enrichment of those services,
- improvement of quality of provided services of sector via training
- appointment and projection of tourist products in the internal and exterior market.
- aiding of alternative forms of tourism
- appointment and promotion the environmental and cultural resources of the Region.
- elongation of tourist period beyond the peak period.

The actions of the Regional program will function in synergy with the corresponding action of the National program as well as with interventions in the sector of human resources for the prevention and the fighting of unemployment, the appointment of dexterities, the promotion of employment and equal occasions of access in jobs market, what will be materialized via actions that are provided in the priority axis of Human Resources.

APPENDIX – V

TECHNOLOGY PARK OF THESSALY

The Technology Park of Thessaly (TEPATHE) was established in December 2001 by the Metallurgical Industrial Research & Technology Centre S.A. (MIRTEC, EBETAM in Greek) and 38 other shareholders mainly agencies and companies of the region of Thessaly. From the very beginning it has enjoyed the backing of the Region of Thessaly, the Greek Government and the European Union as part of their efforts to encourage actions facilitating the transfer of technology and knowledge from research institutes and centers to private companies. TEPATHE is the first Regional Park in Greece with a capital share of 520 kEuro.

TEPATHE is a new collaboration model of industrial, academic, research and government organizations, which was established to lead the knowledge based information society of the 21st century in the Region of Thessaly. The main objectives of the Technology Park of Thessaly are to: a) accelerate the establishment of new dynamic high technology companies, b) encourage the improvement of existing companies with the introduction of new technologies, and c) support local and regional development.

ACTIVITIES

The Technology Park of Thessaly promotes activities, which contribute to the increased competitiveness of the Thessalian Industry. This goal is pursued by participation in many European, national and regional development programmes. The transfer of deliverables of research and other activities of the Research Institutes and Universities to the industrial sector is encouraged by the Technology Transfer Unit which is under development in the Park. An information network will be established soon and will be expanded including research institutes, industries and regional development initiatives.

TEPATHE has as a short-term development strategy to start out as an incubator for small firms originating from regional Higher Education Institutes / Research Centres and the local community in the region of Thessaly. These start-up companies, once they grow beyond a certain limit, will move to independent premises.

SERVICES

The Technology Park of Thessaly fosters and supports new and dynamic high-tech companies and encourages companies from throughout the world to operate in its premises. The Park offers to the host companies the following basic support services: Administration & Reception Services, Networking, Internet Services, Logistic Services, Access to Scientific Library and to the Patent Office, Cleaning of the space, Collection and distribution of mail, Meeting Rooms and Conference Room, Security, Parking space, Restaurant

The services will soon include: Coaching services, Legal advising, Business planning, Marketing planning, Technology brokerage, Financial support including Venture capital, Business Angels capital and Seed capital. Many other facilities are available on the Technology Park, often without charge or at a discounted rate for tenants. These include: photocopying and facsimile services, business and technology support services, catering etc.

Future actions of the Technology Park of Thessaly will be: a) to develop the necessary infrastructure for providing technical assistance and services, including consultancy and management training, b) to organize the collection, presentation and dissemination of the relevant information and the development of a marketing platform, c) to support the host companies with venture capital and seed capital for their development, and d) to encourage international companies and associations to use the Park's facilities.

INCUBATION FACILITIES

Incubation facilities were developed in MIRTEC's premises in the A' Industrial Area of Volos through a project financed by the Region of Thessaly. A 4,000 m2 flexible space equipped with modern infrastructure is available to accommodate new businesses at a very low rent. TEPATHE encourages companies, natural persons, or legal entities to come and operate under various capacities and also to take advantage of the variety of skills, techniques and products. The available spaces of the incubator fall in three different categories: a) Individual office suites (16) from 30 to 40 square meters, b) Individual laboratory space suites (7) from 30 to 45 square meters, and c) Individual space suites for Industrial Pilot Applications (6) from 160 to 320 square meters

HOSTED COMPANIES

NO	COMPANY NAME	PRODUCTS	ADDRES - CONTACT
1	FUTURE TECHNOLOGY SYSTEMS S.A.	*Rapid Prototyping, Industrial Design CAD/CAM, 3D Scanners, Metrology and Reverse Engineering,Surface and Solid Modeling*	E-mail:info@fts.gr, http://www.fts.gr Tel. : +30-24210-78295 Fax : +30-24210-78294 Responsible : Themis Sittas
2	TECTRANS HELLAS	*Technology Brokers. Production of catalysts from Zeolites*	E-mail : tectrans@internet.gr Tel. : +30-24210-78297 Fax : +30-24210-78296 Responsible: Constantin Zografou
3	SERVICE PRINT S.A.	*Multimedia applications. Digital printing*	E-mail : serviceprint@internet.gr Tel. : +30-24210-78380 Fax : +30-24210-78381 Responsible : George Kirkos
4	KOMEL S.A.	*Industrial Automation and Instrumentation Systems (Power circuits, invert PLCs) Production reporting, Customized industrial software, SCADA systems, Maintenance management systems, Project management.*	E-mail: komel@Ath.forthnet.gr http://www.komelgr.com Tel. : +30-24210-78430 - 2 Fax : +30-24210-78433 Responsible: Dimitrios Dokas
5	ONLINE LEARNING	*Software development, e-business, e-learning*	E-mail: info@onlinelearning.gr http://www.onlinelearning.gr Tel. : +30-24210-78396 - 2 Fax : +30-24210-78397 Responsible: Aggeliki Veneti
6	ARGOnet - THESSALIA NET S.A.	*ISP, Internet provider, software development.*	E-mail: info@argo.net.gr http://www.argo.net.gr Tel.: +30-24210-76400, 23460 Responsible: Vasillis Vorrias
7	INFRARED RADIATION - KARAGIANNIS	*Production of infrared dryers for different industrial applications.*	E-mail : eyat@otenet.gr Tel. : 30-24210-78299 Fax : +30-24210-78298 Responsible:Andreas Karagiannis
8	IMB - Internet Multimedia Bureau	*Web site development, music composition.*	E-mail: contact@imb.gr http://www.imb.gr Tel. : +30-24210-95684 Fax : +30-24210-78298 Responsible:Stavros Linos,O. Mammis
9	GIANNIKOS S. Ltd	*Innovative bookbinding techniques.*	Tel. : +30-24210-78887/9 Fax : +30-24210-78298 Responsible: Spiros Giannikos
10	PIXEL SELECTIVE PLATING	*Surface treatment of electronic equipment*	Tel. : +30-24210-78299 Responsible: Vasillis Piskas, K. Dimitriadis
11	TEK – N. MAMALOUDIS	*Pilot pressure casting for small items*	Tel. : +30-24210-95048 Fax : +30-24210-78298 Responsible : Nikos Mamaloudis
12	K. TZIFAS Ltd	*Industrial automation and robotics*	Tel. : +30-24210-78299 Fax : +30-24210-78298 Responsible: Constantin Tzifas

SHAREHOLDERS

No.	NAME	Share %
1	DEVELOPMENT COMPANY OF MAGNESIA S.A.	0,25
2	DEVELOPMENT AGENCY OF KARDITSA S.A.	0,50
3	DEVELOPMENT AGENCY OF PREFECTURE OF TRIKALA	0,25
4	VEMEKEP S.A.	2,97
5	MUNICIPALITY OF AISONIA	0,74
6	MUNICIPALITY OF VOLOS	2,48
7	HELLENIC AEROSPACE INDUSTRY S.A.	2,48
8	MIRTEC S.A. (EBETAM AE)	35,67
9	EPIKINONIA Ltd	0,25
10	CHAMBER OF LARISSA	2,48
11	DEVELOPMENT AGENCY OF CHAMBER OF MAGNESIA	0,20
12	EXIN S.A.	2,48
13	ZEYXIS Ltd	0,50
14	INTRACOM S.A.	3,94
15	INTRAMET S.A.	3,94
16	EDUCATION & TRAINING CENTRE OF MAGNESIA	0,39
17	NIK. KIOLEIDES S.A.	3,94
18	METKA S.A.	3,94
19	I. BEKRODIMITRIS S.A.	2,48
20	UNIVERSITY OF THESSALY	2,47
21	I. PAPAGEORGIOU & Co.	0,25
22	REGIONAL DEVELOPMENT FUND OF THESSALY	2,48
23	SIDENOR S.A.	3,94
24	ASSOCIATION OF INDUSTRIES OF THESSALY & CENTRAL GREECE	0,50
25	ASSOCIATION OF THESSALIAN INDUSTRIES	1,49
26	COOPERATIVE BANK OF KARDITSA	0,50
27	TECHNOLOGICAL INSTITUTE OF LARISSA	0,79
28	ASSOCIATION OF MUNICIPALITIES OF LARISSA	0,79
29	TEMKA S.A.	1,58
30	NIK. TRAILERS S.A.	3,94
31	BANK OF ATTICA	2,48
32	HYDROELECTRICA S.A.	0,25
33	HALYVOURGIA THESSALIAS S.A.	0,59
34	BRAIN S.A.	0,39
35	FUTURE TECHNOLOGY SYSTEMS S.A.	0,50
36	LAMIAS Ltd	0,39
37	LINOMEDIA S.A.	2,48
38	PLANNING S.A.	0,39
39	SOVEL S.A.	3,94

APPENDIX VI

METALLURGICAL INDUSTRIAL RESEARCH AND TECHNOLOGY DEVELOPMENT CENTRE (MIRTEC - EBETAM)

1. Brief History and Background

MIRTEC S.A. (Metallurgical Industrial Research and Technology development Centre) EBETAM in Greek, was founded in 1985 by the General Secretariat of Research and Technology. The main organizations participating in the initial investment capital were the Public Electricity Board, the Hellenic Ferroalloys, SIDENOR, EMMEL and ELBO. MIRTEC has been the first company of Industrial Research and Technological Development, ever founded in Greece. MIRTEC's objectives are the application and exploitation of scientific research and technology results, by providing high quality technological services to the metallurgy and metals sectors. Volos was selected because it had been the biggest metallurgical centre in Greece, with significant tradition and activity in the metals and construction sector, and secondly it is located in the middle between the two biggest metallurgical centres, Athens and Thessaloniki.

MIRTEC was thus established in the A' Industrial Area of Volos, in a building occupying 400m^2. In the beginning of 1986 and after the company had acquired some basic equipment, it initiated its professional activity by participating in research projects and by offering technical services to the industrial sector. During its first year of operation, MIRTEC, in collaboration with Hellenic Ferro Alloys SA, submitted two research projects, one national and one European with the participation of British Steel. At the same time the first contract, worth 10 million GRD, was signed with PYRCAL for the reverse engineering and production of the electrical resistances of the conveyor belts used in the Public Electricity Board works.

Since 1987 the company is progressing in all its activity sectors. By its accession into the Mediterranean Integrated Projects of East - Central Greece, an amount of 10 mil.GRD was raised, the whole of which was allocated for the enforcement of its laboratory substructure. In the following years, the company developed intensive applied industrial research activities, in collaboration with the Greek Industry. Till today it has participated in more than 50 National and 30 European research projects. Thus the company has succeeded to be recognized as a trustworthy research organisation in the European business, technological and industrial community. In parallel, the company is showing a continuous expansion of services to the industry focused on: a) Quality control of metallic items, b) Inspection and certification of installations, c) Case studies for the improvement of production routes, d) Reverse engineering of metallic parts for domestic production, e) Technology transfer, and f) Industrial staff training in quality control methods, welding technology, metallography etc

In 1990, via the 1st European Support Framework, MIRTEC was financed through two investment programs, totaling to 1.1 billion GRD. From 1991 to 1993, through the materialisation of these two programs, the company:

- Acquired a site of 32,000 sq.m in the A' Industrial area of Volos, with 7,500 sq.m built installations. The company moved to its new premises at the beginning of 1994.
- Created (4) laboratories, specialising in the quality control of metallic materials and parts: *Chemical Analysis, Mechanical & Hydraulic Testing, Non-Destructive Testing,* and *Metallography & Microscopy*
- Created (4) small scale production units in which new technologies are tested, technologically advanced products are produced and industrial problems are solved: *Anodising Plant, Laser Unit, Thermo-Chemical Treatment Plant,* and *Pilot Foundry*.

In 1995, MIRTEC was certified according to EN ISO 9002 for the total of its laboratory testing. The new installations and equipment have contributed immensely to an increase in its turnover during the 5-year period from 1993 to 1997. The number of industrial customers being 20 at the end of 1986, was raised to 530 at the end of 1991 and 750 at the end of 1997.

The effort for the company to operate as a national centre for scientific and technological support to the metals sector in Greece, is continuing through the materialization of two new investment projects under the European Support Framework II amounting to about 700 mil. Drs. Two new laboratories were founded for the testing of Concrete and Gas Appliances. New activities in the area of Industrial Testing and Certification also started.

MIRTEC has been approved as a body for providing Services of Occupational Health & Hazard. The procedures for the accreditation of the company by the Hellenic Accreditation Council have been completed, and now MIRTEC SA is accredited in the following fields as:

- Type A inspection body according to specification ELOT EN 45004 (Certificate No. 28/01)
- Industrial products and procedures certification body according to specification ELOT EN 45011 (Certificate No. 27/01)
- Quality assurance systems certification body according to specification ELOT EN 45012 (Certificate No. 26/01)
- Laboratory testing body according to ELOT EN ISO/IEC 17025 for a specified number of physical, mechanical, chemical and non-destructive tests.

In parallel, under the financial support of the Region of Thessaly, MIRTEC has coordinated the foundation of the "Centre for the Strengthening of Structures for the Transfer of Technology & the Promotion of Innovation", which is based in MIRTEC.

In the beginning of 1994, MIRTEC was transferred to new privately owned installations in the A' Industrial Area of Volos, situated in an area of 32,000 sq.m., the buildings (offices, laboratories, industrial grounds) occupying an area of 7,500 sq.m. The Fixed assets of the company today amount to 2 bil. GRD.

2. Main Activities

Services are directed towards a wide range of industrial applications. A short description of the main technological requirements set by the main industrial sectors in Greece, is given below:

Metallurgical industries: In collaboration with MIRTEC, metallurgical industries in Greece carry out research projects aiming at the increase of their productivity, the improvement of their products quality and the environmental consequences, the introduction of expert systems, and/or recycling of their by-products.

Casting plants: Casting plants assign to MIRTEC the supervision of the production of high specification cast parts, either through research work or specific contracts. They also assign services of product quality control.

Petrochemical - Chemical plants: The main demands of this sector are focused on quality control and inspection of their equipment, failure analysis and corrosion studies, as well as the production of corrosion resistant materials.

Defense Industry: It comprises the main customer of the company's Anodising plant. There is also demand for reverse engineering services and laboratory quality tests.

Construction Industry: Quality control and assurance services for raw materials and new installations are requested, together with consultancy work on welding technology.

LPG and industrial gases Industry: There is a demand for quality control and certification services for pressure vessels and tanks.

3.1 Research Projects

One of the main activities of MIRTEC is the supply of services and support to the industry, through applied industrial research. MIRTEC has developed research collaborations with most Greek industrial enterprises and a large number of SME's, thus contributing to technology transfer, design and production of new products, property improvement of old products, improvement and modernisation of production routes, environmental problems solving. The main scientific areas of interest are: *extractive metallurgy, physical metallurgy, casting technologies, laser technology, new product development,* and *environmental technology*. The company has also collaborated with large European enterprises through research projects as a result of which it has contributed to the diffusion of new technologies to the relevant Greek industrial sectors. An Indicative list of research projects is given below.

National Projects

- MINT (Technology transfer and development of new technologies by SME's in Greece)
- PAVE (Development of industrial Research and innovation program)
- MENTOR (Cooperation development between research companies/institutions and industry)
- PRISMA (Accrediation of companies according to ISO-9000).
- RETEX (Regional EU action targeted on development, technology know-how and quality)
- EPET (National Research & Technology program)

European Projects

- BRITE-EURAM (Basic Research and Industrial Technology targeted on improving European industry competitiveness)
- CRAFT (Research action on SME's cooperation)
- ENVIRONMENT (Environmental protection program)
- ESPRIT (Information technology research)
- BCR (Applied metrology program)
- ECSC (European Community Steel and Carbon program)
- SPRINT (Strategic program in innovation and technology transfer)
- EUREKA (Improvement of competitiveness and productivity of European industry)
- RAW MATERIALS (Improvement of Research technologies of enrichment and treatment of mineral raw materials)
- NATO-Science for Stability (Program for the support of applied research actions targeted in energy saving and productivity / improvement in Greek industry)
- INTERREG (Program for the development of border areas and cooperation among neighbor countries)

Through the **active information center,** operating at MIRTEC, one can acquire information and advice on Greek and international technology know-how in the area of metallurgy from the library which covers standards and bibliography on applied science and technology issues and especially metallurgy and quality control. And through on-line searches in Greek and European databanks on metallurgy and materials science are performed.

3.2 Inspection / Certification of Industrial Plants and Products

MIRTEC is accredited by the Hellenic Accreditation Council to carry out:

- Inspection of products and installations, under the terms of the ELOT EN 45004 standard, as a Type A Inspection Body and as specified in the relevant scope (No of Accreditation Certificate : 28/01).

- Certifications of products and procedures, under the terms of the ELOT EN 45011 Standard, as specified in the relevant scope (No. of Accreditation Certificate 27/01).
- Certifications of Quality Assurance Systems, under the terms of the ELOT EN 45012 Standard, as specified in the relevant scope (No. of Accreditation Certificate 28/01).

Some of the company's activities in the inspection and certification field include the inspection and certification of pressure vessels and pressure equipment (notified body), the inspection of refinery (LPG, ammonia , VCM) tanks , the inspection of urban networks for natural gas, the inspection /certification of water supply & sewage systems, the inspection and certification of scaffolding, welding procedure and welder specification, inspection of welded pipes, certification of machinery, certification of lifts (notified body), gas appliances, fire extinguishers, shop & field inspection projects

3.3 Case studies

The following services are offered: a) Failure analysis work as requested by the industrial sector, and b) Reverse engineering for the domestic production of parts that are currently imported. The work includes Analysis of imported samples, Design of new samples, Trial production, Design of final part, Production of final part, Quality control and supervision of final production. Typical reverse engineering projects carried out include :

- Carburetor and cylinder head for a military vehicle engine
- Cylinder sleeve for a submarine engine
- Transformer resistances for the Public Power Corporation works
- Spare parts for machinery operating at various industrial plants
- Molding equipment - design and manufacture
- Sealing plate for earth mills

Investigation of specific problems encountered during production such as :

- Production of specific grades of cast iron
- Improvement of welding techniques
- Introduction of improved materials in the production line
- Improvement of production routes

3.4 Laboratory testing

Most of the work is carried out at the company's laboratories. There are six fully equipped laboratories : Mechanical & Hydraulic Testing, Nondestructive Testing, Chemical Analysis, Metallography & Microscopy, Concrete, and Gas Appliances. The first four (4) of these labs have recently been accredited by the Hellenic Accreditation Council for a number of mechanical, non-destructive, physical and chemical tests (No. of Certificate 64).

- Destructive Testing Laboratory
  Mechanical testing is carried out in MIRTEC's Mechanical & Hydraulic Testing Laboratory. The following tests can be performed using international standards (ASTM, DIN, ISO, etc.) Tensile, Impact, Hardness, Bending, Fatigue, Creep, Hydraulic Pressure.
- **Non Destructive Testing Laboratory**
  The Non Destructive Testing Laboratory carries out inspection and testing on metallic constructions and materials, issuing the relevant certificates. The Non Destructive Testing methods used, cover visual inspection, X rays, ultrasonic, magnetic, dye penetrants
- **Chemical Laboratory**
  The Chemical Laboratory of MIRTEC performs chemical analyses of different materials. Most elements (metallic, non-metalic) in samples of different forms can be analysed such

as metallic samples, ores, minerals, composite materials, environmental samples (waters, disposals etc.). Trace element in most materials categories can also be detected.

- **Metallography & Microscopy Laboratory**

  In the Metallography & Microscopy Laboratory the following tests are carried out : Macroexamination (e.g. for the evaluation of welds, castings etc.), metallography for qualitative and quantitative microstructural characterization, portable metallography – replica for in situ non-destructive microexamination, microhardness for phase hardness measurement and microhardness profile of surface hardened materials, X-ray diffraction for qualitative crystal phase and compound determination in solid materials, determination of stainless steel resistance to intergranular corrosion in accordance with DIN 50914, scratch test for the determination of coating adhesion.

  In order to evaluate the behavior of materials at specific industrial conditions, corrosion tests under simulated environments can also be designed and performed, such as Special immersion tests according to ASTM and DIN standards, Koesternich test (DIN 50028), salt-spray test (ISO 9227), cycle oxidation test, stress corrosion cracking tests under special conditions of temperature and pressure, electrochemical tests using special potentiostatic devices.

  Corrosion rates can thus be determined and corrosion mechanisms studied. In addition the laboratory can offer consultancy on corrosion issues. Cooperation with European Corrosion Labs has been developed.

- **Concrete Laboratory**

  The laboratory is developing activities in sampling and testing concrete specimens.

- **Gas Appliances Laboratory**

  Specific tests for the certification of gas appliances according to the Directive EC 90/396 can be performed.

3.5 Production plants

Anodising Plant

A high standard Anodising and Painting of Al alloys unit is operating offering the following services : Chromic anodizing, Hard anodizing, Sulfuric anodizing, Dyeing, Painting, and Alodine treatment. Depending on the kind of treatment, anodic layers produced can have flexibility, hardness, high temperature and corrosion resistance, thermal and electrical insulation. The surfaces produced are of high standards and they find applications in the Aeronautics sector, Defense & Shipbuilding industry.

In the paint shop adhesive and oxidation resistant layers can be achieved, the treated surface acquiring extremely high resistance to aging as well as aesthetically perfect appearance. Depending on the kind of treatment, anodic layers produced can have flexibility, hardness.

Laser Industrial Application Unit

The CO_2 Laser Industrial Applications Unit operating on a productive scale, provides services to different sectors of the Greek industry. Research work is also carried out and cooperation with foreign institutes has been developed for new applications of the laser beam.

Applications

Cutting (steel up to 10mm in thickness), drilling, marking, welding (steel up to 4mm in thickness), surface treatments (surface painting, cladding)

Materials

Inflexible and flexible materials, stainless steel, Al alloys, Ni alloys, Ti alloys, glass, plexiglass, PVC, carton, cloth, synthetic materials

Advantages

Very good quality of cut edges, Low heat influence on the material, High accuracy (± 0,05mm), Best cutting repetition, Nesting, High working speed rates, Hard materials cutting

Extractive Metallurgy Pilot Plant

The main activity of the extractive metallurgy plant is the research and development of new production pyrometallurgy methods, with the aim to provide technology demonstration and information on the industrial application of new technologies. The following technologies are applied :

- Solid state reduction of chrome, manganese and lateritic ores and concentrates
- Smelting of quartz and chromite to produce ferrosilicon and ferrochromium
- Calcination of olivine, laterite and manganese ore
- Roasting of tailings from chromite beneficiation
- Corundum production by bauxite roasting

Casting Plant

MIRTEC SA, in collaboration with other foundries and users of cast parts in Greece, noticed that reverse engineering of imported cast parts requests serious work and experimentation, that is not possible to be performed in the old foundries. At the same time, there is a lack of development and casting work as far as new and advanced materials are concerned. By having established the pilot foundry, MIRTEC S.A. :

- Is fulfilling the needs for small size and quantities production of special cast parts of Steel, Aluminium and Copper alloys
- Applies and develops new casting technologies
- Performs research work for Special Steels, Aluminium and Copper alloys of high specifications
- Develops new and advanced materials and follows the international evolution in this area.

Alloys that can be cast include cast irons, plain carbon and stainless steels, copper alloys.

Thermochemical Treatment Plant

Gas carburising and nitriding processes as well as heat treatment cycles in an inert atmosphere can be performed here. The PC controlled batch furnace has a volume of $1m^3$ and it is equipped with an automatic loading and unloading system.

4. Organizational Structure

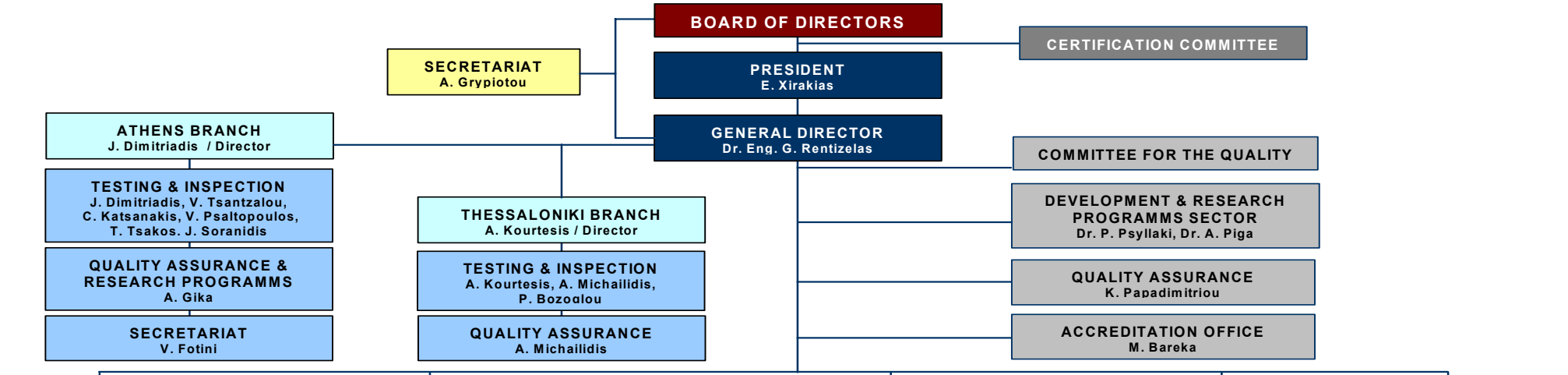
A Board of Directors of seven members is directing MIRTEC. One of the members is assigned by the General Secretariat of Research and Development and one by the Greek Organisation of SME's. The General Assembly of Shareholders elects four members, while one representative is elected by the employees. The Board of Directors selects the General Director, to whom executive duties are allocated. The organisational chart is laid out on the following page.

5. Scientific Personnel

MIRTEC's scientific personnel includes Mining and Metallurgical Engineers, Mechanical & Electrical Engineers, Chemical Engineers, Physists, a Materials Scientist, and a Mechanical & Industrial Engineer.

	SHAREHOLDER	Shares	%
1	THE GREEK STATE (Ministry of Development – General Secretariat for R & D)	3.388	58,27
2	THE GREEK ORGANISATION OF SME's	600	10,32
3	THE PUBLIC POWER ORGANISATION	432	7,43
4	SIDENOR S.A.	160	2,75
5	HELLENIC STEEL S.A.	40	0,69
6	STEEL WORKS S.A.	40	0,69
7	STEEL WORKS OF THESSALIA S.A.	40	0,69
8	MYTILINEOS HOLDIND S.A.	500	8,6
9	THE RESEARCH CENTRE OF MUNICAPILITY OFVOLOS	4	0,07
10	HELLENIC ARMS INDUSTRY S.A.	5	0,09
11	THE GREEK ALUMINIUM INDUSTRY S.A.	120	2,06
12	HALCOR S.A.	80	1,38
13	PIPEWORKS OF KORINTHOS S.A.	28	0,48
14	GREEK CABLES S.A.	40	0,69
15	EXALCO S.A.	20	0,34
16	PREFECTURAL AUTHORITY OF MAGNESSIA	1	0,02
17	SOVEL S.A.	295	5,07
18	HELLENIC AEROSPACE INDUSTRY S.A.	20	0,34
19	THE TECHNICAL CHAMBER OF GREECE – DEPARTMENT OF MAGNESSIA	1	0,02
TOTAL		5.814	100

ORGANIZATIONAL CHART



STUDIES SECTOR

Failure Analysis
P. Polatidis / *Director*
K. Papadimitriou
P. Psyllaki
A. Stamou

Reverse Engineering
P. Polatidis / *Director*
K. Papadimitriou
P. Psyllaki
A. Stamou

Oxidation / Corrosion
P. Polatidis / *Director*
K. Papadimitriou
P. Psyllaki
A. Stamou

TESTING & INSPECTION SECTOR

Pressure Equipment
A. Stamou

Machinery
A. Stamou

Gas Appliances
A. Tzamtzis / *Director*

Portable Fire Extinguishers
A. Tzamtzis / *Director*
A. Stamou

Concrete Reinforcement Bars
V. Papaspyrou / *Director*
P. Psyllaki

Welding
A. Stamou
P. Kotoulas
S. Schinas

Industrial Inspection
A. Stamou
P. Kotoulas
S. Schinas

Quality Assurance
A. Tzamtzis / *Director*
V. Papaspyrou / *Director*
A. Stamou

LPG Equipment for Vehicles
A. Tzamtzis / *Director*
A. Stamou

ADR Vehicles
A. Stamou
H. Pavlidis
N. Triantafillopoulos
V. Bokotas

Non Refillable Gas Cartridges
A. Stamou

Lifts - Crains
V. Papaspyrou / *Director*
V. Stogias

Occupational Health & Hazard
J. Brekis
A. Michailidis
V. Gourgoulianis
S. Tsakogias

Environmental Studies
G. Archontis / *Director*
S. Katsalis
A. Piga

LABORATORY SECTOR

Mechanical & Hydraulic Testing
V. Papaspirou / *Director*
P. Psyllaki

NDT
A. Stamou
P. Kotoulas
S. Schinas

X-Rays
A. Stamou
P. Kotoulas
S. Schinas

Pressure Vessels
A. Stamou
P. Kotoulas
S. Schinas

Gas Appliances
A. Tzamtzis / *Director*

Concrete
J. Brekis
S. Tsakogias

Metallography & Microscopy
P. Polatidis / *Director*
K. Papadimitriou
T. Theocharis

Chemical Analyses
G. Archontis, *Director*
S. Katsalis
T. Theocharis

Technicians
T. Panayiotou
N. Papachatzis
V. Pisiotis
P. Veligiannidis

PRODUCTION SECTOR

Anodising Plant
G. Archontis, *Director*
S. Katsalis

CO_2 Laser Unit
V. Papaspyrou / *Director*
V. Stogias

Pilot Foundry
P. Polatidis / *Director*

Thermochemical Treatment Plant
P. Polatidis / *Director*

Technicians
Z. Volikakis
G. Grinias
T. Papaiosif
V. Pisiotis
D. Tsousis
C. Paparounas

FINANCIAL - ADMINISTRATION SECTOR

Financial Services
M. Zafiropoulou
A. Agrafiotou
J. Ganotopoulos

Accounts / Supplies
M. Ladopoulou

Personnel Office / Active Information Centre
M. Blanning

EDP Office
V. Gourgoulianis

Administration
G. Gouvani
K. Metaxopoulou
H. Rouka
N. Kapsiotou

APPENDIX - VII

THE UNIVERSITY OF THESSALY

1. Introduction

The University of Thessaly (UTH) was founded in 1984 and started its academic operation in 1988 with the two Pedagogic Departments of Primary and Preschool Education and the Department of Agriculture. It has demonstrated remarkable progress and it is now operating with four (4) Faculties, sixteen (16) undergraduate Departments, three (3) elective study programs and five (5) Post-graduate programs. Five (5) more Post-graduate programs will be running from the academic year 2004-2005.

During all years of operation, the University of Thessaly has given particular importance to the cultivation of principles that upgrade science with the aim to offer the best possible services to man and the public in general. Emphasis has also been placed on a qualitative academic environment, on contemporary equipment and on pioneering facilities, which result in an obvious presence of quality - an element that distinguishes the university more and more each year. Our efforts are continuous and focus on expanding the cognitive subjects, on establishing high level research, interdisciplinary approaches, and versatility in all areas such as computers and the Internet, digital libraries, and promotion of and financial support for student and professor mobility to many universities abroad.

With research and instruction as the driving forces of academic development, seeking collaboration with other universities and public or private organizations, with an effort to spread practical training of the undergraduates, an openness to freedom of expression, with good management and operation of the administrative and other services of the university, and with an effort to facilitate the undergraduates and render good services in matters of board, lodgings, and health care, the University of Thessaly is a dynamic organization continuously developing, adapting, and reshaping so that it is always in the vanguard, blazing a trail to new cognitive roads. All these are interwoven with the broader social environment for the benefit of the citizen because the scientific and academic manifestations of the university, its participation in the cultural and social surrounding, and its intense presence in the social events constitute essential and adequate characteristics of its operation

The University of Thessaly has set very high goals and, with the efforts and the will of all academic staff, personnel and students, it follows the international trends looking forward to the world of scientific developments. It has the potential to educate scientists of tomorrow, researchers of the future, and capable executives of organizations and corporations that will be able to correspond equally, forcefully, and efficaciously to the new and demanding needs and challenges of the new millennium.

2. Historical Review

The University of Thessaly was founded (along with the University of Aegean and the Ionian University) in 1984 with Presidential Decree 83. The seat of the University is the city of Volos located in east-central mainland Greece, 300 km from Athens and 200km from Thessaloniki. According to the founding Decree the University of Thessaly included the Departments of Agriculture - Crop and Animal Production, Physical Education and Sport Science, Primary School Education, Nursery School Education, and Planning and Regional Development. The Presidential Decree 302 in 1985 founded the School of Human Sciences (which included the two Pedagogic Departments and the General Department), the School of

Production Sciences (which included the Departments of Agriculture - Crop and Animal Production, of Planning and Regional Development, and Mechanical and Industrial Engineering). Furthermore, the Department of Medicine and the Department of Physical Education and Sport Science were founded as independent Departments.

Thus, the first phase of the organization and operation of the University of Thessaly involved eight (8) Departments, all of which were in Volos with the exception of the Department of Medicine, which was seated in Larissa. The two (2) Pedagogic Departments and the Department of Agriculture admitted students for the first time in the academic year 1988-1989. The following academic year 1989-1990, the Department of Planning and Regional Development admitted students, while the Department of Mechanical and Industrial Engineering and the Department of Medicine started their academic operation during academic year 1990-1991. The General Department, which did not directly accept students, began offering educational services to the other Departments.

With the Presidential Decree 177 in 1993, the School of Human Sciences was renamed to School of Humanities and the School of Production Sciences to School of Technological Sciences. In addition, the Departments of Special School Education, History – Archaeology - Folklore, Civil Engineering, Veterinary Science, Physical Education and Sport Science (re-founding), Dentistry, and Mathematics and Informatics were founded.

In the academic 1994-1995 the Department of Civil Engineering started its operation in Volos, the Department of Veterinary Science in Karditsa, and the Department of Physical Education and Sport Science in Trikala. In 1998-1999, the Departments of Special Education and of History-Archaeology and Folklore started operating in Volos. The Departments of Dentistry, and Mathematics and Informatics are not in operation and are in the process of being cancelled.

In addition, three Elective Studies Programs started their operation in 1998, including the Museum Pedagogic Education and Management of Regional Environment and Natural Resources in Volos and the Medical Biochemistry Program in Larissa. These programs will be terminated in 2005.

Presidential Decree 211 of 1999 founded the Departments of Economics, and of Architecture in Volos, which started operating in 1999-2000. Finally, Presidential Decree 82 founded in 2000 the Departments of Computer Engineering - Telecommunications and Networks in Volos, and of Biochemistry and Biotechnology in Larissa, which started their operation during the academic year 2000-2001.

During academic year 2000-2001 the School of Technological Sciences was renamed to School of Engineering. In addition, the School of Agricultural Sciences was founded, which included the Department of Agriculture - Crop Production and Agricultural Environment and the Department of Agriculture - Animal Production and Marine Environment. In addition, the Department of History - Archaeology - Folklore was renamed to Department of History, Archaeology and Social Anthropology.

3. Academic Structure

Today the academic organization of the University of Thessaly is as follows:

School of Humanities, including (4) Departments: Primary School Education (Volos), Preschool Education (Volos), Special Education (Volos), History-Archaeology and Social Anthropology (Volos)

School of Engineering, including (5) Departments: Planning and Regional Development (Volos), Mechanical and Industrial Engineering (Volos), Civil Engineering (Volos), Architecture (Volos), Computer Engineering - Telecommunications and Networks (Volos).

School of Health Sciences, including (4) Departments: Medicine (Larissa), Veterinary Science (Karditsa), Biochemistry and Biotechnology (Larissa).

School of Agricultural Sciences, including (2) Departments: Agriculture - Crop Production and Agricultural Environment (Volos), Agriculture - Animal Production and Marine Environment (Volos).

Independent Departments (2): Physical Education and Sport Science (Trikala), Economic Studies (Volos)

Elective Studies Programs (3): Museum Pedagogic Education (Volos), Management of Regional Environment and Natural Resources (Volos), Medical Biochemistry (Larissa)

4. University Administration

The administration of the University of Thessaly was initially assigned to a Administrative Committee, appointed by the Presidential Decree 83 of 1984. The mission of the Administrative Committee was the founding and staffing of the University administration and the management as well as the preparation of its academic functions until the election of the first Rectorate. The first Administrative Committee was appointed in 1984 and was seated in Athens. In September 1994 the seat of the Administrative Committee' was transferred to Volos, which is the University of Thessaly administrative seat.

As is the case with all Institutes of Higher Education in Greece, the University of Thessaly is a legal entity of public law with complete autonomy. It is supervised and funded by the state through the Ministry of Education. According to the framework Laws for Higher Education (1268/82 and 2083/92), Universities are managed by the Senate, the Rector's Council, and the Rector.

The *Senate* of the University of Thessaly consists of the following elected officials or representatives:

1. The Rector and the two Vice Rectors
2. The Deans of the Schools
3. The Chairmen of the Departments
4. One Student representative from each Department
5. Two Graduate Student representatives
6. One representative of the Assistants-Tutors-Scientific Collaborators
7. One representative of the Special Teaching Personnel
8. One representative of the Special Administrative Personnel
9. One representative of the Administrative Personnel

In addition, representatives of the Associate Professors, the Assistance Professors, and the Lecturers participate in the Senate in a number that is equal to 1/3 of the Departments of the University, no less than 6 and no more than the total number of Departments. When the number of Departments exceeds 15 the above number of representatives may be increased by 2 following a corresponding decision of the Senate. The two extra representatives originate from the Departments of the University that have the largest number of teaching and research personnel.

The *Rector's Council* is comprised of the Rector, the two Vice-Rectors, a Student Representative who is elected by the Students participating in the Senate, the Supervisor of the Secretariat of the University as an advisor, and a representative of the Administrative Personnel without the right to vote. Until the Supervisor of the Secretariat is elected and appointed the corresponding position in the Rector's Council is filled in by the Director of the Office of Administration Management, the Director of the Office of Financial Management, and the Director of the Technical Service who participate in the Rector's Council as advisors on issues of their expertise.

4. University Campuses

The University of Thessaly has campuses in four cities of the Region of Thessaly, namely: Volos, Larissa, Karditsa and Trikala.

The facilities of the University of Thessaly in Volos are assembled mainly in three areas: the *Harbor*, *Pedion Areos* and *Fytoko*. Other premises of the University are found in various points of the city centre. The University Central Library is in the area of Metamorphosis.

The *Harbour* complex (14.820m2) hosts various directorates of Administration as well as the Senate and the Rectorate, the School of Humanities, and temporarily the Library. The complex at *Pedion Areos* (about 20.000 m2) hosts the School of Engineering. Finally, the complex at *Fytoko* hosts the School of Agriculture.

The installations in Larissa are in the city centre as well as in its outskirts. The installations in the centre include the Departments of Medicine, and of Biochemistry - Biotechnology. The University Hospital and the new building of the Medical School (under construction 36.000m2) are located at *Mezourlo* in the outskirts of the city.

The campus (5.370m2) of the Veterinary Science is found in Karditsa. It consists of the central building, the Library that includes auditoria, and the Clinics and Laboratories.

The Department of Physical and Sports Education in Trikala was initially in *Matsopoul*os Park, but in July 1999 it moved to *Karyes*, approximately 4 km from the city centre.

5. The Local Communities

The geographical area of Thessaly is comprised of the Prefectures of Magnesia, Larissa, Trikala, and Karditsa. Magnesia, with a population of 198.500, was named after *Magnites*, its inhabitants during the historical years. Magnites were part of the larger group of *Tagoi*, who lived in the area of Thessaly. Magnesia has a natural beauty and is a tourist destination throughout the year. It flourished during the neolithic era (e.g. communities of Sesklo, Dimini, etc.) and only during the Mycenean era began to wane. During the 3rd century BC, Dimitrios the Conqueror founded the community of Dimitriada. During the Byzantine era, the communities of Dimitriada and Fthiotides Thibes (today Nea Aghialos) were developed, while during the Turkish occupation the communities of Zagora, Makrinitsa, and others in Mount Pilion. Volos, the capital of the area, was one of the most beautiful towns in Greece with excellent planning and beautiful buildings. After the earthquake in 1955 the town was rebuilt. The city coincides with the ancient town of Iolkos, the starting point of the Argonaut expedition.

The Prefecture of Larissa has 270.000 inhabitants. Excavations have revealed neolithic communities and important findings. Larissa flourished during the Mycenean era and especially during the 6th century BC when the *Tagoi* (Alevades, Skopades) inhabited the area. During the Byzantine era, Bulgarians, Normads and Francs invaded Larissa. The Turkish occupation started in 1423 AD and the city was liberated in 1881. The capital of the

Prefecture is the city of Larissa. It has interesting sightseeing and notable cultural life, especially through the Thessalian Theater.

Karditsa and Trikala are located in the west part of Thessaly and include both mountainous and plain areas. The Prefecture of Karditsa has 125.000 inhabitants. Its capital is the town of Karditsa, which was founded in 17th century AD at the center of the plain of Thessaly. It is a beautiful and peaceful town with excellent city planning, spacious squares, the park of Pafsilipo, the famous building of the Municipal Market, museums, etc. From Karditsa one can drive to the Monastery of Korona and Plastira Dam, an artificial lake located in a gorgeous landscape between the Regions of Thessaly and Evritania, the *Agrafa* mountains.

The town of Trikala is renowned for being the birthplace of Asklipios and the nymph Trikki. The Lithaios River is running through it. Kalabaka and Meteora are located in the Prefecture of Trikala. Meteora was a significant monk community during the Turkish occupation. Trikala is a beautiful town with sightseeing including the Byzantine Fort, the Clock (17 century AD), the area of Varousi, the Folk Museum, etc. Trikala is also renowned for the mountainous village Elati, and the ski area of Pertouli. Kosmas Aitolos lived here (1777-1778) and in the summer of 1944 (during the 2nd World war) the Pedagogical Institute of Roza Imvrioti operated here.

6. The University Library

6.1 Central Library and Annexes

The mission of the University Library is to become a dynamic place for education, research and the dissemination of information throughout the Region of Thessaly. The library policy is to give access to its services to researchers and scholars beyond the limits of the University community and to the general public as well.

Similarly to the University of Thessaly, its Library system has an urban character and a decentralized structure, with branches situated in four cities (Volos, Larissa, Trikala, Karditsa). The structure of the University of Thessaly Library has as follows:

Volos: Central Library, School of Humanities Branch, School of Engineering Branch, School of Agricultural Sciences Branch, Kitsos Makris Folk Art Center

Larissa: Dept. of Medicine Library Branch, Dept. of Biochemistry-Biotechnology Branch

Trikala: Department of Physical Education and Sports Branch

Karditsa: Department of Veterinary Science Branch

The Library is managed by its Director who reports to the Rector. The present Library structure with 38 employees is shown in the Library Organizational Chart. The Central Library is responsible for the execution of library policy by all the Branches, Departments and Units. The Central Library also deals with the acquisitions of all Library material.

The Library can be used by all the University community, and by researchers, scholars and members of the general public. In order to use the Library and its services, one must fill an application form for a Library ID at any Library branch. By obtaining a Library ID, the Library user can borrow material from any branch that he/she wishes. The application for a Library ID declares that the applicant agrees to obey the Library Regulations.

Today the library stocks around 86.000 book volumes, and subscribes to 450 international and 75 Greek journals (printed version). The library also provides on-line access

to more than 10.000 electronic journals (full – text) and to 10 bibliographic databases - web or cd-rom based. The collection also includes 300 videotapes, 18.000 slides and 1.077 maps.

6.2 Library Committee

The Library Committee is an academic body, which acts as an advisory board to the Library and the University Senate as far as academic and policy matters are concerned. The Committee consists of faculty members, from all academic Departments, and the Library Director.

7. Financial Management

The budget of the University of Thessaly is managed by the Directorate of Finance. The following table presents a summary of the institutional budget since the financial year 1988, when the operation of academic Departments started.

Financial Year	**Total Revenue** Including funds from previous year (Euros)	**Total Expenditure** (Euros)	**Transferred to next year** (Euros)
1988-1992	19.510.644	17.664.091	-7.994
1993-1997	48.524.036	46.079.352	282.910
1998 -1999	38.625.485	37.218.891	1.464.742
2000	16.310.057	15.704.353	-859.038
2001	14.477.990	15.214.945	122.082
2002	13.385.660	12.398.020	865.557
2003	26.901.662	31.984.267	5.948.162
2004	29.937.055	26.783.438	2.794.545

8. The Research Committee

8.1 Mission

The mission of the Research Committee (RC), a standing committee of the University of Thessaly Senate, is to promote and facilitate all forms of research and support both students and academic staff in the discipline of scientific research. Research is defined as scholarly pursuit according to the guidelines of each discipline. In fulfilling its mission, the RC commits itself to the highest standards of ethics and professionalism, endeavouring to achieve the excellence expected by an establishment holding a serious trust. The goals set by the RC of the University of Thessaly are as follows:

- *Goal 1* - Oversee and administer the research grant review and application process. Strategies: Increase the quality of applications. Target specific areas of research for initiative grant support.
- *Goal 2* - Award small research grants to University faculty. These funds are intended to help researchers achieve short-term research goals. These projects often provide preliminary data needed for extramural grant applications. Grants are peer reviewed and ranked for quality and impact. Grants are not intended as a continuing source of funding.
- *Goal 3* - Increase interaction with other research organisations. Strategies: Develop relationships with other research organisations through co-sponsored symposia, monographs or workshops. Explore scientific exchange programs with other societies

8.2 Research in the University of Thessaly

Research and its subcategories are stated in the Government White Paper referring to the establishment of the University of Thessaly and are based on the relevant State Laws (L.1514/85, par. 15 to 21; L.2083/92, CA/679/96, par. 1 of L.530/97, and par. 16 of L.2817/2000). Research is a constitutional right and obligation of each member of the Academic Staff, takes place under academic freedom, and it is appropriately linked to the teaching processes. Apart from its importance for the University of Thessaly, research could also add to the development of the region and contribute to the country's technological and scientific advances.

8.3 Objectives of the strategies for the development of research

The University of Thessaly, through its scientific community and the co-ordinated efforts of the RC, is aiming to become: A nationally and internationally recognised Higher Education Institution. Other aims include: a) quality of teaching through a continuous flow of current knowledge, b) management of social problems, and c) acceptance of dissimilarities of different cultures and people. These aims are measurable and they should be assessed on a three-years basis using indices, such as the number of research programs and their total funding, the number of scientific publications produced, and the number of patents. To fulfil the above there is a need to: a) identify and document the active research teams in the different Departments (i.e., academic staff, postgraduate bursaries, Doctorate students), b) their research directions and interests, c) their publications in accredited (established) national and international periodicals, and d) the number of graduate scholars and doctorate students.

8.4 Research Activity

As a new Institution, our University is still in the phase of its growth spurt. However, buildings, equipment and staff are currently reflecting the lack of significant funding and governmental support. The geographical dispersion of its schools and the lack of a single campus can only add to these difficulties. Apart from the School of Engineering, which contributes approximately 47% of the RC's annual revenue from research grants, all other Schools and Independent Departments require significant support. The Tables provide data for the research revues and illustrate that the most active research teams are from the School of Engineering followed by those from the School of Agriculture. The research activities that have been modulated in the University's 16 Departments have been primarily affected by the age of each department, and their active research teams.

Projects	**1999**		**2000**		**2001**		**2002**		**2003**		**Totals**	
	No.	Budget (Euros)	No.	Budget (Euros)	No.	Budget (Euros)	No.	Budget (Euros)	No.	Budget (Euros)	No.	Budget (Euros)
International	9	775.241	7	471.861	9	481.476	16	965.548	9	1.130.992	50	3.825.120
National	71	5.428.619	119	9.843.878	58	1.066.345	209	15.532.416	132	5.916.181	589	37.787.443
Institutional	32	83.940	29	81.245	9	14.966	31	84.758	31	151.280	132	416.192
Total	112	6.287.801	155	10.396.985	76	1.562.788	256	16.582.724	172	7.198.453	771	42.1028.755

Schools/Departments	**RC Revenue (∈m)**	**Academic Staff (#)**	**RC Revenue/ Academic Staff**
Humanities	7.2	76	0.095
Engineering	15.4	69	0.223
Health	2.8	107	0.027
Agriculture	4.8	33	0.145
Independent Depts	2.8	29	0.097
Total	**33.0**	**314**	

8.5 RC and Financial Incentives to Promote Research Activities

Although it may slightly vary from year to year, it is an established RC policy to distribute about 50% of each year's net surplus as follows: a) 35% for research (open competition and specific assessment criteria), b) 35% for research equipment, and 30% for RC running costs

9. Technical Services

All building projects, maintenance and repair works of the University of Thessaly are executed under the supervision of the Technical Services. This important unit is managed by its Director (a Electrical/Mechanical Engineer) and is manned with 17 engineers (Architects, Civil, Electrical, Mechanical, Surveying, Planning), 2 scientists (Agriculturist, Environmentalist), 24 technologists (Civil, Electrical, Mechanical, Agriculturist) 20 technical and 12 administrative staff. The present structure of the Technical Services is shown in the corresponding Organizational Chart of Appendix IV-3a.

With campuses in four cities at a distance from 30km to 100km apart and buildings scattered within the cities, the daily effort of the members of the Technical Services is enormous and unburdened often times by the technical advice and support of the academic staff of the School of Engineering. However, in order to improve the organizational structure and the overall performance, the Director of Technical Services is proposing the following:

a) A new organization of the Services according to the chart proposed in Appendix IV-3b
b) Employment of all required staff: Univ. Engineers = 20, Univ. Admin. = 2, Technologists Admin. = 2, Technologists Engineers = 25, Secondary Technical =20, Secondary Admin. =4, Primary =3)
c) Establishment of a technical subsidy and travel expenses for all personnel, because of the large disparity between salary and productivity
d) Purchase of a university car for the needs of the Technical Services
e) Continuous training of personnel with university expenses

10. Student Services and Facilities

10.1 Student Welfare Office

The **Student Welfare Office** deals with student affairs such as lodging, catering, healthcare and their other everyday needs. It also supports students in their effort to organize sports events and cultural activities.

10.2 Office of International Relations and Educational Programs

The University of Thessaly participates actively in student exchanges with other higher education Institutions in the framework of bilateral agreements under the Socrates/Erasmus mobility programs. The Office of International Relations and Educational Programs is responsible for administering the exchange programs helping incoming and outgoing students in solving practical, administrative and educational problems during their study period. Some of its main objectives are the following European Union educational programs:

- Socrates/Erasmus - ECTS program - Bilateral agreements
- Participation in international student exhibitions
- Representation at international conferences and congresses
- Organization of seminars, educational visits and cultural meetings
- Promotion of the University of Thessaly abroad
- Creation of new cooperation with foreign higher education institutions
- Counseling for incoming and outgoing students

10.3 The Career Office

The Career Office of the University of Thessaly was founded in October 1996 via the 2nd Community Support Framework Program of the European Union (EPEAEK - Operation Program of Education and Initial Professional Training of the Ministry of Education). The mission of the Career Office is to ensure the smooth placement of students and graduates of the University to interesting jobs. Furthermore, the Office supports students in their effort to choose postgraduate studies, to make use of student grants, to sign up for various training programs, to find companies willing to take them on as apprentices, etc. Another mission of the Career Office is to keep the University community informed of the current situation and the trends in the labor market. It also collects information that will be taken into account in determining the program of studies, the content of courses, etc. The Career Office offers the following services to all interested:

- Information on programs of postgraduate studies and specialization of universities in Greece and abroad
- Information on scholarships and bequests, for second cycle and postgraduate study in Greece and abroad
- Advisory Career (curriculum vitae note, interview of choice, techniques of job search)
- Professional Advisory (creation and management of professional identity)
- Individual Advisory Support (educational process, individual subjects)
- Briefing of enterprises wishing to engage persons with the knowledge and dexterities of students and graduates of all Departments
- Collection of data for available job places
- Information for enterprises wishing to employ students for practical exercise
- Research for the existing situation and tendencies in the job market

The Career Office created important infrastructure for its operation and growth under the supervision of Prof. Dimitri Oikonomou and, since March 2003, Prof. Nikolaos R. Dalezios. The Office is staffed with specialists who offer special advice and services. The Career Office undertook and materialized a series of actions as follows:

1. Weekly training seminars for executives of Liaison Offices on Advisory issues, in the frame of the *Career Office Horizontal Action*. Executives from the Liaison Offices of most Greek Higher Education Institutions participated in the seminars.
2. Study of job placement of graduates of Higher Education Institutions of Greece
3. Creation of web pages common for all the Liaison Offices with complete, valid and effective information concerning all services of the Career Office.
4. Creation of an Ethics Code of Horizontal Action.
5. A program of Business dexterities was included in the frame of Horizontal Action.

Since September 2003, the *Career Office Advisory Committee* was established composed from representatives of all academic Departments. The main objective of this collaboration is the projection and enlargement of the work of the Career Office. In this framework the following were undertaken:

1. Brief seminars on the services offered by the Liaison Office
2. Advisory Career seminars for graduating students
3. Professional Advisory seminars for students of the programs of Practical Experience
4. Founding of the Association of Graduates of University Thessaly
5. Collection of data for graduates, enterprises and promotion of graduates in the job market

The Career Office is materializing the action "**Business dexterity**" which concerns the promotion of graduates of the University Thessaly in the job market. It also carried out the processing of information and submission of applications for 19 job places in **"Athens 2004"** offered by the company ICAP**.**

11. The University of Thessaly Press

The University of Thessaly Press (UTH Press) was established in 1998. Its purpose is to contribute in the dissemination of the scientific knowledge within the academic community of UTH with the publication of books, monographs and collective volumes in printed and digital form.

The main activities of the UTH Press are the publishing of books and the printing of lecture notes and supplementary course material distributed free of charge to the students of the University.

It is estimated that a total of over 35.000.000 pages to have been printed by the UTH Press since 1998. The UTH Press is also printing the Guides for the Undergraduate and Postgraduate Courses, Research Papers, Scientific Magazines, Discussion Papers and other related publishing material.

In addition to the printing activities, there has also been a significant publishing activity with (25) books published so far. These books are divided in three subject series: Applied Sciences, Social and Humanistic Sciences, and Planning and Development. Some of these books had had great success and have already been republished.

Center for the Support of Educational Work

12. The Center for Educational Support

During the winter semester of the academic year 2004-2005 the "Center for Educational Support" will be established in the University of Thessaly. The main objective of this Center will be to provide faculty and teaching staff with general support and assistance for the integration of Information and Multimedia technologies in the educational process of the University. Funding for the Center in the years 2004-2006 will be through the institutional action of the EPEAEK II project for the "Reorganization of the University of Thessaly Undergraduate Studies". The Center will be located in the new Central Library building and, in addition to its own staff, will be supported by the Library's Department of Information Systems staff.

An academic committee has been already set up in order to establish the detailed rules and regulations of the Center's activities and to inform the academic community about the Center. Chairman of the Committee is Prof. Elias Houstis (Chairman of the Department of Computer & Communication Engineering). The Center will be managed by Assoc. Professor George Petrakos (Chairman of the Department of Planning & Regional Development) and the Library Director, Dr. Ioannis Clapsopoulos.

The main goals of this Center are:

- To provide technical and instructional support to faculty members and other teaching stuff for the effective use of Information and Multimedia technologies in the educational process (eg. using the technologies, building digital instructional resources etc)
- To implement a unified University e-learning (course management) system.
- To provide instructional support to students and teaching staff for the use of the e-learning system, through seminars and the Center's website.
- To provide technical support for the use of the Tele-conference facilities of the UTH.
- To collect and publish statistical data for the usability of Information and Multimedia technologies and to provide feedback to the academic community for its evaluation of the effect of their use on the educational process of the University.

11. Office of Foreign Languages

The mission of the Foreign Languages Program (FLP - *English, French, German, Italian Language Instruction For Specific Purposes*) is to provide language and linguistics expertise and

service to the UTH community of students, faculty, and administrators and to foster the achievement of University goals through programmatic initiatives. The Educational - Academic endeavor of the FLP is to strengthen the link between theory, research and practice, with special emphasis on developing the university students´ academic/ professional linguistic competence in their particular field or discipline, thus, providing an environment that promotes professional excellence. In order to provide international career and study prospects for our students through multingualism and degree qualification, we offer them the opportunity to enroll in a second foreign language program of their choice upon successful completion of their first selected FL program. Our purpose is to increase students' skill and confidence in using the foreign language(s) for their professional growth.

Actions of the FLP include:

Instruction in English, French, German, Italian as Foreign/ International Languages for Specific Purposes (Academic, Professional), Students' preparation for transition/ entry into a local, national or international corporate, professional, or academic environment.

Student familiarization with alternative learning strategies and tools through utilization of physical and technology resources as well as with ethics and conventions governing the use of Internet information.

Research in the domain of applied linguistics, foreign/ second language learning, teaching and assessment and supporting instruments design, adult continuous education (Current Research Projects on FLSP, National Language Policies, Language Assessment and Certification)

Development of Subject matter- related Materials (in connection with/ to accommodate) compatible with research findings and the needs of diversified up-to-date teaching methods and practices as well as of pilot courses and projects.

Collaboration on Projects and Modern Languages Promotion Planning with other European and overseas partners - Universities, Educational Institutions, Modern Languages Associations, Education Policy Makers, etc.

Staff of the FLP include: *English* 4 permanent members, 4 under contract and 4 from schools, *French*: 3 permanent members, 1 under contract and 1 from schools, *German*: 1 permanent members, 1 under contract, and *Italian*: 2 permanent members.

12. The Liaison Office

The establishment of the Liaison Office has given a fresh impetus to the exploitation of the research results and the potential of the University Of Thessaly. The primary target of the Liaison Office is the undertaking of any necessary initiative and action for the promotion and support of the cooperation of the UTH researchers with the local, regional and national production units. The Office assists researchers, small and medium enterprises, productive and developmental Institutions and individuals. In addition, it offers prompt, accurate and reliable information, in a printed or digital form, to assist the activities and the research potential of the UTH as well as the offered services.

The Liaison Office aims in particular at the following:

- Creation and updating of databases of the research activities and the potential of the UTH to offer services, as well as the needs in technology and services of the production units, such as large and small industries, agricultural enterprises, services departments, project consultants.
- Informing the production agents about the research products of the UTH, as well as the UTH itself, about the needs of the production units

- Disseminating technology information and know-how to enterprises and production agents in order to become more competitive and expand in the international market.
- Offering specialized consultative services, such as planning, test trials, laboratory investigations-measurements-analyses, and collection of specifications.
- Supporting researchers in patenting and copyrights and financial exploitation of their research results

13. Proposals of the Administration Services

13.1 The Directorate of Administrative Services

The **Directorate of Administrative Services** is one of the basic directorates of the University of Thessaly. Its objective is, the strategic planning, the coordination of actions, the promotion of processes, the processing and maintenance of data required for the operation and the growth of services of UTH. It assists in the development of the organizational chart of services, the recruits of personnel all categories of education (primary, secondary and higher). It also observes the rules and processes for the recruitment and career development of personnel until retirement. Finally, it forwards to the appropriate authorities all decisions and rulings of the University, archives all Laws and ministerial decisions about universities.

The responsibilities of the Directorate are distributed in the following departments: a) Department of Academic Staff, v) Department of Administrative Personnel and c) Department of Administrative Affairs.

Department of Staff (1 head, 3 employees): It deals with all matters relating to the permanent and contract teaching staff from initial employment until retirement. It also keeps the official records of this personnel as well as files of all relevant Ministerial decisions and laws.

Department of Administrative Personnel (1 head, 3 employees): Handling of all matters concerning permanent and contract administrative personnel from recruiting until retirement. . It also keeps the official records of this personnel as well as files of all relevant Ministerial decisions and laws.

Department of Administrative Affairs (1 head, 3 employees, 2 ushers): It supports the other services of the Administration and of the University. It is responsible for keeping the Register of incoming and outgoing correspondence, receiving and delivering all correspondence, certificating copies and photocopies from the original documents. It also makes available the University auditoria for conferences, lectures, seminars etc and cares for the keep and cleaning of buildings.

In order to improve performance, the Management of this Directorate proposes the following:

a) Continuous training of personnel in new administration methods via seminars, workshops, etc.
b) Recruitment of personnel with excellent knowledge of PC usage and foreign languages
c) Improvement of working conditions, by improving the spaces of service accommodation as well as modernization of used media (PCs) and working methods
d) Improvement of salaries of personnel, possibly via the University Research Committee funds, etc.
e) Briefing of personnel on the methods and systems used in the HEI of the U countries, via exchange of employees similar to that of students, in a framework to be determined between the HEIs.

13.2 The Directorate of Academic Affairs

13.2.1 Department of Studies

- Better cooperation between the Department and the Schools/Departments of the University
- Direct electronic report from the Departments' Secretariats to the Department on the General Assemblies decisions and on issues concerning students.
- Direct electronic report from the Studies Department to the Departments' Secretariats on all issues concerning legislation.

13.2.2 Department of Student Welfare

-Better cooperation between the Department and the Schools/Departments of the University

- Electronic connection of the Department with the Academic Departments and direct report on the decisions of the General Assemblies, Laboratories, etc.

13.2.3 Department of Cultural Exchange & Public Relations

Office of European Educational Programms

- Development of several Programs apart from the SOCRATES/ERASMUS could be achieved with the increase of the Office's administrative staff.
- Report from the Schools/Departments to the Office on the lectures of the incoming Teaching Staff under the ERASMUS Programme. This would also contribute to keeping well-informed database of the University.

Office of Public Relations

- Direct report from the Academic Departments to the Office on the conventions, seminars, etc. of the University for better organization and promotion to the mass media.
- Participation in National Educational Fairs for the promotion of the University.
- Participation in the Conventions of the Greek Universities Public Relations Offices for the strengthening of their role to the Universities' development
- Participation in seminars concerning public relations

Office of International Relations

- Strengthening of the international profile of the University of Thessaly.
- Activation of Teaching Staff to increase the number of bilateral agreements between the University of Thessaly and European, American and Asian Universities
- Keeping up and updating of the University's database about international seminars, conventions, conferences, meetings, etc., organized by the University of Thessaly
- Participation in International Educational Fairs for the promotion of the University.
- Participation in the Conventions of the Greek Universities International Relations Offices for the strengthening of their role to the Universities' development.
- Participation in seminars concerning international relations.

13.3 Directorate of Financial Management

The Directorate of Financial Management is organized in the following Departments:

a) Department of Budget – Accounts

- Preparation, approval, audit and execution of Budget
- Collection of income from subsidies and other funding sources
- Preparation of Balance Sheets – Accounts Statements.
- Issue of certificates of available budget funds for approval of expenditure
- Payment of loans, scholarships, and general financial help to students

- Collection of receipts, legal and completeness checks, acceptance and payment of expenses
- Payment of all budget expenses (own property and Public Investment)
- Operation of Cashiers office
- Keeping of necessary books and records.

b) Department of Payroll

- Salaries of all personnel and recording of salary changes
- Keeping of salary records
- Issue of statements relating to salaries
- Issue of income statements
- Approval-clearing and payment of fees and compensations
- Payment of "third party deductions" and related record keeping
- Keeping of necessary books and records.

c) Department of Purchases

Execution of annual purchases according to regulations, and specifically:

- Recommendations to the relevant University authorities for the approval of expenses and issue of related authorizations
- Preparation of tenders and their publication in the daily press
- Formation of committees for execution of tenders and recommendations for decision making
- Small purchases for which no bid is needed
- Preparation of contracts and audit of their good execution
- Collection of receipt for expenses, issue of approvals and forwarding to the appropriate departments for issue of paycheck
- Quantitative and qualitative receipt of all purchases, bookkeeping and distribution to the particular University services
- Care for the collection of old materiel, repair or bargain sales
- Operation of storage
- Keeping of necessary books and records

d) Department of Property

- University property keeping, record keeping, property titles keeping
- Management of University property, care for property renting and bookkeeping
- Receipt, delivery, audit and keeping of contracts of rentals
- Inventory of the Institution's property
- Acceptance or refusal of endowments, gifts and their exploitation
- Repair and maintenance of property in cooperation with the Department of Maintenance-Repairs
- Fulfillment of all obligations arising from endowments and gifts
- Keeping of necessary books and records

13.4 The Directorate of Student Care

The Directorate of Student Care is responsible for the feeding, accommodation, mass transportation, health care and entertainment of students. For a better operation and improvement of services to students, the following are proposed:

- Increase of funds for food allowance and accommodation of students

- Transfer to universities of the responsibility for allocating the accommodation subsidy of 1.000 €.
- Organization and operation of Students Club aim at improving the everyday life of students
- Activation of the Department of Care and Events for better provision of services of dealing with the problems during the study period of students, such as finding accommodation, work, etc. It will also contribute to dealing with matters relating to entertainment and the promotion of social and cultural development, such as music, theater, cinema, photography, painting, lectures, as well as matters that relate to organizing and athletic events.
- Activation of the Department of Health Care, subject of which is the health care of students.
- Employment of medical and paramedical personnel to insure better health care for the students

13.5 Department of Publications

For better service and functioning, the Department of Publications requires: a) Computerization, and b) Employment of permanent staff. It requires an integrated electronic system of management and archiving of University textbooks, publications and printouts that are used with great success by the Greek HEI. More specifically, with this system almost all processing will be automated and there will a better management of all data of the Department.

With computerization, all internal operations could be processed easier and more efficiently so to achieve an increase of rate of processing and better service. It will provide the capability to introduce decisions, cost estimation of textbooks and calculation of authors and translators rights, production of lists of authors payments, certificates for tax purposes, preparation of auditing acts of textbooks that are printed by the authors or private publishers, preparation of lists of publishers payments, issuing of cover letters to publishers and the Ministry of Education, and the financial services of the University.

Also, issue of statements for author payments, keep of electronic register, control of printing paper, via the monitoring of printouts, invoices, logos, and Internet webpages will be easier. The Department of Publications complements and helps the teaching duties by providing textbooks and other support material that it distributes free of charge to all students. However, this process is time-consuming without computerization and, in combination with lack of personnel, it becomes a more difficult job.

APPENDIX VIII
EXPLANATION AND COMMENTS

Appendix VIII – 1

Chart IV-1 shows the existing organization of the central Administration of the University of Thessaly. The numbers in parentheses () indicate the number of employees in each Directorate and Department. It can be seen that some units do not have enough staff or are not staffed at all.

Appendix VIII – 2

Chart IV-2 shows the existing organization of the University Library. A total number of 39 staff and its Director are serving in the Library system.

Appendix VIII – 3

Chart IV-3 shows the existing organization of the Directorate of Technical Services of UTH. A total number of 23 staff and its Director are serving at present while a total of 75 is indicated as required to handle the many and diversified works of the Directorate.

Appendix VIII – 4

Chart IV-4 provides the organizational structure the existing academic units of UTH. According to the framework law, the Senate, the Rectorate, the Rector's Council, and the academic Departments are the ruling bodies of the University. Schools are not decisive but rather act as coordinators of the independent Departments. The Senate has appointed two ad hoc committees (Property Management and Academic Development & Strategic Planning) who are serving as advisory bodies to the Rector and the Senate.

Appendix VIII – 5

Table IV-5 provides the academic structure of the University of Thessaly, indicating the title of each Department, its seat, founding year, and the year of academic start. Most Departments are organized in Sectors and all have at least one Laboratory operating officially. Apart from the undergraduate programs, all Departments have doctoral programs and some have also formal MSc programs.

Appendix VIII – 6

Table IV-6 provides the academic structure of ach Department, and the names of their sectors wherever they exist.

Appendix VIII – 7

Table IV-7 shows the existing buildings of each academic Department, indicating the start of its academic operation, and approximately the space used for Classrooms, Laboratories and Offices. The total area of buildings is more than 46.000 sqm. divided into 8.600 sqm of classrooms, 7.200 sqm. of offices and 14.400 sqm. of laboratory space. Data for some Departments are missing, as they did not provide the necessary information.

The Table also shows the projection of new buildings either under construction or in the planning stage. The major efforts here are the new building of the Basic Sciences of the Medical School which is under construction, and the two buildings of Civil Engineering and of Mechanical & Industrial Engineering which are in the final stages of starting their construction, pending availability of funds. There is also an effort to start the planning of a new building of the Department of Computer & Communication Engineering, which has been discussed in the School of Engineering and the Senate.

Appendix VIII – 8

The Table IV-8 shows the evolution of the elected faculty serving in the various Departments from academic year 1993-1994 onwards. It should be noted that some Departments are 15 years old (eg. Primary and Pre-School Education) while some others only 3 years old (eg. Biochemistry & Biotechnology and Computer & Communication Engineering). The total number of appointed-elected faculty is 314 with the Medical School having more than 25% of that total. The data show that most Departments are still understaffed. Retirements are not many as it should be expected in a young university and new elections-appointments more that 10% of total serving. Detailed data for some Departments are missing, as they did not provide the necessary information.

Appendix VIII – 9

The Table IV-9 shows the number of serving elected faculty and the number of visiting and special teaching staff for each Department. As a young university, UTH depends still on visiting teaching staff which is appointed for a maximum period of 3 years after which, if the position is not filled by regular faculty election, they must re-apply in an open call. The numbers indicate that the number of visiting teaching staff (399) remains still higher than the number (320) of elected faculty.

Appendix VIII – 10

An interesting table is Table IV-10, which shows the number of serving administrative and technical staff in each Department. The 89 administrative, 53 technical and 36 contract staff make a poor total of 178, which demonstrates dramatically the lack of existing support for the serving faculty in administering their teaching and research duties. Indeed, 320 faculty and 399 visiting teaching staff rely on only 178 support staff in carrying out their everyday duties. This is a striking disparity in the use of human resources because the higher paid faculty and teaching staff are forced by necessity to spend valuable time doing work (eg. Secretarial, technical, etc) that could be well done by lower salaried staff. This problem is apparent in all Departments as they are all understaffed with personnel.

Appendix VIII – 11

The evolution of undergraduate students of the University of Thessaly is given in Table IV-11, which shows the number of enrolled, transfer, and graduating students for each Department since academic year 1993-1994. Again, detailed data for some Departments are missing, as they did not provide the necessary information.

The number of enrolled undergraduate students varies between 1170 and 1550 per year, the number of transfers between 180 and 440, and the number of graduating students from 180 to 350. According to the data provided by the academic units, the total number of enrolments in the University of Thessaly since 1993-1994 was 6634, total number of transfers 1285, while 2144 students have graduated.

Appendix VIII – 12

The evolution of graduate students in the University of Thessaly is given in Table IV-12, which shows the number of enrolled and graduating students for each Department since academic year 1995-1996. Again, detailed data for some Departments are missing, as they did not provide the necessary information.

The number of enrolled students, since 2000, varies between 82 and 99 for MSc and 44 and 73 for PhD, and the number of graduates from 50 to 67 for MSc and 2 and 16 for PhD. The total number of enrolments were 432 for MSc and 752 for PhD, while a total of 243 MSc students and 83 doctoral candidates have graduated.

It is natural that the newly started Departments are not as yet very active in graduate programs, mainly because the highest priority of their faculty has been to develop the infrastructure as well as the undergraduate programs. This is lately changing dramatically as most Departments are now engaged in graduate research and are starting their MSc programs (eg. Primary Education, Computer & Communication Engineering).

Appendix VIII – 13

The evolution of research activities in the Departments of the University of Thessaly is given in Table IV-13, as provided by the Departments themselves. Data are not complete because of the lack of sufficient information provided by the academics units. This is mainly due to the fact that many Departments are new and have not, therefore, developed fully as yet their research laboratories or have not yet an influx of their own graduate student to seek graduate research.

While there is a large number of official Laboratories in the University, there is an average of 2 faculty member per laboratory, a minimal number of support staff and a small number of senior contract research staff (excluding graduate students).

Total funding for research is not indicated for all Departments because it has not been provided. However, the Research Committee provided data for most Departments as indicated in Appendix IV-16. An average of 3 projects per laboratory have been executed in the University of Thessaly since its start.

The data for journal publications are provided in two columns, one showing total faculty production and the other an estimate of publications since coming to UTH. It appears that all Departments have organized from 2 to 20 conferences averaging about 8 per Department and one third per faculty member.

Appendix VIII – 14

An interesting set of data showing the evolution of annual current expenses in each Department is given in Table IV-14, as provided by almost all the Departments themselves. Total annual funding of the Departments has ranged between almost 800.000 and 1.100.000 Euros. Some Departments (eg. Mechanical & Civil) have included the rather large support provided by the Ministry of Education via the 2nd and 3rd Community Support Framework.

Appendix VIII – 15

This Table IV-15 provides data for the Programs of Extended Studies operating with funds provided by the Ministry of Education via the 3rd Community Support Framework. These programs will be terminated at the end of this academic year.

Appendix VIII – 16

One of the most interesting set of data is given in Tables IV-16a, b, c which were supplied by the Secretariat of the Research Committee. The table shows the evolution of research activities in all the Departments of the University of Thessaly from the year 1999 onwards. International, national and internal (UTH Research Committee) projects are listed. A total of 771 projects were executed since 1999 with a total funding of 42.000.000 Euros. A total of 49 projects were Institutional with a total funding of almost 8.300.000 Euros. Approximately an average of 9 international projects with an average funding of 800.000 Euros were executed annually, an average of 150 national projects with an average funding of 9.500.000 Euros, and finally an average of 35 internal projects with an average funding of 3.000 Euros.

While quite a few data is lacking (not provided by the academic units) the last column of Table IV-16c show the share of the Schools in the Research Committee revenue. The largest share is that of the School Engineering, followed by the School of Agriculture.

Appendix VIII – 17

Table IV-17 provides useful data about the evolution of funds of the research committee in the last 5 years for all Departments and the University.

Appendix VIII – 18

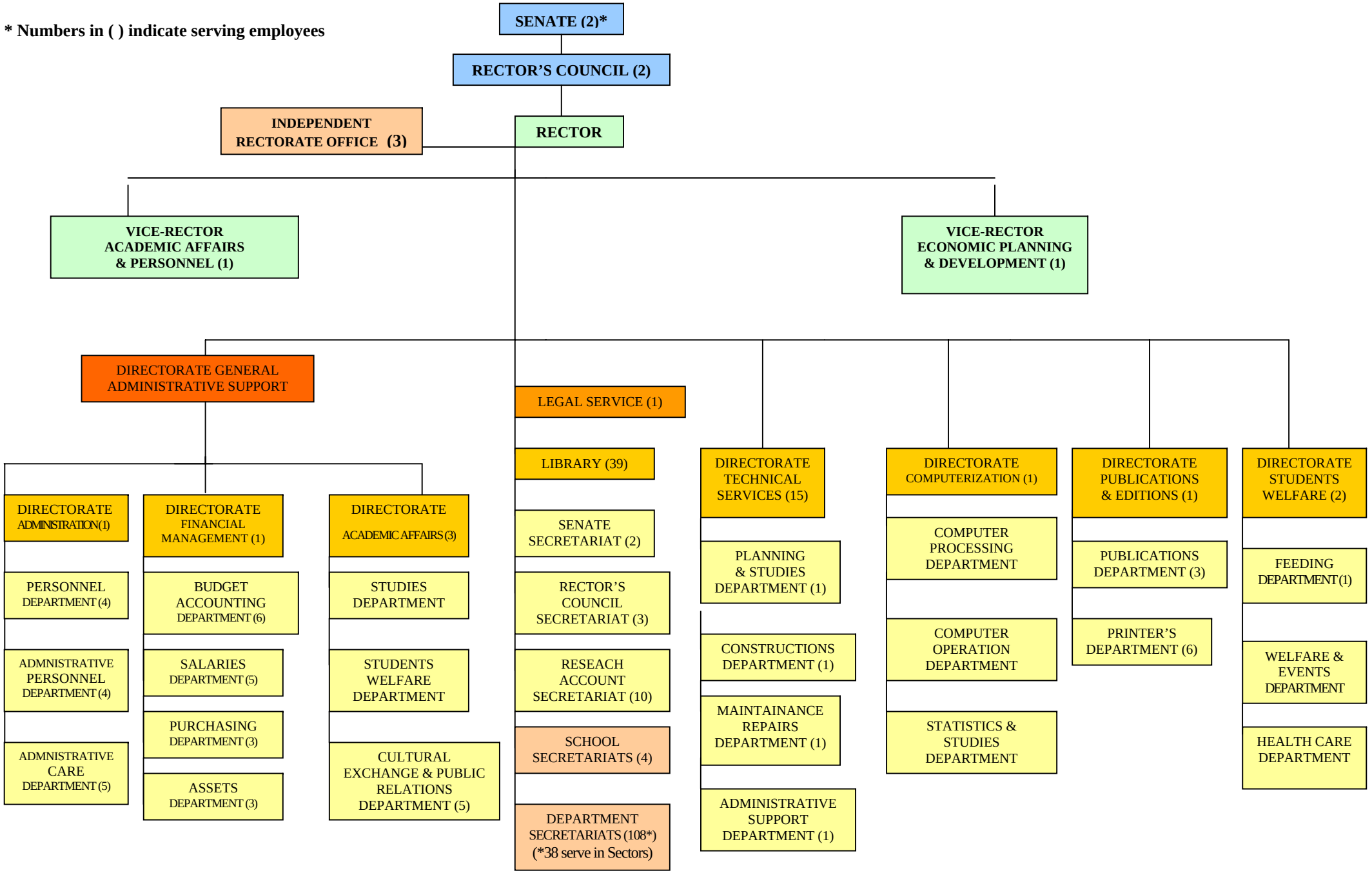
Table IV-18 provides useful data about the ratio of undergraduate and graduate students or granted degrees per elected faculty or total teaching for the last academic year 2002-2003. A total of 320 faculty and 350 visiting teaching staff were serving. A total of almost 5,500 undergraduate, 430 MSc and 750 PhD students were enrolled. A total of 2,356 degrees for undergraduate studies have been granted, 243 MSc degrees, and 83 PhD degrees since the start of the University of Thessaly.

The average ratio of undergraduate students per faculty is 17.1 ranging from 5.6 (Medicine) to 31.7 (Architecture), for MSc the average is 1.2 ranging from 2.6 (Animal Production) to 6.4 (Planning & Regional Development), and PhD is 2.4 ranging from 0.3 (Architecture) to 4.6 (Planning). When the visiting teaching staff is also considered, for undergraduate students the average 8.2 ranging from 4.6 (Medicine) to 13.9 (Physical Education), for MSc the average is 0.6 ranging from 0.8 (Computer) to 2.8 (Planning), and for PhD the average is 1.1 ranging from 0.1 (Architecture) to 2.9 (Medicine).

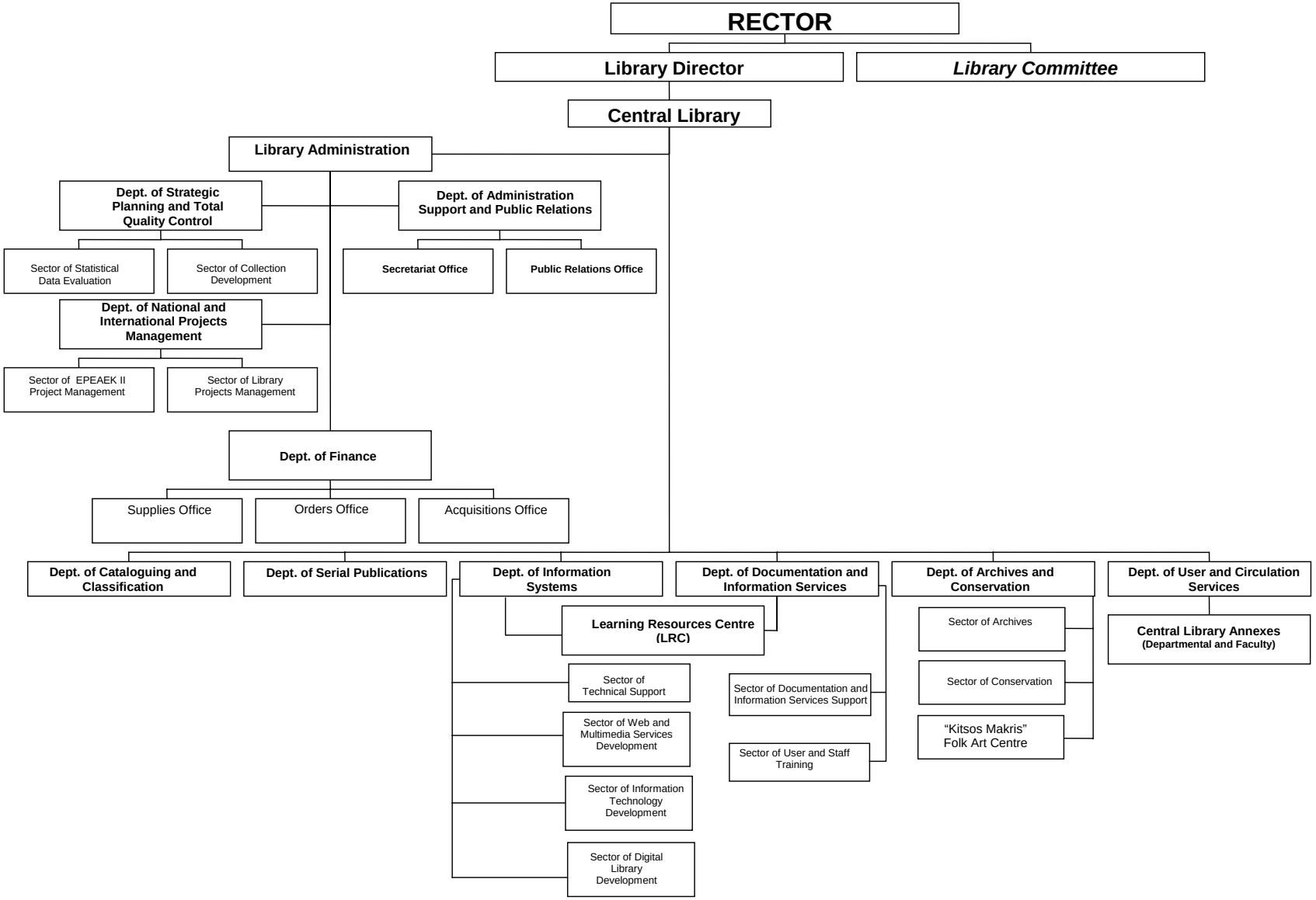
The average ratio of undergraduate degrees per faculty is 7.4 ranging from 2,7 (Medicine) to 20,8 (Biochemistry-Biotechnology), for MSc the average is 0.8 ranging from 1,1 (Physical Education) to 5,0 (Planning & Regional Development), and for PhD 0.3 ranging from 0,1 (Biochemistry, Veterinary) to 0,6 (Pre-School, Mechanical). With the visiting teaching staff, the average for undergraduate degrees is 3.5 ranging from 1,4 (History) to 13,1 (Primary Education), MSc is 0.4 ranging from 0,6 (Physical Education) to 2,2 (Planning), and for PhD is 0.1 from 0,1 (Planning, Agriculture) to 0,3 (Primary, Pre-School).

APPENDIX VIII-1: ORGANIZATIONAL CHART OF THE ADMINISTRATION OF THE UNIVERSITY OF THESSALY

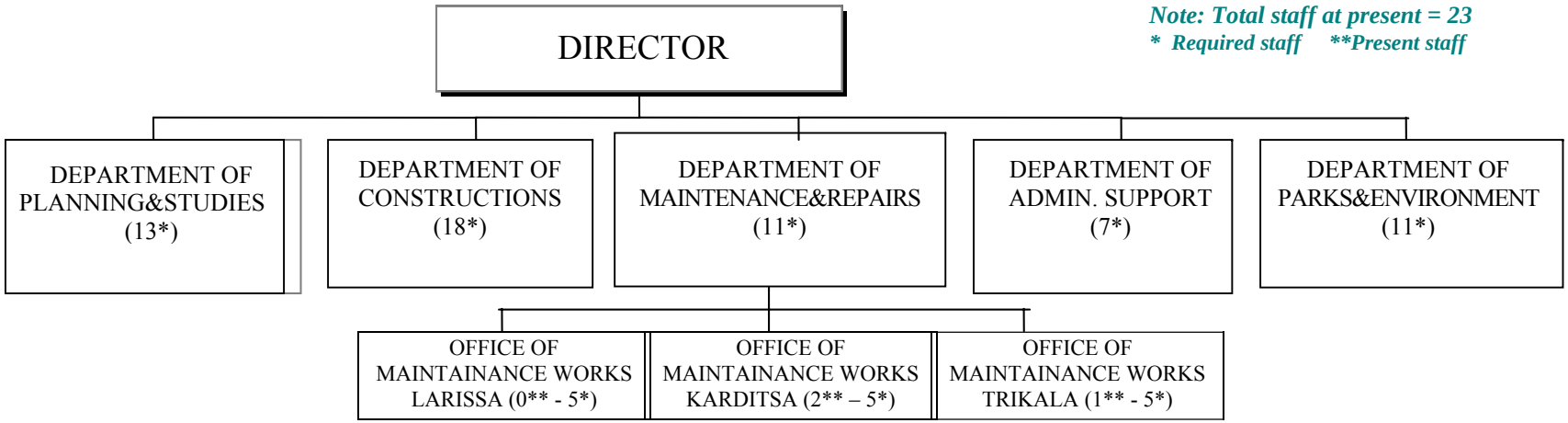
*** Numbers in ( ) indicate serving employees**



APPENDIX VIII-2: ORGANIZATIONAL CHART OF LIBRARY & INFORMATION SERVICES OF THE UNIVERSITY OF THESSALY



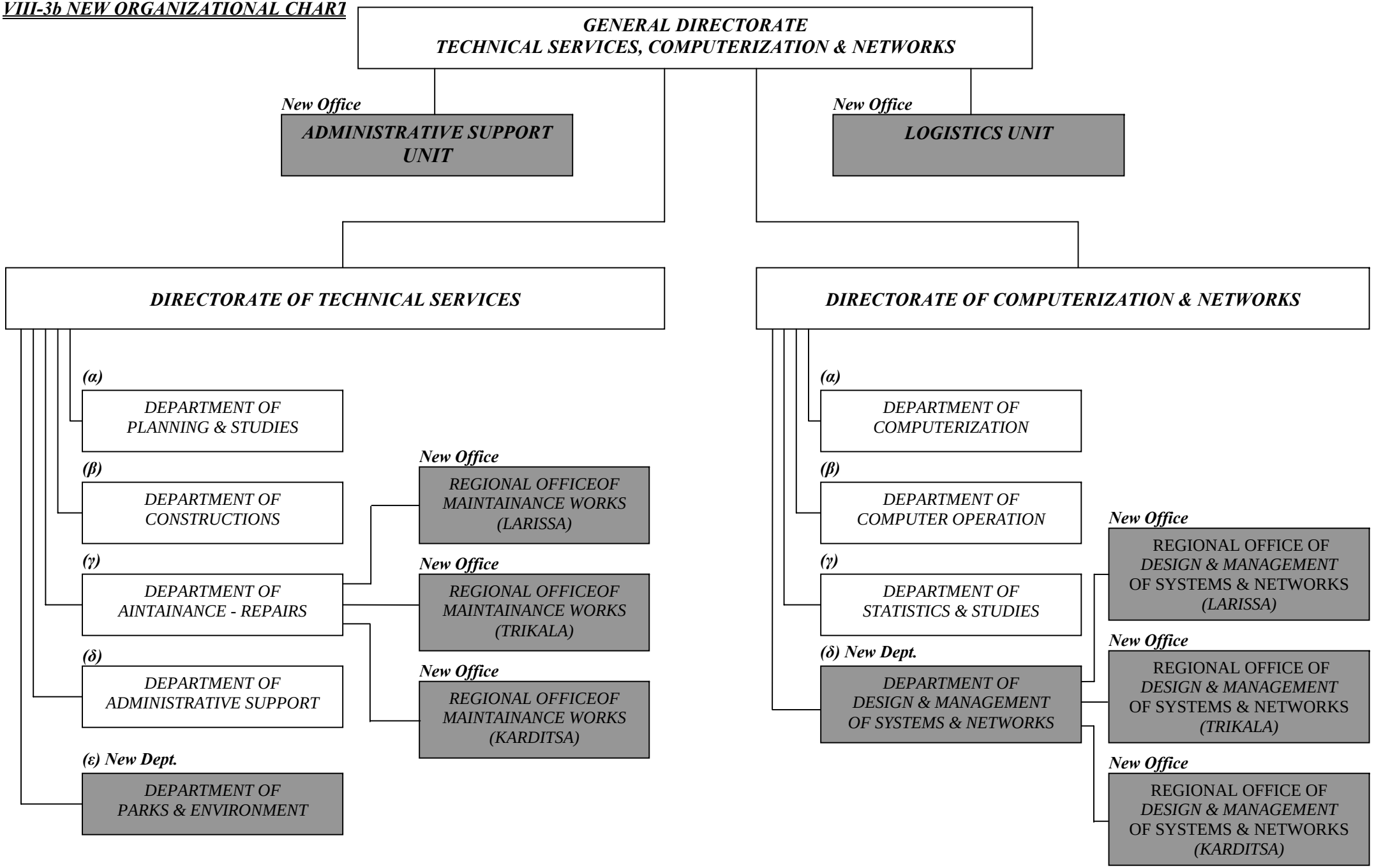
APPENDIX VIII-3a: ORGANIZATIONALCHART OF THE TECHNICAL SERVICES OF THE UNIVERSITY OF THESSALY



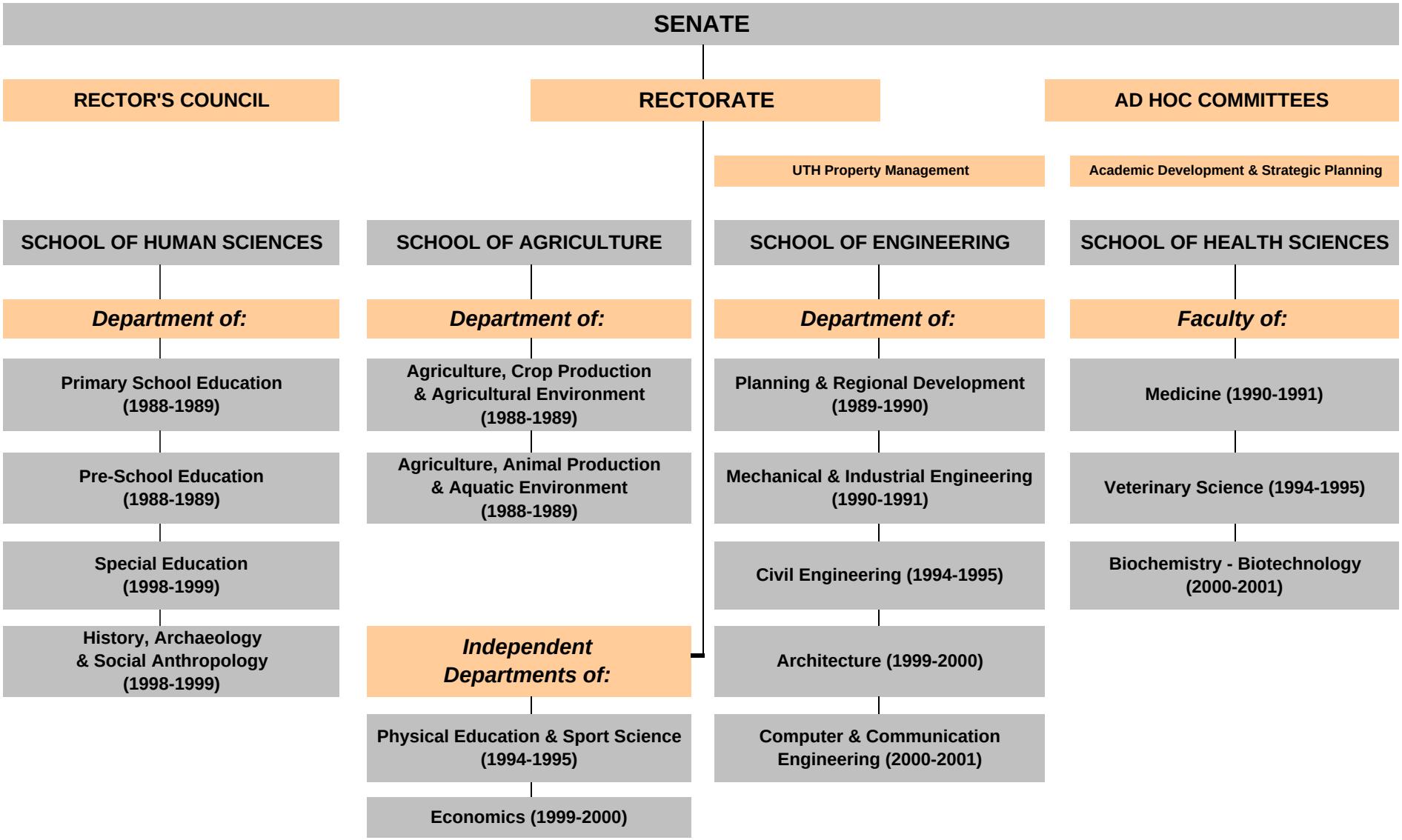
Note: Total staff at present = 23
**** Required staff **Present staff***

TECHNICAL SERVICES STAFF			
◊ Engineers	=	17	- *Architects = 5 Civil = 5* - *Electrical -Mechanical = 5* - *Surveying – Panning = 2*
◊ Scientists	=	2	- *Agriculture = 1* - *Enviromentalist = 1*
◊ Technologists	=	24	- *Civil = 12 - Surveying = 1* - *Electrical - Mechanical = 10* - *Agriculture = 1*
◊ Administrative	=	12	
◊ Technical	=	20	
Total	=	**75**	

VIII-3b NEW ORGANIZATIONAL CHART



APPENDIX VIII-4: ORGANIZATIONAL CHART OF THE ACADEMIC UNITS OF THE UNIVERSITY OF THESSALY



APPENDIX VIII-5: ACADEMIC STRUCTURE OF THE UNIVERSITY OF THESSALY

SCHOOLS	DEPARTMENTS	CAMPUS	FOUNDING YEAR	ACADEMIC START	SECTORS	LABS	GRADUATE STUDIES	
							MSC	PHD
Humanities	Primary School Education	Volos	1984	1988-1989		5	Yes	Yes
	Pre-School Education	Volos	1984	1988-1989		6		Yes
	Special Education	Volos	1993	1998-1999	2	1		Yes
	History, Archaeology, Social Anthropology	Volos	1993	1998-1999	3	4	Yes	Yes
Engineering	Planning & Regional Development	Volos	1984	1989-1990		11	Yes	Yes
	Mechanical & Industrial Engineering	Volos	1985	1990-1991	3	10	Yes	Yes
	Civil Engineering	Volos	1993	1994-1995	4	8		Yes
	Architecture	Volos	1999	1999-2000		2		Yes
	Computer & Communication Engineering	Volos	2000	2000-2001	4		Yes	Yes
Health Sciences	Medicine	Larissa	1985	1990-1991	8	50		Yes
	Biochemistry - Biotechnology	Larissa	2000	2000-2001		8		Yes
	Veterinary Science	Karditsa	1993	1994-1995		14		Yes
Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	Volos	1984/2001	1988-1989	4	17	Yes	Yes
	Agriculture, Animal Production & Aquatic Environment	Volos	1984/2001	1988-1989	2	9	Yes	Yes
Independent Departments	Physical Education & Sport Science	Trikala	1984	1994-1995	3	3	Yes	Yes
	Economics	Volos	1999	1999-2000	2	2		Yes
Elective Studies Programs	Museum Pedagogic Education	Volos	1998	1998-1999		1		
	Management of Rural Environment & Natural Resources	Volos	1998	1998-1999		2		
	Medical Biochemistry	Larissa	1998	1998-1999				
The two Agricultural Depts. operated as one until academic year 2001-2002				TOTALS	35	153	8	16

APPENDIX VIII-6: ACADEMIC STRUCTURE OF THE DEPARTMENTS OF THE UNIVERSITY OF THESSALY

SCHOOLS	DEPARTMENTS	START	SECTORS								LABS
Humanities	Primary School Education	1988-1989									5
	Pre-School Education	1988-1989									6
	Special Education	1998-1999	Special Education of Kindergarten Teacher				Special Education of Teacher				1
	History, Archaeology, Social Anthropology	1998-1999	History		Archaeology			Social Anthropology			4
Engineering	Planning & Regional Development	1989-1990									11
	Mechanical & Industrial Engineering	1990-1991	Energy, Industrial Processes, Pollution Abatement			Mechanics, Materials, Manufacturing			Production Management		10
	Civil Engineering	1994-1995	Transpotation		Hydraulics		Structural Mechanics		Soil Mechanics		8
	Architecture	1999-2000									2
	Computer & Communication Engineering	2000-2001	Fundamentals & Applications of Computer Science		Software & Information Systems Technology		Hardware & Computer Architecture		Signals, Telecommunications & Networks		
Health Sciences	Medicine	1990-1991	Morphology	Basic Sciences	Laboratory Medicine	Internal Medicine	Surgery	Mother & Child	Neural & Related Systems	Social Medicine	50
	Biochemistry - Biotechnology	2000-2001									8
	Veterinary Science	1994-1995									14
Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	Integrated Plant Production		Genetic Plant Improvement & Biotechnology		Integrated Plant Protection		Water - Soil Resources & Agricultural Engineering		17
	Agriculture, Animal Production & Aquatic Environment	1988-1989	Advanced Fishery - Pisci-Culture				Advanced Aquatic Environment Management				9
Independent Departments	Physical Education & Sport Science	1994-1995	Competitive Sport		Recreation and Sport Management			Sport Pedagogy and Special Physical Education			3
	Economics	1999-2000	International Economics & Finacing				Economic Development & Institutions				2

APPENDIX VIII-7: INFRASTRUCTURE OF THE UNIVERSITY OF THESSALY (AS PER ACADEMIC YEAR 2003 - 2004)

	DEPARTMENTS	START	BUILDINGS		CLASS ROOMS		OFFICES		LABS		NEW BUILD.		NEW C/ROOMS		NEW OFFICES		NEW LABS	
			NO.	M2	NO.	M2	NO.	M2	NO.	M2	NO.	M2	NO.	M2	NO.	M2	NO.	M2
School of Humanities	Primary School Education	1988-1989							5									
	Pre-School Education	1988-1989	2	800	2	100	20	300	6	180								
	Special Education	1998-1999							1									
	History, Archaeology, Social Anthropology	1998-1999	2	1.000			23		4	150								
School of Engineering	Planning & Regional Development	1989-1990	1	5.400	10	1.950	30	850	11	750								
	Mechanical & Industrial Engineering	1990-1991	3	3.000	6	500	25	1.000	10	1.500	6	11.500	16	1.500	90	4.000	15	6.000
	Civil Engineering	1994-1995	3	2.323	7	640	22	825	8	858	3	12.000	19	1.600	45	1.800	16	8.600
	Architecture	1999-2000	1	5.000	6	1.100	20	850	3	250	1	3.000						
	Computer & Communication Engineering	2000-2001																
School of Health Sciences	Medicine	1990-1991	4	6.150	7	1.200	32	650	50	4.000	2	16.000	11	2.000	56	2.000	10	7.000
	Biochemistry & Biotechnology	2000-2001	1	1.528	4	428	7	532	8	568								
	Veterinary Science	1994-1995		6.500	4	33			17									
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	2	12.362	16	2.343	30	1.500	24	5.519								
	Agriculture, Animal Production & Aquatic Environment	1988-1989																
Independent Departments	Physical Education & Sport Science	19994-1995	2	2.283	6	228	19	368	8	702	1	1.000	1	250	10	260		
	Economics	1999-2000	1	740	3	155	14	277	2	98	1	1.500	5	760	1	30	2	70
Medicine Labs incl. Clinics - Areas without U. Hospital. *The Agricultural Depts operated as one until acad. year 2001-2002*		TOTALS	22	47.086	71	8.677	242	7.482	166	14.575	14	45.000	52	6.110	202	8.090	43	21.670

APPENDIX VIII-8: EVOLUTION OF ELECTED ACADEMIC STAFF OF THE UNIVERSITY OF THESSALY

DEPARTMENTS		ACADEMIC START	ACAD. YEAR 1993-1998	ACAD. YEAR 1998-2000	ACAD. YEAR 2000-2001	ACAD. YEAR 2001-2002	ACAD. YEAR 2002-2003	Retire/Transfer (2003-2004)	Expections (2003-2004)
School of Humanities	Primary School Education	1988-1989					21		
	Pre-School Education	1988-1989					20		
	Special Education	1998-1999					14		2
	History, Archeology, Social Anthropology	1998-1999		3	10	13	21		1
School of Engineering	Planning & Regional Development	1989-1990	13	20	20	21	20	0	5
	Mechanical & Industrial Engineering	1990-1991	9	13	14	14	16	0	4
	Civil Engineering	1994-1995	2	9	10	12	12	0	4
	Architecture	1999-2000				5	10		
	Computer & Communication Engineering	2000-2001					11		
School of Health Sciences	Medicine	1990-1991	34	47	54	69	87	3	
	Biochemistry & Biotechnology	2000-2001			2	4	5		8
	Veterinary Science	1994-1995					15		8
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	23	26	28	29	19	1	4
	Agriculture, Animal Production & Marine Environment	1988-1989					14		4
Independent Departments	Physical Education & Sport Science	1994-1995	7	12	14	16	19	2	2
	Economic Studies	1999-2000		5	10	10	10	0	4
The two Agricultural Depts operated as one until acad. year 2001-2002		TOTALS	88	135	162	193	314	6	46

APPENDIX VIII-9: TEACHING STAFF OF THE UNIVERSITY OF THESSALY (ACADEMIC YEAR 2003-2004)

DEPARTMENTS		START	ACADEMIC STAFF (ELECTED)	TEACHING STAFF (VISIT-PD407)	SPECIAL TEACH. STAFF (EEDIP)	ELEC. ACADEMIC STAFF	
						NEW APPOINT. (2003 - 2004)	RETIREMENTS (2003 - 2004)
School of Humanities	Primary School Education	1988-1989	21	18	1		
	Pre-School Education	1988-1989	20	20			
	Special Education	1998-1999	14	36		2	
	History, Archaeology, Social Anthropology	1998-1999	21	29	1	1	
School of Engineering	Planning & Regional Development	1989-1990	19	24		6	
	Mechanical & Industrial Engineering	1990-1991	16	23	1	6	
	Civil Engineering	1994-1995	12	24	1	4	
	Architecture	1999-2000	12	25	3	3	
	Computer & Communication Engineering	2000-2001	11	30			
School of Health Sciences	Medicine	1990-1991	87	19	3	13	3
	Biochemistry & Biotechnology	2000-2001	8	15		8	
	Veterinary Science	1994-1995	15	19			
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	19	25		7	2
	Agriculture, Animal Production & Aquatic Environment	1988-1989	14	16		6	
Independent Departments	Physical Education & Sport Science	1994-1995	19	16	6	2	3
	Economics	1999-2000	12	15	1	6	
The two Agricultural Depts operated as one until acad. year 2001-2002		TOTALS	320	354	17	64	8

APPENDIX VIII-10: ADMINISTRATIVE AND TECHNICAL STAFF OF THE UNIVERSITY OF THESSALY (ACADEMIC YEAR Y 2003-2004)

DEPARTMENTS		START	ADMIN. STAFF	TECHNICAL STAFF	CONTRACT EPEAEK+	TOTAL	NEW APPOINTMENTS		RETIREMENTS	
							ADMIN.	TECHNICAL	ADMIN.	TECHNICAL
School of Humanities	Primary School Education	1988-1989	4	2		6				
	Pre-School Education	1988-1989	3	3		6				
	Special Education	1998-1999	2		5	7		1		
	History, Archaeology, Social Anthropology	1998-1999	1	1	4	6				
School of Engineering	Planning & Regional Development	1989-1990	8	3	0	11				
	Mechanical & Industrial Engineering	1990-1991	7	8	2	17				
	Civil Engineering	1994-1995	2	4	2	8				
	Architecture	1999-2000	1			1				
	Computer & Communication Engineering	2000-2001	7	2		9				
School of Health Sciences	Medicine	1990-1991	25	13		38				
	Biochemistry & Biotechnology	2000-2001	2		4	6		1		
	Veterinary Science	1994-1995	1	6		7				
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	15	7		22		1		
	Agriculture, Animal Production & Aquatic Environment	1988-1989	5	2		7				
Independent Departments	Physical Education & Sport Science	1994-1995	3	1	16	20	1			
	Economics	1999-2000	3	1	3	7				
The two Agricultural Depts operated as one until acad. year 2001-2002		TOTALS	89	53	36	178	1	3	0	0

APPENDIX VIII-11: EVOLUTION OF UNDERGRADUATE STUDENTS OF THE UNIVERSITY OF THESSALY

	DEPARTMENTS	START	AY 1993-1998			AY 1998-2000			AY 2000-2001			AY 2001-2002			AY 2002-2003			TOTALS		
			ENROL	TRANS	GRAD	ENROL	TRANS	GRAD	ENROL	TRANS	GRAD	ENROL	TRANS	GRAD	ENROL	TRANS	GRAD	ENROL	TRANS	GRAD
School of Humanities	Primary School Education	1988-1989							101			87			100			511		511
	Pre-School Education	1988-1989							128			109			112			349		175
	Special Education	1998-1999				166			95			93			94			448		139
	History, Archeology, Social Anthropology	1998-1999				190			138			123			123			574		69
School of Engineering	Planning & Regional Development	1989-1990	108	0	24	95	0	54	64	2	32	67	6	37	60	0	38	394	8	185
	Mechanical & Industrial Engineering	1990-1991	248	78	36	128	48	82	74	19	22	64	19	34	38	25	36	552	189	210
	Civil Engineering	1994-1995	159	30		119	18	20	81	17	15	73	23	26	60	27	42	492	115	103
	Architecture	1999-2000				100	17		100	20		87	28		111			398	65	
	Computer & Communication Engineering	2000-2001							76			93			104			273		
School of Health Sciences	Medicine	1990-1991	249	95	39	217	65	89	72	27	34	64	21	50	72	35	26	674	243	238
	Biochemistry & Biotechnology	2000-2001							55	12		53	6		58	7		166	25	
	Veterinary Science	1994-1995	115	92		116	35	13	39	18	8	39	11	18	45	12	13	354	168	52
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	269	115	94	155	68	45	104	36	23	93	23	34	70	14	42	349	168	210
	Agriculture, Animal Production & Aquatic Environment	1988-1989													39	5	1			
Independent Departments	Physical Education & Sport Science	1994-1995	26	33		109	36	48	125	33	31	113	23	40	112	40	88	485	165	207
	Economics	1999-2000				152	50	0	168	43	0	145	33	0	150	13	45	615	139	45
The Agricultural Depts operated as one until 2001-02		TOTALS	1174	443	193	1547	337	351	1420	227	165	1303	193	239	1348	178	331	6634	1285	2144

APPENDIX VIII-12: EVOLUTION OF POSTGRADUATE STUDENTS IN THE UNIVERSITY OF THESSALY

	DEPARTMENTS	START	AY 1995-2000				AY 2000-2001				AY 2001-2002				AY 2002-2003				TOTAL			
			ENROLLED		GRADUATED		ENROLLED		GRADUATED		ENROLLED		GRADUATED		ENROLLED		GRADUATED		ENROLLED		GRADUATED	
			MSC	PHD	MSC	PHD	MSC	PHD	MSC	PHD	MSC	PHD	MSC	PHD	MSC	PHD	MSC	PHD	MSC	PHD	MSC	PHD
School of Humanities	Primary School Education	1988-1989																		38		10
	Pre-School Education	1988-1989																		36		12
	Special Education	1998-1999																		20		6
	History, Archaeology, Social Anthropology	1998-1999		3				1				7				8				22		
School of Engineering	Planning & Regional Development	1989-1990	49	50	25	2	24	12	21	1	24	7	24	0	25	18	25	3	122	87	95	6
	Mechanical & Industrial Engineering	1990-1991	35	28	15	1	21	12	14	5	25	9	10	0	20	12	22	3	101	61	61	9
	Civil Engineering	1994-1995		7				5				5				7				24		
	Architecture	1999-2000														3				3		
	Computer & Communication Engineering	2000-2001														4			32	13		
School of Health Sciences	Medicine	1990-1991																		308		21
	Biochemistry & Biotechnology	2000-2001										2				4				6		1
	Veterinary Science	1994-1995																		26		1
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	36	42	36	2	17	3	15		30	4	16	2	34	10		5	117	59	67	9
	Agriculture, Animal Production & Aquatic Environment	1988-1989																				
Independent Departments	Physical Education & Sport Science	1994-1995		17		1	20	3		1	20	3			20	3	20	4	60	26	20	6
	Economics	1999-2000	0	2	0	0	0	8	0	1	0	12	0	0	0	11	0	1	0	33	0	2
The two Agricultural Depts operated as one until acad. year 2001-02		TOTALS	120	149	76	6	82	44	50	8	99	49	50	2	99	80	67	16	432	762	243	83

APPENDIX VIII-13: RESEARCH ACTIVITIES OF THE DEPARTMENTS OF THE UNIVERSITY OF THESSALY (FROM START)

DEPARTMENTS		START	NUMBER OF LABS	FACULTY MEMBERS	SUPPORT STAFF	RESEARCH STAFF	TOTAL NO. PROJECTS	TOTAL FUNDING (EUROS)	JOURNAL PUBLNS. TOTAL	JOURNAL PUBLNS. FROM UTH	ORGANIZED CONFERENCES
School of Humanities	Primary School Education	1988-1989	5	21							3
	Pre-School Education	1988-1989	6	20							2
	Special Education	1998-1999	1	14							1
	History, Archaeology, Social Anthropology	1998-1999	4	21	2		3				14
School of Engineering	Planning & Regional Development	1989-1990	11	19	3	15	220	10.823.369	240	164	16
	Mechanical & Industrial Engineering	1990-1991	10	16	6	8	83	5.087.185	400	148	4
	Civil Engineering	1994-1995	8	12	1	3	30	985.296	245	94	12
	Architecture	1999-2000	2	12	2		3	514.872			
	Computer & Communication Engineering	2000-2001		11						23	12
School of Health Sciences	Medicine	1990-1991	50	87						114	10
	Biochemistry & Biotechnology	2000-2001	8	8			11	280.500	222		
	Veterinary Science	1994-1995	14	15					126		6
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	17	19	7	9	76		459	380	20
	Agriculture, Animal Production & Aquatic Environment	1988-1989	9	14	2	19	22		273		2
Independent Departments	Physical Education & Sport Science	1994-1995	8	19			45	1.927.117	504		12
	Economics	1999-2000	2	10	3	0			187		2
The two Agricultural Depts operated as one until acad. year 2001-2002		TOTALS	155	318	26	54	493	19.618.339	2656	923	116

APPENDIX VIII-14: ANNUAL CURRENT EXPENSES OF THE DEPARTMENTS OF THE UNIVERSITY OF THESSALY (in Euros)

DEPARTMENTS		START	FISCAL YEARS 1998-2000	FISCAL YEAR 2001	FISCAL YEAR 2002	FISCAL YEAR 2003	TOTAL	REMARKS
School of Humanities	Primary School Education	1988-1989	63.096	29.347	29.345	25.000	146.788	
	Pre-School Education	1988-1989	31.108	2.641	26.412	23.000	83.161	
	Special Education	1998-1999	20.608	14.673	8.804	10.000	54.085	
	History, Archaeology, Social Anthropology	1998-1999	17.608	19.076	32.600	30.000	99.284	
School of Engineering	Planning & Regional Development	1989-1990	217.167	58.694	58.694	55.000	389.555	
	Mechanical & Industrial Engineering	1990-1991	588.409	202.494	61.628	60.000	912.531	incl EPEAEK 1998-2000
	Civil Engineering	1994-1995	483.090	46.955	46.910	45.000	621.955	For 1994-2003
	Architecture	1999-2000					1.904.395	incl EPEAEK 1999-2003
	Computer & Communication Engineering	2000-2001						
School of Health Sciences	Medicine	1990-1991	410.858	88.041	94.000	94.000	686.899	
	Biochemistry & Biotechnology	2000-2001		20.543	44.347	45.000	109.890	
	Veterinary Science	19994-1995	86.000	41.000	41.000	41.000	209.000	
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	211.299	67.498	67.498	48.000	414.295	
	Agriculture, Animal Production & Aquatic Environment	1988-1989				20.000		
Independent Departments	Physical Education & Sport Science	1994-1995	72.544	35.216	40.000	40.000	187.760	
	Economic Studies	1999-2000		297.423	234.192	245.182	776.797	
The two Agricultural Depts operated as one until acad. year 2001-2002		TOTALS	2.201.787	923.601	785.430	781.182	6.596.395	

APPENDIX VIII-15: PROGRAMS OF EXTENDED STUDIES OF THE UNIVERSITY OF THESSALY

UTH and invited or adjunct faculty from other Universities participated in these programs.UTH teaching and research facilities were used, primarily, in afternoon hours.

DEPARTMENT	START	TEACHING & OTHER STAFF - LABS & OFFICES					
		ACAD. STAFF (Other Depts)	TECHING STAFF (Visiting)	ADMIN. STAFF	TECHNICAL STAFF	NUMBER OF LABS	OFFICES
Medical Biochemistry	1998-1999	28	50	2	1		1
Agricultural Management		20	30	2	1	2	1
Education of Museum Pedagogic		26	26	2	1	1	1
	TOTALS	74	106	6	3	3	3

	START	UNDERGRADUATE STUDENTS					
		ACAD. YEAR 1998-1999	ACAD. YEAR 1999-2000	ACAD. YEAR 2000-2001	ACAD. YEAR 2001-2002	ACAD. YEAR 2001-2002	TOTAL
Medical Biochemistry	1998-1999	33	40	0	0	0	73
Agricultural Management		49	63	6	0	0	118
Education of Museum Pedagogic		45	50	0	0	0	95
	TOTALS	127	153	6	0	0	286

	START	ANNUAL EXPENSES					
		FISCAL YEAR 1998-1999	FISCAL YEAR 1999-2000	FISCAL YEAR 2000-2001	FISCAL YEAR 2001-2002	FISCAL YEAR 2002-2003	TOTAL
Medical Biochemistry	1998-1999	328.625	328.625	258.217	171.411	148.487	1.235.365
Agricultural Management		475.963	475.963	235.431	261.391	242.148	1.690.896
Education of Museum Pedagogic		231.322	231.322	183.045	152.411	188.993	1.038.879
	TOTALS	1.035.910	1.035.910	676.693	585.213	579.628	3.965.140

These programs will be terminated in 2005

APPENDIX VIII-16a: RESEARCH BOARD - RESEARCH PROJECTS OF THE UNIVERSITY OF THESSALY (in Euros) - *continued*

DEPARTMENTS		START	FY 1999						FY 2000					
			International		National		UTH		International		National		UTH	
			NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET
School of Humanities	Primary School Education	1988-1989	1	18.038	3	37.946	3	13.793			3	302.193	2	5.869
	Pre-School Education	1988-1989			4	163.536	3	10.707			4	242.736	3	5.869
	Special Education	1998-1999			1	233.715	2	5.869			2	336.362	3	5.869
	History, Archaeology, Social Anthropology	1998-1999											1	2.935
School of Engineering	Planning & Regional Development	1989-1990	1	49.535	15	1.948.367	3	9.697			35	1.945.656	4	17.195
	Mechanical & Industrial Engineering	1990-1991	4	568.906	16	625.254	2	5.869	1	5.916	21	1.088.646	3	5.869
	Civil Engineering	1994-1995			2	124.601	1	4.402			2	59.490	4	11.739
	Architecture	1999-2000												
	Computer & Communication Engineering	2000-2001					1	3.815						
School of Health Sciences	Medicine	1990-1991			7	332.295	6	7.630	1	100.000	4	100.954	2	5.869
	Biochemistry & Biotechnology	2000-2001			2	209.717	1	2.054			3	151.756	1	5.869
	Veterinary Science	1994-1995			1	499	3	5.869			2	31.793		
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	2	130.372	7	234.153	3	6.456	3	129.550	14	825.142	3	5.356
	Agriculture, Animal Production & Aquatic Environment	1988-1989			3	380.725			1	223.124	6	1.178.099		
Independent Departments	Physical Education & Sport Science	1994-1995	1	8.390	3	31.031	4	7.777	1	13.272	7	472.749	2	5.869
	Economics	1999-2000			5	377.253					2	121.799	1	2.935
	General (*Stopped operating in 2000?*)				1	1.761								
	Department Total		9	775.242	70	4.700.852	32	83.940	7	471.861	105	6.857.375	29	81.245
	Institutional				1	727.768					14	2.986.504		
		TOTALS	9	775.242	71	5.428.620	32	83.940	7	471.861	119	9.843.879	29	81.245

APPENDIX VIII-16b: RESEARCH BOARD - RESEARCH PROJECTS OF THE UNIVERSITY OF THESSALY (in Euros) - *continued*

DEPARTMENTS	START	FY 2001						FY 2002					
		International		National		UTH		International		National		UTH	
		NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET
Primary School Education	1988-1989			2	12.179					1	30.000	3	8.337
Pre-School Education	1988-1989			2	11.939	2	2.935			4	555.999	3	4.402
Special Education	1998-1999									2	98.610	2	5.869
History, Archeology, Social Anthropology	1998-1999					1	587			4	495.132	2	5.869
Planning & Regional Development	1989-1990	3	90.276	21	541.423	1	1.027	5	397.150	46	1.213.289	2	5.869
Mechanical & Industrial Engineering	1990-1991	2	31.712	5	100.946			3	159.000	27	1.794.422	4	6.869
Civil Engineering	1994-1995			2	74.541					5	134.800	2	5.869
Architecture	1999-2000									3	514.872	1	2.935
Computer & Communication Engineering	2000-2001							1	5.000	7	525.632	1	1.174
Medicine	1990-1991	1	36.000	8	35.803	2	1.321	3	15.619	19	588.047	3	6.456
Biochemistry & Biotechnology	2000-2001									2	356.684		
Veterinary Science	1994-1995	1	82.172	3	19.689	1	5.869	1	111.024	10	225.307	3	17.869
Agriculture, Crop Production & Agricultural Environment	1988-1989	2	241.317	10	223.395	1	293	2	17.756	7	174.710	3	7.369
Agriculture, Animal Production & Aquatic Environment	1988-1989			1	11.739	1	2.935			19	111.653		
Physical Education & Sport Science	1994-1995			2	10.480					16	1.099.638	2	5.869
Economics	1999-2000			2	24.211					3	312.368		
General													
Department Total		9	481.476	58	1.066.345	9	14.967	15	705.549	175	8.231.164	31	84.759
Institutional								1	260.000	34	7.301.253		
	TOTALS	9	481.476	58	1.066.345	9	14.967	16	965.549	209	15.532.417	31	84.759

APPENDIX VIII-16c: RESEARCH BOARD - RESEARCH PROJECTS OF THE UNIVERSITY OF THESSALY (in Euros) - *concluded*

DEPARTMENTS	START	FY 2003						TOTAL						TOTAL OF TOTALS	
		International		National		UTH		International		National		UTH			
		NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET	NO.	BUDGET
Primary School Education	1988-1989			2	147.200	5	28.300	1	18.038	11	529.518	13	56.299	25	603.855
Pre-School Education	1988-1989			3	245.447	3	10.700	0	0	17	1.219.657	14	34.613	31	1.254.270
Special Education	1998-1999			3	709.986	2	17.600	0	0	8	1.378.673	9	35.208	17	1.413.881
History, Archeology, Social Anthropology	1998-1999			3	27.950	3	3.380	0	0	7	523.082	7	12.771	14	535.853
Planning & Regional Development	1989-1990	4	774.506	32	1.047.477			13	1.311.467	149	6.696.212	10	33.788	172	8.041.468
Mechanical & Industrial Engineering	1990-1991	1	27.419	15	806.938	1	900	11	792.953	84	4.416.206	10	19.508	105	5.228.667
Civil Engineering	1994-1995			10	362.254	2	17.600	0	0	21	755.686	9	39.610	30	795.296
Architecture	1999-2000							0	0	3	514.872	1	2.935	4	517.807
Computer & Communication Engineering	2000-2001	1	90.000	8	376.566			2	95.000	15	902.198	2	4.989	19	1.002.187
Medicine	1990-1991			20	286.323	8	33.800	5	151.619	58	1.343.422	21	55.077	84	1.550.117
Biochemistry & Biotechnology	2000-2001			5	355.205	2	17.600	0	0	12	1.073.362	4	25.524	16	1.098.886
Veterinary Science	1994-1995	1	9.252	10	32.200	2	9.800	3	202.448	26	309.488	9	39.408	38	551.344
Agriculture, Crop Production & Agricultural Environment	1988-1989	1	150.259	9	107.456			10	669.254	47	1.564.855	10	19.476	67	2.253.585
Agriculture, Animal Production & Aquatic Environment	1988-1989	1	79.556	6	603.357	1	1.400	2	302.680	35	2.285.573	2	4.335	39	2.592.588
Physical Education & Sport Science	1994-1995			5	261.841	2	10.200	2	21.662	33	1.875.739	10	29.716	45	1.927.117
Economics	1999-2000							0	0	12	835.631	1	2.935	13	838.566
General								0	0	1	1.761	0	0	1	1.761
Department Total		9	1.130.992	131	5.370.200	31	151.280	49	3.565.120	539	26.225.936	132	416.192	720	30.207.248
Institutional				1	545.982			1	260.000	50	11.561.507	0	0	51	11.821.507
	TOTALS	9	1.130.992	132	5.916.182	31	151.280	50	3.825.120	589	37.787.443	132	416.192	771	42.028.755

APPENDIX VII-17 RESEARCH BOARD - TOTAL PROJECTS OF THE UNIVERSITY OF THESSALY

PROJECTS	1999		2000		2001		2002		2003		TOTAL	
	NUMBER	BUDGET	NUMBER	BUDGET	NUMBER	BUDGET	NUMBER	BUDGET	NUMBER	BUDGET	NUMBER	BUDGET
International	9	775.242	7	471.861	9	481.476	16	965.549	9	1.130.992	50	3.825.120
National	71	5.428.620	119	9.843.879	58	1.066.345	209	15.532.417	132	5.916.182	589	37.787.443
U of Thessaly	32	83.940	29	81.245	9	14.967	31	84.759	31	151.280	132	416.192
TOTALS	112	6.287.802	155	10.396.985	76	1.562.789	256	16.582.725	172	7.198.454	771	42.028.755

APPENDIX VIII-18: RATIOS OF STUDENTS OR DEGREES PER TEACHING STAFF OF THE UNIVERSITY OF THESSALY (2002 - 2003)

DEPARTMENTS		START	TEACHING STAFF			STUDENT ENROLL			STUDENTS/FACULTY			STUDENTS/TOTAL			DEGREES			DEGREES/FACULTY			DEGREES/TOTAL		
			FACULTY	VISITING	TOTAL	UNDER	MSC	PHD	UNDER	MSC	PHD	UNDER	MSC	PHD	UNDER	MSC	PHD	UNDER	MSC	PHD	UNDER	MSC	PHD
School of Humanities	Primary School Education	1988-1989	21	18	39	400		38	19,0		1,8	10,3		1,0	511		10	24,3		0,5	13,1		0,3
	Pre-School Education	1988-1989	20	20	40	430		36	21,5		1,8	10,8		0,9	175		12	8,8		0,6	4,4		0,3
	Special Education	1998-1999	14	36	50	360		20	25,7		1,4	7,2		0,4	139		6	9,9		0,4	2,8		0,1
	History, Archeology, Social Anthropology	1998-1999	21	29	50	450		22	21,4		1,0	9,0		0,4	69			3,3			1,4		
School of Engineering	Planning & Regional Development	1989-1990	19	24	43	573	122	87	30,2	6,4	4,6	13,3	2,8	2,0	185	95	6	9,7	5,0	0,3	4,3	2,2	0,1
	Mechanical & Industrial Engineering	1990-1991	16	23	39	304	101	61	19,0	6,3	3,8	7,8	2,6	1,6	210	61	9	13,1	3,8	0,6	5,4	1,6	0,2
	Civil Engineering	1994-1995	12	24	36	333		24	27,8		2,0	9,3		0,7	115			9,6			3,2		
	Architecture	1999-2000	12	25	37	380		3	31,7		0,3	10,3		0,1									
	Computer & Communication Engineering	2000-2001	11	30	41	273	32	13	24,8	2,9	1,2	6,7	0,8	0,3									
School of Health Sciences	Medicine	1990-1991	87	19	106	484		308	5,6		3,5	4,6		2,9	238		21	2,7		0,2	2,2		0,2
	Biochemistry & Biotechnology	2000-2001	8	15	23	166		6	20,8		0,8	7,2		0,3	166		1	20,8		0,1	7,2		
	Veterinary Science	1994-1995	15	19	34	239		26	15,9		1,7	7,0		0,8	52		1	3,5		0,1	1,5		
Scool of Agricultural Sciences	Agriculture, Crop Production & Agricultural Environment	1988-1989	19	25	44	320	80	39	16,8	4,2	2,1	7,3	1,8	0,9	180	47	6	9,5	2,5	0,3	4,1	1,1	0,1
	Agriculture, Animal Production & Aquatic Environment	1988-1989	14	16	30	150	37	20	10,7	2,6	1,4	5,0	1,2	0,7	64	20	3	4,6	1,4	0,2	2,1	0,7	0,1
Independent Departments	Physical Education & Sport Science	1994-1995	19	16	35	485	60	26	25,5	3,2	1,4	13,9	1,7	0,7	207	20	6	10,9	1,1	0,3	5,9	0,6	0,2
	Economics	1999-2000	12	15	27	139		33	11,6		2,8	5,1		1,2	45		2	3,8		0,2	1,7		0,1
		TOT/AV	320	354	674	5.486	432	762	17,1	1,2	2,4	8,1	0,6	1,1	2.356	243	83	7,4	0,8	0,3	3,5	0,4	0,1

DISTRIBUTION OF CURRENT EXPENSES BUDGET - UNIVERSITY OF THESSALY

DEPARTMENTAL ALLOCATION OF CURRENT EXPENSES BUDGET - UNIVERSITY OF THESSALY

600.000 Euro — No Expansion — 342.000

Departments	Faculty	%	Euro	Students	%	Euro	PhD Cand	%	Euro	Faculty + Stud+PhD	Dept. Factor	Euro	Totals (Euro)
Primary Education	21	0,013	7.826	410	0,015	9.196	38	0,002	922	17.944	1,00	2.792	20.736
Special Education	15	0,009	5.590	352	0,013	7.895	20	0,001	485	13.971	1,00	2.792	16.762
Pre-School Education	20	0,012	7.453	404	0,015	9.062	32	0,001	776	17.291	1,00	2.792	20.083
History, Archaeology & Social Anthropology	21	0,013	7.826	423	0,016	9.488	22	0,001	534	17.848	2,50	6.980	24.827
Agriculture - Crop Production & Rural Environment	20	0,012	7.453	283	0,011	6.348	47	0,002	1.140	14.941	10,00	27.918	42.860
Agriculture - Animal Production & Aquatic Environment	14	0,009	5.217	89	0,003	1.996	22	0,001	534	7.747	10,00	27.918	35.666
Physical Education & Sport Science	19	0,012	7.081	481	0,018	10.789	10	0,000	243	18.112	6,00	16.751	34.863
Ecomic Sciences	10	0,006	3.727	503	0,019	11.282	22	0,001	534	15.543	1,00	2.792	18.334
Medicine	87	0,054	32.422	367	0,014	8.232	355	0,014	8.612	49.266	15,00	41.878	91.144
Veterinary Science	16	0,010	5.963	200	0,007	4.486	26	0,001	631	11.079	15,00	41.878	52.957
Biochemistry - Biotechnology	8	0,005	2.981	236	0,009	5.293	7	0,000	170	8.445	10,00	27.918	36.363
Architecture	12	0,007	4.472	461	0,017	10.340	0	0,000	0	14.812	10,00	27.918	42.731
Computer & Communication Engineering	11	0,007	4.099	374	0,014	8.389	23	0,001	558	13.046	8,00	22.335	35.381
Mechanical & Industrial Engineering	16	0,010	5.963	241	0,009	5.406	44	0,002	1.067	12.436	12,00	33.502	45.938
Planning & Regional Development	19	0,012	7.081	278	0,010	6.236	58	0,002	1.407	14.723	10,00	27.918	42.642
Civil Engineering	13	0,008	4.845	248	0,009	5.563	16	0,001	388	10.795	10,00	27.918	38.714
Totals	322	0,2	120.000	5.350	0,20	120.000	742	0,030	18.000	258.000	123	342.000	600.000

SOCRATES/ERASMUS Exchange Partners

BELGIUM

1. B HASSEL 021 Katholieke Hogeschool Limburg
2. B LOUVAIN 01/Université Catholique de Louvain

BULGARIA

3. BG ROUSSE 01 /"Angel Kanchev" University of Rousse
4. BG SOFIA 03/University of National and World Economy
5. BG SOFIA 06/University of Sofia

CZECH REPUBLIC

6. CZ PRAHA 02/ Czech University of Agriculture, Prague

DENMARK

7. DK FREDERI 01/Royal-Veterinary-Agricultural University
8. DK HASLEV 01/Haslev College
9. DK KOVENHA 13 /N. Zahles College of Education/Seminarium
10. DK ARHUS 11/Peter Sabroe Seminariet

FINLAND

11. SF JYVASKY 01/University of Jyväskylä

FRANCE

12. F PAU 01 /Université de Pau et les Pays de l'Adour,
13. F MONTPEL 03/Montpellier III,
14. F MONTPEL 01/Montpellier I
15. F NANTES 01/Université de Nantes
16. F DUNKERQ 09/ULCO Dunkerque
17. F LYON 02/Université Lumière Lyon 2
18. F TOULOUS 02/De Toulouse II-Le Mirail
19. F ORLEANS 01/Université D'Orleans
20. F AVIGNON 01 /D'Avignon et les Pays de Vaucluse
21. F TOURS 01/ François Rabelais, Tours
22. F STRASB 01/Louis Pasteur-Strasbourg I
23. F PARIS 011/Université de Paris-Sud XI
24. F DIJON 08/IUFM de Dijon
25. F RENNES 15/IUFM de Bretagne
26. F PARIS 004/Université de Paris IV Sorbonne

GERMANY

27. Universität Rostock
28. D DORTMUN 01/Universität Dortmund
29. D ERFURT 01 /Universität Erfurt
30. D WEINGAR 01 /University of Education, Weingarden
31. D DARMSTA 01/Techniche Universität Darmstadt
32. Eberhard Karls Universität Tübingen
33. D WORMS 01/Fachhochschule Worms

HUNGARY

34. HU GODOLIO 01/ Szent Istvan University Godolio
35. HU DEBRECE 01/University of Debrecen Centre of Agricultural Sciences

ITALY

36. I TORINO 01/Università degli studi di Torino
37. I SIENA 01/Università degli studi di Sienna
38. I FOGGIA 03/Università degli studi di Foggia
39. I BARI 01/Università degli studi di Bari
40. I-ROMA 01/Università di Roma "La Sapienza
41. Università Cattolica del Sacro Cuore
42. I BRECIA 01/Università degli studi di Brescia
43. I MILANO 01/ Università degli studi di Milano
44. I NAPOLI 01/Università degli studi di Napoli
45. I POTENZA 01 /Università degli studi della Basilicata
46. I MILANO 02/Università Polytecnico di Milano
47. I BENEVEN02/Università degli studi di Sannio
48. I CAGLIAR 01/ Università degli studi di Cagliari

LITHUANIA

49. LT VILNIUS 01/Vilnius University

POLAND

50. PL LODZ 01/ University of Lodz
51. PL BYDGOSZ 02/Akademia Techniczno-Rolnicza
52. PL LODZ 02/Technical University of Lodz

PORTUGAL

53. P LISBOA 03/Universidade Nova de Lisboa
54. P FARO 02/Universidade Do Algarve, Faro
55. P VILA-RE 01/Universidad de Tras os Montes e Alto Douro
56. P LISBOA 42/Instituto Superior de Agronomia de Lisboa
57. P LOULE 01/University Institute Dom Afonso III

ROMANIA

58. RO BRASOV 01/Transilvania University of Brasov
59. RO TARGOVI 01/Valahia University of Targoviste
60. RO GALATI/ University Dunarea de Jos of Galati

SPAIN

61. E MURCIA 04/Universidad Politecnica de Cartagena
62. E MADRID 03/Universidad Complutense de Madrid
63. E BARCELO 03/ Politechnica de Catalunya
64. E BARCELO 02/University Autonoma de Barcelona

SWEDEN

65. S STOCKHO 01/Stockholm's University
66. S OREBRO 01/Orebro Universitet

TURKEY

67. TR ISTANBU 20/Sabanci University

UNITED KINGDOM

68. UK MANCHES 04 /Manchester Metropolitan University
69. UK POOLE 01/Bournemouth University
70. UKNEWCAST01/University of Newcastle
71. Wolverhampton University
72. UK OXFORD 04/Oxford Brookes University

OUTGOING ERASMUS TEACHING STAFF/ACAD.YEAR 2003-2004

COUNTRY	UNIVERSITY	NAME	DEPT
1. Belgium	Katholieke Hogeschool Limburg	Vassiliki Lalagianni	Primary Education
1. Denmark	Agricultural University	Theophanis Gemtos	Agriculture, Crop Production & Rural Environment
2. Finland	University of Juvaskyla	Harilaos Kouthouris	Physical Education & Sports Science
Finland	University of Juvaskyla	Nikos Digelidis	Physical Education & Sports Science
3. Germany	University of Education	Napoleon Mitsis	Primary Education
Germany	University of Education	Dimitrios Benekos	Primary Education
Germany	Universitat Erfurt	Nikos Kyriazis	Economics
4. Italy	Di Roma "La Sapienza"	Konst/nos Matthiopoulos	Biochemistry & Biotechnology
Italy	Degli Studi di Brescia	Michael Zoumpoulakis	Economics
Italy	Politechnico di Milano	Vaso Trova	Architecture
Italy	Degli Studi di Foggia	George Nanos	Agriculture, Crop Production & Rural Environment
2. Portugal	Universidade do Algarve	Zissis Mamouris	Biochemistry & Biotechnology
Portugal	Universidade do Algarve	Katerina Moutou	Biochemistry & Biotechnology
1. Spain	Autonoma de Barcelona	Magda Nikolaraizi	Special Education
TOTAL: 14			

OUTGOING ERASMUS STUDENTS ACAD.YEAR 2003-2004

COUNTRY	UNIVERSITY	NAME	DEPARTMENT
9. France	Université de Toulouse	Sofia Hartsioti	History, Arcaeology, Social Antropology
France	Paris-SUD XI	Georgia Tsagogeorga	Biochemistry & Biotechnology
France	Louis Pasteur Université	Stamatina Giannouli	Biochemistry & Biotechnology
France	Louis Pasteur Université	Vassiliki Stamatopoulou	Biochemistry & Biotechnology
France	Avignon et Pays de Vaucluse	Dimitrios Kalesopoulos	Planning & Regional Development
France	Paris-SUD XI	Kalliope Trahana	Biochemistry & Biotechnology
France	Paris-SUD XI	Galateia Papathoma	Biochemistry & Biotechnology
France	Paris-SUD XI	Ioannis Giannios	Biochemistry & Biotechnology
France	Université de Toulouse	Maria Fragouli	History, Arcaeology, Social Antropology
3. Germany	Degli Studi di Brescia	Maria Sakali	Economics
Germany	Degli Studi di Brescia	Zoe Anagnostidou	Economics
Germany	University of Education	Ioanna-Fotini Mavroudi	Pre-School Education
9. Italy	Degli Studi di Milano	Dimitra Papadimitriou	Medicine
Italy	Di Roma 'La Sapienza'	Agoritsa Kaliora	Biochemistry & Biotechnology
Italy	Degli Studi di Sienna	Ifigenia Xaidara	History, Arcaeology, Social Antropology
Italy	Degli Studi di Milano	Leonidas Arvanitis	Medicine
Italy	Politechnico di Milano	Maria Papoutsaki	Architecture
Italy	Politechnico di Milano	Chrysoula Kokolaki	Architecture
Italy	Cattolica del Sacro Cuore	Irene-Maria Georganda	Biochemistry & Biotechnology
Italy	Cattolica del Sacro Cuore	Konstantinos Efthimiadis	Biochemistry & Biotechnology
Italy	Di Roma 'La Sapienza'	Panagiotis Giannios	Biochemistry & Biotechnology
1.Poland	University of Lodz	Dimitra Kamvisi	Architecture
4. Portugal	Universidade do Algarve	Eleanna Kafe	Biochemistry & Biotechnology
Portugal	Tras os Montes e Alto Douro	Nikos Kouvopoulos	Physical Education & Sports Science
Portugal	Universidade do Algarve	Sultana Kapeta	Biochemistry & Biotechnology
Portugal	Tras os Montes e Alto Douro	Ioannis Koutelas	Physical Education & Sports Science
2. Spain	Polytecnica de Cartagena	Andreas Karathanasopoulos	Agriculture, Crop Production & Rural Environment
Spain	Polytecnica de Catalunya	Konstantinos Klepkos	Mechanical & Industrial Engineering
4. Sweden	Orebro Universitet	Georgios Tsiris	Special Education
Sweden	Orebro Universitet	Nikos Hatzoulis	Special Education
Sweden	Stockholm's University	Eleni Giouvanoudi	Biochemistry & Biotechnology
Sweden	Orebro Universitet	Olga Moukouli	Special Education
TOTAL: 32			

INCOMING ERASMUS STUDENTS/ACAD.YEAR 2003-2004

COUNTRY	UNIVERSITY	NAME	DEPARTMENT
3. Belgium	Katholieke Hogeschool Limburg	Ilona Krause	Primary Education
Belgium	Katholieke Hogeschool Limburg	Ioana Merola	Primary Education
Belgium	Katholieke Hogeschool Limburg	Sarah Brebels	Pre-School Education
4. Bulgaria	University of Rousse	Ivaylo Rozinov	Agriculture,Crop Production & Rural Environment
Bulgaria	University of Rousse	Nikolay -Slavov Nikolov	Agriculture,Crop Production & Rural Environment
Bulgaria	National & World Economy	Trifon – Michailov Paskalev	Planning & Regional Development
Bulgaria	National & World Economy	Galina Damyanova	Planning & Regional Development
4. France	Universite de Nantes	Celine Dubois	History, Arcaeology, Social Antropology
France	Montpellier I	Clemence Ploivy-Pirrera	Economics
France	De Pau et des Pays de l'Adour	Amelie Jaouen	History, Arcaeology, Social Antropology
France	Universite de Nantes	Amelien Peroys	History, Arcaeology, Social Antropology
1. Italy	Degli Studi Di Sienna	Fiorenza Bettini	History, Arcaeology, Social Antropology
1. Lithuania	Vilnius University	Eugenija Krisciukaityte	Computer Engineering,Communication & Networks
2. Poland	Technology & Agriculture	Anna Maciuszonek	Agriculture,Crop Production & Rural Environment
Poland	Technology & Agriculture	Ewa Wisniewska	Agriculture,Crop Production & Rural Environment
4. Portugal	Tras os Montes e Alto Douro	Joao-Miguel Sontos	Physical Education & Sport Science
Portugal	Tras os Montes e Alto Douro	Luis-Filipe Ribeiro	Physical Education & Sport Science
Portugal	Tras os Montes e Alto Douro	Luis-Filipe Meireles	Physical Education & Sport Science
Portugal	Tras os Montes e Alto Douro	Sergio-Patricio Soares	Physical Education & Sport Science
3. Romania	Valahia University of Targoviste	Adela-Monica Stoica	Agriculture,Crop Production & Rural Environment
Romania	Valahia University of Targoviste	Oana Cretu	Agriculture,Crop Production & Rural Environment
Romania	Valahia University of Targoviste	Andrei Sasu	Agriculture,Crop Production & Rural Environment
2. Spain	Polytecnica De Cartagena	Veronica Rachel Garcia Qutierrez	Agriculture,Crop Production & Rural Environment
Spain	Polytecnica De Cartagena	Virginia Alarcon Martinez	Agriculture,Crop Production & Rural Environment
TOTAL: 24			