



BENCHMARKING IN EUROPEAN HIGHER EDUCATION

Findings of a two-year
EU-funded project





BENCHMARKING IN EUROPEAN HIGHER EDUCATION

FINDINGS OF A TWO-YEAR EU-FUNDED PROJECT

This report describes the results of a two-year EU-funded project, Benchmarking in Higher Education, which investigated the concepts and practices of benchmarking in higher education.

The project had four partner organisations: the European Centre for Strategic Management of Universities (ESMU), Centre for Higher Education Development (CHE), the UNESCO European Centre for Higher Education (UNESCO-CEPES) and the University of Aveiro, which carried out extensive desk and bibliographical research into benchmarking concepts and practices. The partners designed a typology to characterize collaborative benchmarking groups in higher education and carried out interviews with these groups. This resulted in this "report on project findings", an online tool on benchmarking in higher education and guidelines for effective benchmarking. See www.education-benchmarking.org.

The report is the collective result of the project team.

Project team

Frans van Vught (Project leader)	ESMU President
Uwe Brandenburg	CHE
Nadine Burquel	ESMU
Diane Carr	CHE
Gero Federkeil	CHE
José Alberto dos Santos Rafael	University of Aveiro
Jan Sadlak	UNESCO-CEPES
Jim Taylor (†)	University of Aveiro
Joanna Urban	ESMU (Bialystok Technical University)
Peter Wells	UNESCO-CEPES

Brussels, August 2008

The project has been funded with support from the European Commission. The content of this report reflects the views only of the authors and the Commission cannot be held responsible for any use which may be made of the information contained therein.
Socrates Project N° 2006-1470/001-001 S02-81AWB

Contact

Nadine Burquel
Secretary-General
European Centre for Strategic Management of Universities (ESMU)
Rue Montoyer 31
1000 Brussels

© 2008 ESMU

www.education-benchmarking.org
e-mail: benchmarking@esmu.be

All rights reserved. No reproduction or copy of this publication may be made without written permission.

TABLE OF CONTENTS

1. INTRODUCTION	7
2. EXECUTIVE SUMMARY	9
3. CONTEXT	13
3.1 Origin of project	14
3.2 Benchmarking in Higher Education	15
4. METHODOLOGY AND RESEARCH DESIGN	19
5. PROJECT OUTCOMES	23
5.1 Criteria specifications and results	24
5.2 Major benefits and challenges of benchmarking initiatives (BI)	43
5.3 Recommendations for institutions wishing to begin or initiate a BI	44
5.4 Additional results of the analysis of benchmarking initiatives	45
5.5 Other project outcomes	45
5.6 Specific results	47
6. ANNEX 1 – THE COLLABORATIVE BENCHMARKING GROUPS OF THE DESK RESEARCH	50
6.1 Aarhus Benchmarking Network	50
6.2 ACODE - Benchmarking in Higher Education (Australia)	51
6.3 ACU Commonwealth University Management Benchmarking Club	52
6.4 Benchmarking Club Fachhochschulen (Germany)	53
6.5 Benchmarking Club Technical Universities (Germany)	53
6.6 ECIU - European Consortium of Innovative Universities	54
6.7 ESMU - European Centre for Strategic Management of Universities	55
6.8 HESA - Higher Education Statistics Agency (United Kingdom)	56
6.9 HIS - Higher Education Information System (Process-oriented benchmarking) (Germany)	56
6.10 HIS - Higher Education Information System (Indicator-oriented benchmarking 1 university)	57
6.11 HIS - Higher Education Information System (Indicator-oriented benchmarking several universities)	57
6.12 IDEA League - Leading European Education and Research in Science and Technology	58
6.13 Italian University Benchmarking	59
6.14 Leipzig Group (Germany)	60
6.15 NACUBO - National Association of College and University Business Officers (USA)	61
7. ANNEX 2 – BIBLIOGRAPHY	62

In an increasingly **competitive higher education environment** paralleled by national and European governments calls for reforms both at system and institutional level, improving university performance has become of paramount importance to demonstrate accountability for the use of public funding, quality of education and research, and contribution to economic growth.

National governments are gathering all types of data to support policy, strategic development and restructuring their higher education systems. They are setting indicators to measure performance, which in turn will lead to defining benchmarks for higher education institutions to respond to.

At the European level, the Open method of coordination between EU Member States sets quantitative and qualitative benchmarks as a means of comparing best practices. Benchmarks are used extensively to set targets for achievement, for example with the list of 16 indicators linked to eight EU policies to benchmark progress of the Lisbon Strategy in terms of education and training¹.

At their meeting in Berlin in 2003, ministers of education of Bologna signatory countries invited ENQA, the European network of Quality Agencies to develop “an agreed set of standard procedures and guidelines on quality assurance”. The European standards and guidelines for quality assurance defined by ENQA (2007) provide directions for higher education institutions to improve their policies and procedures related to internal quality assurance. Benchmarking exercises on quality assurance can take these standards and guidelines a step further.

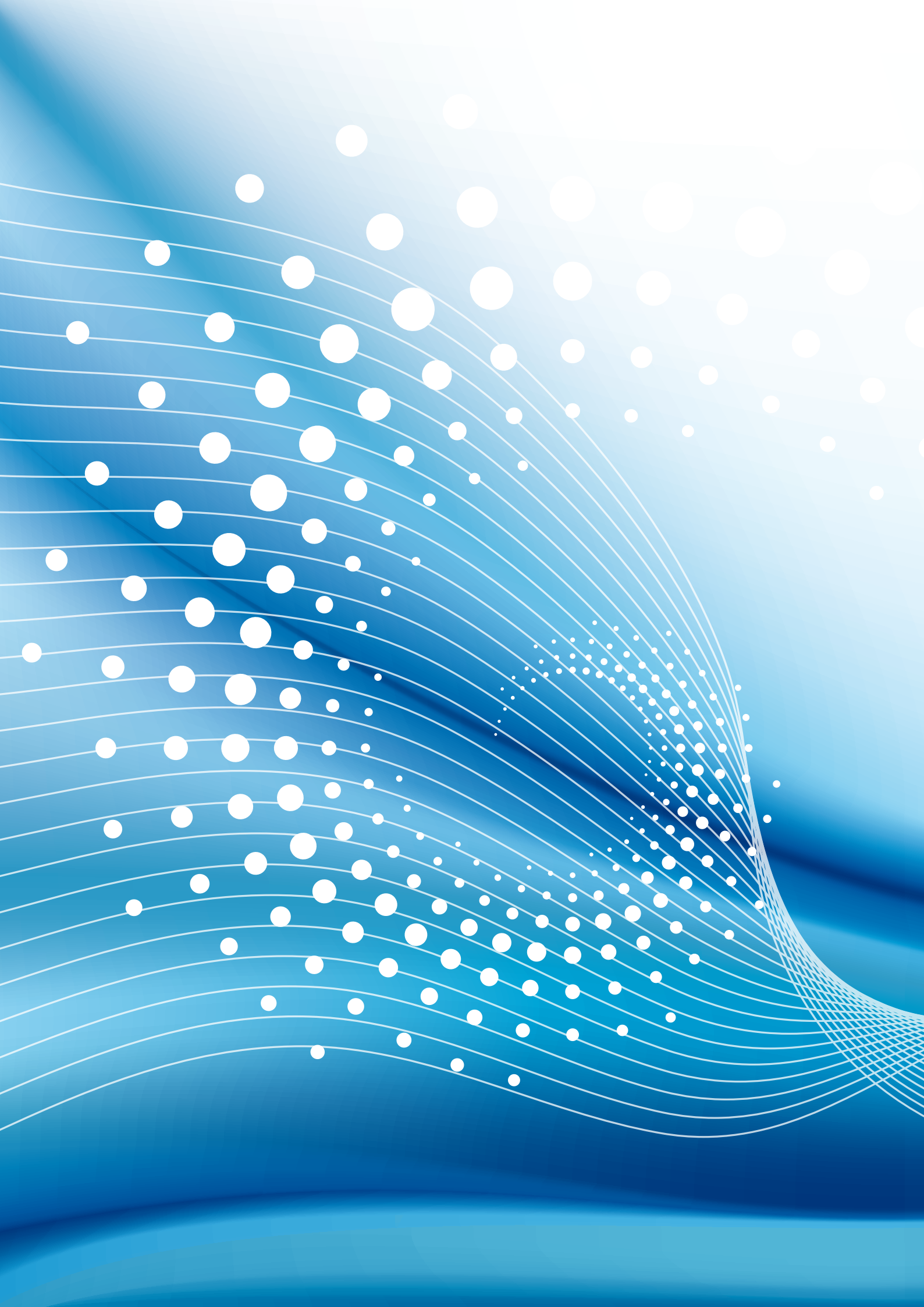
At the international level, in its comparative report Tertiary Education for the Knowledge Society (2008), the OECD reviews tertiary education in 24 countries from the point of view of governance, funding, quality assurance, research and innovation, links to the labour market and internationalisation. The report also provides recommendations to improve performance and aims to set policy for further development.

It is against this background that the two-year EU-funded project **Benchmarking in European Higher Education** has been developed. The project investigated the concepts and practices of benchmarking in higher education, first with an extensive desk and bibliographical research into benchmarking. It designed a typology to characterise collaborative benchmarking groups and carried out interviews with these groups. The project outcomes are available on www.education-benchmarking.org. These include a handbook on benchmarking in higher education, a report on the project findings, an online tool with an extensive online bibliography and guidelines.

I would like to thank our partners in the project team for their valuable contributions to our research into benchmarking in higher education which has led to these project outputs. I do hope that these will be valuable tools for leaders, decision-makers and staff in higher education in their constant endeavours to improve university performance. At our own level we will take this initiative further with a second project phase and the launch of a European platform on benchmarking in higher education, with collaborative benchmarking groups on university governance, lifelong learning, university-enterprise cooperation and curriculum reforms.

Frans van Vught
ESMU President

¹ For the policy linked to the modernisation of higher education, indicators focus on progress with the Bologna Process (number of higher education graduates, cross-national mobility of students in higher education and investment in higher education and training); The 2008 Commission annual report Progress towards the Lisbon objectives in education and training, indicators and benchmarks 2008 provides an update of countries' performance.



The background is a gradient of blue, transitioning from a light, almost white blue at the top to a deep, vibrant blue at the bottom. On the left side, there is a vertical column of white circles of varying sizes, some appearing as soft, out-of-focus bokeh. At the bottom, there are several white, thin, wavy lines that flow across the page, creating a sense of movement and depth. The overall aesthetic is clean, modern, and professional.

EXECUTIVE SUMMARY

Major changes are taking place in European higher education. Competition has risen significantly, urging higher education institutions to increase their attractiveness on the market and to profile themselves much more distinctively. Curricula need to be reformed in line with the Bologna Process and research has become much more strategically oriented. European higher education institutions are encouraged to become strong players in the European economy and the global knowledge society.

Quality is key to support these developments and in this context, enhancing university performance and modernising university management must be on the agenda of all university leaders and decision-makers in Europe. A clear understanding and transparency of modes of operations and processes with a view to continuously improve upon them is needed. Higher education institutions are developing strategies to achieve these goals. Benchmarking can be a valuable method to improve collaborative relationships, obtain information on best practices and increase levels of performance.

To enhance public accountability and ensure that policy makers will ground their judgements on reliable information, performance indicators and benchmarks are indispensable. However, the distinction should be made that benchmarks are purely measurements used for comparison and that benchmarking is the process of finding best practices and of learning from others.

The project **Benchmarking in European Higher Education** aimed to provide a deeper insight into the mechanisms of benchmarking in higher education as well as to develop guidelines and support for establishing and successfully pursuing new benchmarking initiatives. This was a two-year project funded by DG Education and Culture of the European Commission. The project has been designed to help modernise higher education management and to promote the attractiveness of European higher education. It supports higher education institutions and policy makers to better realise the Lisbon goals and the Bologna Process.

The project was initiated by the European Centre for Strategic Management of Universities (ESMU), together in a consortium with UNESCO European Centre for Higher Education (UNESCO-CEPES), the Centre for Higher Education Development (CHE) and the University of Aveiro.

In the beginning of the project, the team decided which type of benchmarking should be the focus of the analysis. Two kinds of benchmarking can be observed in higher education. The first one is the non-collaborative type, when higher education institutions employ consulting companies or simply buy data from private companies in order to compare to other institutions and to benchmark their standing in the competitive market, as well as to develop enhancements procedures. The other type of benchmarking is collaborative, which emphasises co-operation and collaborative learning between the benchmarking institutions and maintains a clear focus on enhancing procedures by learning from the other.

Collaborative benchmarking is grounded on the presupposition of voluntary co-operation for the benefit of all partners. It requires trust and ethical conduct during the realisation of the project as well as after completion of the benchmarking exercise. By all means, confidentiality should be guaranteed and access to data protected. The trust between partners is indispensable and can be enhanced by applying the rule of exchanging the same set of data. The information obtained in the course of a benchmarking process should not be made available to third parties without prior permission of the partner. This should also apply to the information about participation in the project, which should not be published without the partner's prior consent.

The Benchmarking in European Higher Education project focused on the second type of benchmarking, i.e. the collaborative approach, and identified 18 collaborative benchmarking groups conducted by higher education institutions in Europe, Australia, Canada and the USA. These were selected as a sample group for further analysis.

For the purposes of the project, the term 'benchmarking' was therefore understood to mean a process of self-evaluation and self-improvement through the systematic and collaborative comparison of practice and performance with similar organisations in order to identify strengths and weaknesses, and to learn how to adapt and improve organisational processes.

Along with the analysis of existing benchmarking networks in order to identify typical characteristics of benchmarking in higher education, the research included the provision of information to universities which want to engage in co-operative benchmarking initiatives and identification of different approaches to benchmarking for particular purposes. For the sake of the project, the following definition of benchmarking was specified:

Benchmarking in higher education within the project is understood as a co-operative endeavour of at least two institutions which come together voluntarily in order to enhance management processes within their respective institutions.

The 18 Benchmarking Initiatives (BI) were analysed according to this definition. The focus of the analysis was to identify the similarities and differences between the varying benchmarking approaches. A set of criteria for the analysis was developed based on two conditions: 1) the provision of relevant information while retaining neutrality and 2) that the criteria should be to some extent interrelated in order to obtain relevant conclusions.

The Benchmarking Initiatives were scrutinised in more detail through questionnaires and interviews. The results of the interviews and questionnaires were analysed according to the uni-variate results of every criterion and bi-variate relations of the criterion to other criteria. All 18 initiatives were asked to indicate the major benefits and challenges of their benchmarking activities. The 14 criteria were defined as follows : Institution (holistic ↔ specific), Benchmarking Area (holistic ↔ specific), Group Character (homogeneous ↔ heterogeneous), Management of BI (self steered ↔ moderated), Size (small ↔ large), Targets/Goals (vague ↔ well-defined), Membership (open-access ↔ closed shop), performance based ↔ non-performance based, Founding/Timeline (one off ↔ continuous), Scope (regional/national ↔ international), Methodology and Analysis (quantitative methods, qualitative methods, pre-set standards), Benchmarking Focus (input, output, processes), Level of Participation (high ↔ low), Outcomes and Dissemination (public ↔ private), Financial Resources (membership fee).

The analysis produced an **overview of a broad selection of benchmarking practices in higher education**. It was also at the basis of **guidelines** for good benchmarking, an **online tool**, and a **handbook** in order to assist European higher education institutions in finding the most appropriate type of benchmarking practices for their own needs. In addition, the project produced four interactive events, one symposium in Brussels with approximately 120 participants and three practice-oriented workshops in Bucharest, Berlin and Brussels with together more than 90 participants.

Throughout the project, it became clear that benchmarking in higher education lacks coherent and broadly accepted definitions for key aspects and that standard sets of concepts do not exist. Information on existing benchmarking initiatives is scarce and incomplete and a general platform does not exist. The online tool might be a start for such an initiative.

The most decisive finding of the group analysis was that there is no single dominant model or even a small group of archetypes of benchmarking groups. Benchmarking approaches in higher education vary by their aims, objectives, structure of the groups, their methods, and the kind of data used. The interviews with the benchmarking initiatives brought about some other key considerations, such as selection and identification of partners, definition of areas of benchmarking, or identification of a useful approach. Many initiatives also struggled with finding the right facilitator or coordinator, or with defining time frames for their benchmarking process. Appropriate levels of human, technical and financial resources also remained an issue. The most striking finding was that even in well-run initiatives the results are often not implemented in the home institution.

Overall, the different approaches (desk research, analysis, interviews, workshops, and survey) produced a broad set of results, quite a number of them surprising and not anticipated. Benchmarking in higher education is still a very young child with little experience and with even less publicity. But with the increasing role of accountability and process enhancement in higher education institutions, it is likely that benchmarking will gain importance and become a commonly known and frequently used tool in higher education management. The project can provide some information and a discussion platform to foster this process.



CONTEXT



3.1 ORIGIN OF PROJECT

A two-year project funded by DG Education and Culture of the European Commission, the project was designed to help modernise higher education management and to promote the attractiveness of European higher education in order to support higher education institutions and policy makers to better realise the Lisbon goals and the Bologna Process.

The project was initiated by the European Centre for Strategic Management of Universities (ESMU), together in a consortium with UNESCO European Centre for Higher Education (UNESCO-CEPES), the Centrum für Hochschulentwicklung (CHE) and the University of Aveiro.

The project aimed to develop an online tool which will allow higher education institutions to find the most appropriate benchmarking approach for their own needs, with an extensive bibliography and database of articles and publications on Benchmarking in Higher Education. It also aimed to produce a 'Handbook on Benchmarking in European Higher Education' based on the systematic stocktaking of existing benchmarking approaches and methods.

The term 'benchmarking' was first adapted to business practices by Xerox in 1979. Through the systematic and collaborative comparison of performance with its competitors, Xerox's aim was to evaluate itself, to identify its strengths and weaknesses and adapt to constantly changing market conditions.

Benchmarking approaches have been gradually adopted by many businesses in the context of the quality assurance and quality enhancement movements and the need to ensure productivity and effectiveness in the face of increasing competition. With the development of New Public Management, benchmarking has also become an increasingly popular management tool in the public sector for the improvement of public services and administrations.

In Europe, the use of benchmarking as a tool for improving performance both in the private and public sectors has been supported by the European Commission (DG Enterprise) for more than ten years. The underlying aim is to improve Europe's competitiveness, by working at three levels, i.e. improving the general context in which organisations cooperate, improving the internal environment and working with sectoral benchmarking approaches focusing on the competitive challenges in specific sectors of industry.

Benchmarking involves the **systematic collection of data and information** with a view of making **relevant comparisons** of strengths and weaknesses, of aspects of performance (functions or processes), usually with others in the sector. Benchmarking identifies gaps in performance, seeking new approaches for improvements, monitoring progress, reviewing benefits and **adopting good practices**.

Benchmarking exercises focus on collecting **quantitative data** (statistical and performance indicators), can be **qualitative exercises** or review **management processes**. In the higher education sector, they have been conducted at the institutional, national and international level, thus supporting higher education institutions both at the institutional and system level.

Benchmarking may be a one-off activity to provide a snapshot of a given area, but it seems to be more valuable as an on-going process of measuring and increasing organisational performance to lead to new strategic developments. **Increasing performance** also produces marketing effects and increased value, which are considered as one of the most important aspects of benchmarking.

Benchmarking is often defined as a diagnostic instrument, a **self-improvement** tool, a **collaborative learning exercise** and an on-going evaluation and systematic approach of continuously measuring work processes (UNESCO-CEPES 2007). Some initiatives only rely on quantitative statistics and performance indicators and lack the focus on processes which at the heart of most benchmarking approaches.

3.2 BENCHMARKING IN HIGHER EDUCATION

Some implicit forms of 'benchmarking' have always been part of higher education. Various forms of peer reviews and on-site visits have encompassed some aspects of benchmarking for the reviewers and the visitors: both the peers and the institutions evaluated acquired insights into other institutions and could make comparisons to their own institution. What is new in the use of explicit benchmarking, however, is the increasing interest in the formalisation and institutionalisation of those processes. Whereas some actors in higher education tend to say that they always did some form of benchmarking, but just never used this specific term, many involved in 'benchmarking' projects in higher education "use the term benchmarking when it is marginally appropriate – the term has been used whenever a comparison of some type has been made" (Engelkemeyer 1998: 26).

The growth of benchmarking in higher education reflects the search for continuous **quality improvement** and for a more effective way of improving performance in a highly diversified higher education sector in order to ensure that public funding is used effectively to support higher education. As such it is strongly encouraged by policy-makers. Benchmarking also serves the needs of individual institutions to learn in order to improve, to change and to manage operations in a more professional way.

Although it is acknowledged that benchmarking has its origins in the business sector, the particularity of higher education is stressed in many publications on benchmarking in higher education. Higher education authors assign a higher degree of complexity and diversity to the world of higher education compared to 'simple' business life (cf. Yorke 1999). As a result of this self-image it may even be surprising that benchmarking works at all in the complex world of higher education: "It should be self-evident, however, that any method adopted from the business sector is most likely to fail in defensive organisations like the universities. Surprisingly enough, this seems not be true with benchmarking" (Karjalainen 2002).

Benchmarking ranges from self-improvement tools for comparisons with others in the sector, to participative (open and collaborative) approaches, linked (or not) to the global ambitions of some institutions to measure their performance.

Benchmarking focuses on openness of analysis, organisational learning and examination of processes, rather than narrowly focusing on inputs/outputs. In the cooperative type, there is a strong desire to learn and share aspects of good practice.

Benchmarking can be undertaken to increase quality or attain certain standards, either for **regulatory purposes** (for accountability purposes at sector level to ensure that public funding is used in an effective way) or for institutional development (with or without defined objectives or standards, measures of customer satisfaction, expert assessment and comparison with other organisations to investigate how an institution is performing in relation to others and where it wants to go).

In "Benchmarking in Higher Education, An international review", Schofield (1998) points to the **difficulties with definitions** of benchmarking by highlighting that "the term can vary considerably between different approaches and practitioners, causing problems to institutions investigating the subject for the first time". In the same publication, based on an analysis of benchmarking in the Australian context, Massaro points to the term being used "fairly loosely to cover qualitative comparisons, statistical comparisons with some qualitative assessment of what the statistics mean and the simple generation of statistical data from a variety of sources which are then published as tables with no attempt at interpretation". Wragg sees one of the advantages of the co-operative methodology adopted by the ACU² Benchmarking Club as leading to "a true benchmarking process" in the absence of predetermined benchmarks.

What was written in the mid 90s is still true today. The term is used for very different practises from the mere comparison of statistical data and indicators to detailed analysis of processes within institutions. Hence there is the danger that the term becomes a 'catch all' phrase for a wide range of management instruments.

In order to cope with this diversity, there have been several attempts to distinguish different kinds of benchmarking, i.e. to describe benchmarking by a set of descriptors or, in some cases, by analytical dichotomies.

Some authors refer to classifications from general benchmarking literature; others try to develop descriptions specifically for higher education. One of the highly cited general classifications is that by Camp (1989) who identifies four kinds of benchmarking:

- Internal benchmarking
- Competitive benchmarking
- Functional/industry benchmarking
- Generic process/'best in class' benchmarking

Jackson (2001) points out that many benchmarking exercises combine **a variety of approaches** but that they can be classified according to the nature of the underlying processes, i.e. whether they are implicit or explicit, conducted as an independent or collaborative exercise, specific to a single organisation (and internal), or involving dissimilar organisations (as an external exercise), focusing on the whole process (vertical) or being horizontal across different functional units, focusing on inputs, outputs or processes, or based on quantitative or qualitative information.

Highlighting that the purists only see one practice model in the collaborative partnerships, he nevertheless refers to four benchmarking practice models, i.e. the collaborative group partnerships, the collaborative one-to-one partnerships, independent (non-collaborative) benchmarking (which only requires a database available with relevant statistics, performance indicators and codes of practices) and the brokered models. He provides a second set of characteristics to describe whether these are essentially based on active research and dialogue between the participants, or are of a bureaucratic nature mainly based on performance criteria, codes of practices and specifications.

UNESCO-CEPES (2007) uses similar descriptions for the following types of benchmarking in the higher education sector, referring to internal benchmarking (comparing similar programmes in different components of one higher education institution), external competitive benchmarking (comparing performance in key areas based on institutions viewed as competitors), functional benchmarking (comparing processes), trans-institutional benchmarking (across multiple institutions), implicit benchmarking (quasi-benchmarking looking at the production and publication of data/performance indicators which can be useful for meaningful cross-institutional comparative analysis; these are not voluntary like the other types but are the result of market pressures and coordinating agencies), generic benchmarking (looking at basic practice process or service) and process-based benchmarking (looking at processes by which results are achieved).

Alstete (1995) defines four types of benchmarking linked to the voluntary participation of institutions, i.e. internal benchmarking (with the comparison of performance of different departments), external competitive benchmarking (comparing performance in key areas based on information from institutions seen as competitors), external collaborative benchmarking comparisons, with a larger group of institutions who are not immediate competitors, external trans-industry (best-in-class) benchmarking (looking across industries in search of new and innovative practices). Alstete adds a fifth category, the so-called implicit benchmarking, which results from market pressures to provide data for government agencies and the like.

In its report "Benchmarking in the Improvement of Higher Education" (Hämäläinen, Kauko et al., 2002), ENQA, the European Network for Quality Assurance attempts an understanding of the principles of true benchmarking, providing concrete examples and conclusions on perspectives for European benchmarking within higher education. ENQA provides a list of 32 attributes given to benchmarking, the main ones being collaborative/competitive, qualitative/quantitative, internal/external, implicit/explicit, horizontal/vertical; outcome-oriented or experience-seeking, with various purposes (standards, benchmarks, best practices) and interests (to compare, to improve, to cooperate), depending on the owners of the benchmarking exercises. The list is rather arbitrary and does not express a systematic thinking about different approaches to benchmarking. Some items remain vague and it is left to the reader to imagine what is meant by some like 'touristic' benchmarking. ENQA concluded that "good instruments are needed for useful benchmarking exercises" and that "current benchmarking methodologies in Europe must be improved".

In a very competitive market, many benchmarking initiatives seem to have become less visible to outsiders and can be highly individualised among institutions, sometimes remaining private or unstructured, as already indicated above.

The United States first introduced benchmarking in higher education with the exercises launched by NACUBO (National Association of Colleges and University Business Officers). Overall, approaches developed in the U.S. are not true benchmarking but "the generation of management information which produces performance indicators and may lead to identification of benchmarks, but does not often extend to benchmarking by identifying best practice and adapting them to achieve continuous improvement in institutional contexts" (Farquhar 1998).

In Australia, as elsewhere, the development of benchmarking is linked to the quality enhancement movement and the need to demonstrate comparative quality and efficiency of university operations. Benchmarking approaches have been developed at the national level, internationally, by universities themselves or with the support of consulting firms. In its report on Benchmarking in Higher Education (Stella and Woodhouse, 2007), AUQA concludes that much more needs to be done since there is little systematic use of benchmarking to monitor institutional performance, that there is no clear view of the reasons to initiate benchmarking strategies and a lack of clear understanding of the approach.

In Europe, benchmarking approaches in the higher education sector have developed from the mid-nineties at the national level, either as an initiative launched by a national body, by one or a group of institutions or by an

independent body. These usually only involve a small number of institutions and are on a voluntary basis. Transnational level exercises have so far been fairly limited. These benchmarking exercises have adopted a mixture of quantitative, qualitative and processes-oriented approaches. The degree to which these are structured depends on the experience and the purposes.

The ESMU programme, originally launched with ACU, is such an example of a transnational exercise, focusing on management processes in a collaborative way, working with small numbers of universities towards the identification of good practices. Since 1995, CHE has been facilitating a number of benchmarking groups/clubs. Over the years, data on different resources have been accumulated, and indicators developed. The clubs' activities have reached beyond mere data analysis to the definition of standards and benchmarks.

If we look at benchmarking in higher education and at benchmarking networks of higher education Institutions in particular, it becomes obvious that those general descriptors are of limited use in higher education. While we are simply unaware of 'implicit' or completely 'internal' benchmarking initiatives by single institutions, due to the fact that they do not publish anything concerning these initiatives, benchmarking networks scrutinised in the project were, by definition, collaborative. The analysis of existing benchmarking initiatives showed which of those descriptors/dichotomies are useful in describing benchmarking networks in higher education. Usually these descriptors are used in a one-dimensional way; in some cases two-dimensional tabulations are made to create a field of variations for benchmarking approaches. Still lacking is a multi-dimensional analysis of benchmarking approaches that looks for types of approaches or typical combinations of characteristics that are particularly relevant to higher education.

The majority of publications on benchmarking in higher education have a focus on practice, whereas theoretical publications are small in number. This is in line with the general development in benchmarking literature, where the "expansion of benchmarking information, innovations and case studies occurred primarily in practitioner publications" (Yasin 2002: 221).

The conclusion drawn out of a review of general benchmarking literature, that "the academic community is lagging in terms of providing and advancing models and frameworks that integrate the many facts of organizational benchmarking" (Yasin 2002) is valid for benchmarking in higher education too. In particular, benchmarking activities in higher education lack a system-wide organizational approach. This can be illustrated in a study by Salhieh and Singh (2003) that claims to develop an approach based on a system dynamics framework. Instead of devel-

oping a coherent approach linking benchmarking procedures to systems dynamics in an analytic way, they simply add up various performance indicators of teaching quality, research quality and student body quality into a formula of the 'perceived quality' of the institution. But the 'developed framework' remains completely vague.

If we consider the very different purposes and contexts of benchmarking processes in higher education, it is not surprising that there is no coherent theory or approach to benchmarking that defines standardised methods, procedures and indicators. Stressing the aspect of a wide-range of diversity between higher education Institutions, it is claimed that there "**can be no single reference point** for the purposes of benchmarking" (Yorke 1999: 91). Another reason for the absence of an explicit theory of benchmarking is identified by Yasin (2002) who analysed a literature sample of more than 5.000 publications on benchmarking from various fields published between 1986 and 2001. He could show a remarkable rise in the volume of publications related to benchmarking while this "expansion of benchmarking information, innovations and case studies occurred primarily in practitioner publications" (Yasin 2002). He stresses the fact that benchmarking evolved with only "little if any input or diffusion of knowledge from the academic community" (Yasin 2002).

While a theory of benchmarking in higher education should neither level out the differences in purposes and aims of benchmarking, nor the differences in institutional settings in higher education, there are some analytical aspects that could be better elaborated upon:

First, the role of benchmarking in and for strategic management in higher education institutions is not well illuminated. Benchmarking appears as an isolated instrument to enhance performance but without a close link to general governance. In particular, the relationship to the various approaches of quality management (TQM, EFQM) remains vague. This was seen as "one of the biggest impediments to benchmarking in higher education" (Engelkemeyer 1998: 29).

Also, benchmarking literature in higher education lacks – again like general benchmarking literature – approaches to quantifying costs and benefits of benchmarking (cf. Yasin 2002).

Another aspect that is hardly analysed is the relationship of benchmarking (in particular, co-operative benchmarking which seems to be the standard model in higher education) to competition. If it is becoming ever more important for universities to become more competitive and to gain competitive advantages, the fact that most benchmarking activities in higher education are cooperative needs explanation.

² Association of Commonwealth Universities



The background is a gradient of light to dark blue. On the left side, there is a vertical column of white circles of varying sizes. At the bottom, there are several white wavy lines that flow from left to right, creating a sense of movement and depth.

METHODOLOGY AND RESEARCH DESIGN

4. METHODOLOGY AND RESEARCH DESIGN

The project aimed to provide suggestions and guidelines useful for newcomers to the scene of higher education benchmarking based on empirical findings from existing initiatives in higher education benchmarking. Therefore, the development of these guidelines was grounded to a considerable extent in the analysis of a selection of existing co-operative benchmarking initiatives and networks in higher education³. This sample consisted of 18 initiatives from different countries in Europe, Australia, Canada and the USA.

In general, as we have seen in the first chapter, benchmarking can take various approaches: sometimes as an approach similar to assessment, sometimes as a description of very loose groups of institutions mainly wishing to exchange ideas, and sometimes as an initiative of a single institution mining for data to compare secretly with competitors. For the project however, we have defined benchmarking in higher education in a specific way:

Benchmarking in higher education within the project is understood as a cooperative endeavour of at least two institutions which come together voluntarily in order to enhance management processes within their respective institutions.

The initiatives which were analysed were chosen according to this definition. This means that attempts of individual institutions trying to get some information and data on other institutions without their involvement (similar to the famous Xerox benchmarking project) were excluded by definition. Furthermore, this automatically ruled out other initiatives such as the Research Assessment Exercise (RAE) in the United Kingdom that are comparing institutions, but not in a self-organised way with a focus on improvement.

The project aimed to compare the characteristics of these benchmarking initiatives to unearth similarities, regularities, and differences. Thus, the team developed a set of criteria by which the benchmarking approaches chosen as a sample for the survey could be characterised. These criteria were chosen according to existing descriptors of benchmarking approaches in literature and were based on two conditions: firstly, they should provide relevant information while staying value-neutral to all responses (i.e. in the case of the criterion 'size', the characteristic small is in no way better or worse than big). Secondly, the criteria should be to some extent interrelated to provide room for conclusions.

Moreover, the initiatives were scrutinised more carefully through questionnaires and interviews in order to obtain a deeper inside view into the systems, the pitfalls, the advantages and the challenges inherent to each, as well as to avoid assumptions based on pure desk research. The perception of the benchmarking initiative itself was at the core of the project's interest. In this way, the research team could ensure that any suggestion which might derive from the data and its interpretation was based on a variety of empirical findings.

These considerations led to the above mentioned development of 14 criteria with some sub-criteria. In the following section, each criterion is introduced and the analytical aspects assigned to each criterion described.

We also analysed the results of the interviews and questionnaires according to the uni-variate results of every criterion and the bi-variate relation of the criterion to other criteria. The analysis showed clearly that the first idea of a typology of benchmarking initiatives would not be realistic, as even on the bi-variate analysis level, many criteria combinations did not show definite, but rather often ambiguous results. As soon as more than two criteria were combined, the sample group fulfilling all criteria became too small to be relevant.

³ A list of benchmarking initiatives is added in Annex 1.



The background is a gradient of blue, transitioning from a light, almost white blue at the top to a deep, vibrant blue at the bottom. On the left side, there is a vertical column of white circles of varying sizes, some appearing as soft, out-of-focus bokeh. At the bottom, there are several white, thin, wavy lines that flow across the width of the page, creating a sense of movement and depth. The overall aesthetic is clean, modern, and professional.

PROJECT OUTCOMES

5. PROJECT OUTCOMES

5.1 CRITERIA SPECIFICATIONS AND RESULTS

The 14 criteria including their specifications based on the survey are outlined in the following sections:

1. INSTITUTION: HOLISTIC ↔ SPECIFIC

The first criterion analyses the general focus of a benchmarking initiative from an institutional perspective. Two attitudes can be allocated to each of the benchmarking approaches in this research: either the entire institution is involved in the process (defined as 'holistic'), or faculties, institutes, non-academic departments or other sub-units are participating in the process without the whole institution being involved (defined as 'specific'). Of course, in reality one can find all degrees of involvement between these two dimensions. We consider this criterion rather substantial, as it has far reaching implication with regard to the structure of benchmarking groups, in particular the involvement and role of university leadership.

In the diagram below, characteristics of the initiatives (sub-criteria) are listed on the left hand column. The 18 initiatives were divided almost equally according to their benchmarking approach as being 'holistic' or 'specific'. Where those categories did not add up to 18, data were not provided for these initiatives. The shorter uni-directional arrow described as 'even distribution' signifies that within the variable, no clear preference could be observed. The longer double-headed arrow described as 'opposite cluster' and inserted between the two categories highlight those variables which show antithetic results for the two criterion characteristics.

'Holistic' in this context is understood as an approach which applies benchmarking to more than just one part of the institution. Thus, all those initiatives which focus on transversal activities, such as the improvement of student support systems between faculties or communication policies, would fall under the category 'holistic'.

'Specific' was defined as an approach that focuses on one sub-unit of a university. In the beginning of the project, a question related to this aspect arose regarding the percentage of sub-units (and also second level sub-units) involved, as this gives some indication of the real level of institutional involvement. However, this could not be differentiated based on the data provided by the initiatives.

The uni-variate analysis shows that there is a more or less even spread between initiatives focusing on the whole institution (holistic) or just on sub-units (specific). It should be remarked, however, that although many benchmarking approaches were formerly established at the university leadership level for internal political as well as diplomatic reasons, the official involvement of the entire university is very favourable. This is because it usually ensures financial support as well as political backing; the involvement of university leadership does not necessarily mean that the approach is holistic in the sense of this criterion.

The bi-variate analysis provides us with some indication that institution-specific approaches focusing on sub-units of an institution tend to have a holistic attitude towards the selection of benchmarking aspects, while also focusing on processes. They are often international and established with a continuous time frame. Changes in membership are less frequent. Holistic approaches covering the whole institution are antithetic in two aspects, as they are mainly one-off activities with a regional or national scope. The majority of the analysed initiatives were also moderated and they focused on administrative issues.

	INSTITUTION	
	SPECIFIC: SUB-UNITS (10)	HOLISTIC: WHOLE INSTITUTION (8)
AREA	HOLISTIC (7)	↘
GROUP MANAGEMENT	↘	MODERATED (7)
TIME	CONTINUOUS (7)	↔ ONE-OFF (6)
SCOPE	INTERNATIONAL (6)	↔ REGIONAL/NATIONAL (6)
LEVEL	↘	ADMINISTRATION (7)
MEMBERSHIP	NO CHANGES (5/7)	↘
RECRUITMENT BY NEUTRAL PARTNER	NO (8)	↘
FOCUS ON PROCESSES	YES (8)	↘

↘ = EVEN DISTRIBUTION
 ↔ = OPPOSITE CLUSTER

2. BENCHMARKING AREA: HOLISTIC ↔ SPECIFIC

The areas of benchmarking can differ. It is conceivable that initiatives focus on very general areas such as student counselling, as well as areas that are more specified such as research management in physics, or even specified to the study programme level (for example, staff recruitment in the chemistry master's programme). The benchmarking could also cover cross-disciplinary or cross-unit subjects (e.g. controlling of data flows in all departments). Depending on the timeline of the project and its organisational set up, diversity in subjects may also derive from an annual change of the areas scrutinised. The degree of area specification also depends on the perspectives on the areas. Areas may be approached from a consumer/recipient or from a provider/producer perspective. This will automatically lead to different methodologies; different instruments and tools will have to be applied and, in general, it can be assumed that the former will lead to a much stronger output oriented strategy, whereas the latter will more likely focus on input measurements.

In the survey, whereas there was a rather even distribution in terms of benchmarking areas between the holistic and the specific approaches (with slightly more holistic initiatives), nearly all initiatives approach benchmarking from a provider/producer perspective, while only some also opt for a consumer/recipient perspective.

Among the analysed initiatives, those with a holistic approach focus on processes, and in the majority of the cases, also often have a holistic institutional approach with a continuous timeline, an international scope, and are moderated. Many of them also use qualitative methods. Most of them do not focus on teaching and research, while all of them focused on processes. The number of members is often not fixed and the results are, in more than half of the cases, available to the public, with more of the clubs (but not all) spreading the results throughout the institution. Those initiatives with a more specific benchmarking area are more often one-off activities

	AREA	
	HOLISTIC (10)	SPECIFIC (8)
INSTITUTION	WHOLE INSTITUTION (7)	↔ SUB-UNITS (7)
GROUP	↔	HETEROGENEOUS (7)
GROUP	MODERATED (7)	↔
RECRUITMENT	↔	OPEN (6)
TIME	CONTINUOUS (8)	↔ ONE-OFF (5)
SCOPE	INTERNATIONAL (7)	↔ NATIONAL (7)
SCOPE REFERS TO BASIC GOALS	NO (6)	↔ YES (5)
METHODS	QUALITATIVE (7)	↔
LEVEL: GENERAL	YES (7)	↔ NO (8)
LEVEL: TEACHING	NO (7)	↔
LEVEL: RESEARCH	NO (9)	↔
SCOPE REFERS TO BASIC GOALS	NO (6/8)	↔ YES (5)
CONSUMER PERSPECTIVE	↔	NO (7)
INSTITUTIONS DIFFER BY TYPE	↔	YES (7)
INSTITUTIONS DIFFER BY MISSION	↔	YES (7)
MEMBERSHIP FIXED NUMBER	NO (9)	↔
POLICY DOCUMENT ON OBJECTIVES	NO (7)	↔ YES (6)
GOALS LINKED TO INDICATORS	↔	YES (6)
FOCUS ON INPUT	↔	YES (6)
FOCUS ON OUTPUT	↔	YES (6)
FOCUS ON PROCESSES	YES (10)	↔
INTERNAL DISSEMINATION	WHOLE INSTITUTION (8)	↔ SELECTED GROUPS (5)
PUBLICATION OF RESULTS	YES (6)	↔ NO (5)
FEE	↔	YES (4)

↔ = EVEN DISTRIBUTION

↔ = OPPOSITE CLUSTER

with a national scope that is also related to the goals of the initiative, focusing more on sub-units of an institution. One finds more initiatives with open-access. This coincides with the finding that many of these initiatives comprise of institutions which are diverse in regards to the type and mission of the institution. Most of them focus on input and output, whereas focus on processes is as often pursued as not.

3. GROUP CHARACTER: HOMOGENEOUS ↔ HETEROGENEOUS

A benchmarking initiative can follow different strategies concerning the composition of the group members. It may opt for a rather homogeneous group. This means that the institutions share certain core characteristics which are considered essential for the benchmarking approach. This could relate to easily measurable qualities such as size, age, mission, regional location, academic portfolio, research fundraising success, or the number of bachelor programmes. However, it could also relate to aspects which are not so easily identified through quantitative methods, such as reputation, a strong internationalisation attitude, an equal-opportunities policy, or a strong commitment to community outreach. Whatever the criteria for homogeneity, they are

In 9 out of 24 characteristics, the initiatives with a holistic and a specific approach, respectively, form opposite clusters. This suggests that a different approach is required when considering what level of benchmarking the initiative wants to pursue. This is important for pre-defining many other characteristics of benchmarking initiatives.

limited in their number as only very few institutions will share more than one or two critical criteria. Therefore, it can be assumed that homogeneous groups are either set up based on a clear strategy, or (if the homogeneity is just a result of a coincidental development) that the process itself relied on aspects which were due to the group members' shared characteristics (e.g. the formation took place during a conference of similar higher education institutions). Whatever the reasons may be, homogeneity can be considered as a strong influence for the set up, development, management and goal setting of a benchmarking initiative.

	GROUP	
	HOMOGENEOUS (6)	HETEROGENEOUS (12)
INSTITUTION	↻	SUB-UNITS (7)
GROUP MODERATED	YES (6)	↻
RECRUITMENT	CLOSED (5)	↔ OPEN (10/11)
FOUNDING	↻	CONTINUOUS (8)
QUALITATIVE METHODS	YES (6)	↻
MEMBERSHIP FEE	NO (3/4)	↔ YES (7)
LEVEL: ADMINISTRATION	↻	YES (9)
CONSUMER PERSPECTIVE	↻	NO (10)
GROUP: DIFFER BY TYPE	NO (6)	↔ YES (12)
GROUP: DIFFER BY STUDENT BODY	NO (6)	YES (8)
GROUP: DIFFER BY MISSION	NO (6)	↔ YES (12)
GROUP: DIFFER BY SIZE	NO (6)	↔ YES (12)
STRATEGY EXISTING	YES (4)	↔ NO (12)
MEMBERSHIP POLICY: FIXED NUMBER	NO (6)	↻
RECRUITMENT: REGULATIONS	YES (4)	↔ NO (9)
RECRUITMENT: STRATEGY	YES (3/4)	↔ NO (8/9)
FOCUS ON INPUT	YES (5)	↔ YES (9)
FOCUS ON OUTPUT	NO (4)	↔ YES (7)
FOCUS ON PROCESSES	YES (6)	↻
DISSEMINATION WITHIN INSTITUTIONS	WHOLE INSTITUTION (6)	↻

↻ = EVEN DISTRIBUTION

↔ = OPPOSITE CLUSTER

An opposite possibility is a heterogeneous group character. Usually assumed to be the result of a rather coincidental process, heterogeneity can also be deliberately initiated in terms of a 'most different cases' approach. A reason might be that the group members want to broaden their options, or to allow for a 'most different cases' benchmarking design. Again, heterogeneity will not be prevalent in all aspects, but if it is deliberately chosen as a characteristic of the initiative, then it is likely to be based on a strategy. Therefore, certain areas of higher relevance to the benchmarking will be identified for heterogeneity. If the benchmarking is focusing on student services, for example, it might be very helpful to compose the group of universities of different sizes, as relevant aspects related to student services (such as staff numbers or facilities) will differ enough to allow for comparison.

In the survey, about 2/3 of the sample considered themselves a heterogeneous group. Those initiatives also all claimed to differ by type, size, and mission, whereas less different by student body.

All homogeneous and many heterogeneous initiatives were small in size. All homogeneous groups used qualitative methods and differed neither in type, nor student

body, nor mission, nor size. The majority of them had strategies, a membership policy, and recruitment regulations in place. None of the homogeneous initiatives applied a fixed-number-of-members policy. All of them focused on processes and most of them on input. None of the homogeneous initiatives took the output aspect into consideration. It is also remarkable that all of the homogeneous initiatives disseminate their results within the institution.

The heterogeneous initiatives show rather clear patterns in the bi-variate analysis. All of them differ by type of institution, mission and size. Most of them also differ by student body. It is obvious that open access to the initiative leads to more heterogeneous groups. These initiatives often are based on a continuous timeline and tend to focus on the administrative level as well as input and output analysis. In most of the cases, they do not employ the consumer/recipient perspective in their benchmarking. The most striking finding is that all of the heterogeneous initiatives state that they lack an existing benchmarking strategy.

Half of the comparable characteristics show opposing clusters, indicating that the composition of the benchmarking initiative is essential for its further shape.

4. MANAGEMENT OF BI: SELF-STEERED ↔ MODERATED

When analysing benchmarking initiatives, it became clear that the organisational model chosen for the group is an essential component of its structure. In this context, the main focus remains with the option for moderation or for self-steering. The project team defined three possible forms of organisation in this respect.

Firstly, a group may organise itself without any external assistance. This means that any organisational structure established is run exclusively by staff of the member institutions forming the benchmarking group.

Secondly, a group can use a moderator. This can be realised in two different ways. Either the moderator works on a consultancy basis. This would translate into an organisation where the external moderator is explicitly an outsider and remains as such. He or she is only used for facilitating discussions, possibly also for processing data and providing analyses on demand. However, the moderator is not a member of the group and does not hold any voting or other rights attached to a membership. A third option is for a benchmarking group to be accompanied by a moderating institution which is a full member of the group. It possesses all the rights and obligations of any other member while at the same time providing specified services to the group, possibly very similar to the outsider type.

For the survey, the distinction was made between moderated and self-steered benchmarking initiatives. About 60% of the initiatives in the analysis are moderated. These groups often, but not always, focus on sub-units of the institution and are holistic in terms of the benchmarking area. They tend to have a national scope and often use pre-set standards. The self-organised initiatives seem to focus more on the whole Institution but often abstain from benchmarking on research. None focused on teaching. In general, all three foci (input, output, and processes) can be found. More than half of the moderated initiatives publish some of their results and also disseminate them within the institution. This also means that about 40% do not inform a broad range of branches of their own institution about the benchmarking results. It is also striking that they seldom take the position of the customer/client. None of the moderated groups had a mission statement and few had policy documents. Also, in many but not all cases, the goals were not directly linked to a quality assurance system. Institution-wise, they do not show diversion in general, i.e. in terms of student body or mission, as a clear pattern. Interestingly, membership fees seem to be less common than among the self-steered initiatives.

Self-steered initiatives were slightly less frequent and were quite different in their characteristics from the moderated initiatives. They tend to be heterogeneous in their group character. This also translates into diversity in terms of type of institution, student body and mission. Self-steered groups also tend to have an open-access policy often coinciding with a continuous timeline. In contrast to the moderated initiatives, more initiatives claim not to use pre-set standards and they tend to keep their results within the group. Membership fees are not unusual.

In addition to describing the actual organisational structure, it is of analytical relevance whether this structure has been chosen deliberately, and is therefore based on a strategy, or whether it is the result of a rather generic development. We can see that only 4 out of 26 characteristics are antithetic, indicating that this criterion is not necessarily crucial in defining the character of a benchmarking initiative.

GROUP		
	SELF-ORGANISED (7)	MODERATED (11)
INSTITUTION	➤	SUB-UNITS (7)
AREA	➤	HOLISTIC (7)
HOMOGENEITY	HETEROGENEOUS	➤
LEVEL: GENERAL	➤	NO (7)
LEVEL: TEACHING	➤	NO (8)
LEVEL: RESEARCH	➤	NO (11)
CONSUMER PERSPECTIVE	➤	NO (9)
GROUP: DIFFER BY TYPE	YES (6)	➤
GROUP: DIFFER BY STUDENT BODY	YES (5)	➤ NO (8)
GROUP: DIFFER BY MISSION	YES (6)	➤
RECRUITMENT	OPEN (6)	➤
MEMBERSHIP CHANGES	➤	NO (6)
MEMBERSHIP: REGULATIONS	➤	NO (7)
FOUNDING	CONTINUOUS (6)	➤
SCOPE	➤	NATIONAL (7)
PRE-SET STANDARDS	NO (6)	➤ YES (8)
QUALITATIVE METHOD	➤	YES (7)
FOCUS ON INPUT	➤	YES (7)
FOCUS ON OUTPUT	➤	YES (7)
FOCUS ON PROCESSES	➤	YES (9)
PUBLICATION	PRIVATE (5)	➤ PUBLIC (7)
DISSEMINATION OF RESULTS	➤	WHOLE INSTITUTION (7)
MEMBERSHIP FEE	YES (5)	NO (6/9)
OBJECTIVES: MISSION STATEMENT	➤	NO (11)
OBJECTIVES: POLICY DOCUMENT	YES (5)	➤ NO (7)
GOALS LINKED TO QA	➤	NO (9)

➤ = EVEN DISTRIBUTION ➤ = OPPOSITE CLUSTER

5. SIZE: SMALL ↔ LARGE

The criterion size focuses on the number of participating institutions in a benchmarking group. Analysing the existing initiatives, it became clear that most of them fall into two categories: those with a rather limited number of member institutions (often up to 10) and those with a rather large number of members (with more than 30).

Institutions starting a benchmarking initiative tend to have rather clear ideas about how the access to the group should be regulated because they either know beforehand with whom they want to benchmark, or they join an existing initiative, or they turn to advice from an external source. Depending on the different options for access, the size of the group may vary. Open-access groups will more often contain a larger sample of higher education institutions, particularly if the project is not a one-off activity. A sub-criterion, which is always of utmost importance for the definition of the group size, is the existence or non-existence of a strategy in areas such as access, target setting and alike. The lack of a strategy will make it more difficult for the initiative to keep itself small. We can see this development outside of benchmarking in the context of the European university networks which often struggle with requests for membership due to the lack of a membership acceptance strategy.

It might also be that the initiators of a benchmarking group start from the premise that the group shall remain manageable, and thus small. Also, when the factor of long standing experience with one another is a relevant aspect for choosing partners, this will more likely lead to a smaller group. An excellent example of such a small benchmarking initiative with a clear size strategy is the IDEA League (Imperial College London, Delft University, ETH Zürich, and RWTH Aachen as the founding members with Paris Tech as the only added partner and a non-extension policy for the next years). The IDEA league considered its name a brand of such importance that it decided together with the new partner ParisTech not to change it although it was formerly based on the initials of all (founding) members.

In the survey, most of the analysed initiatives were small in terms of size. The reasons for this can vary. Size matters when it comes to target and strategy setting. The smaller the group, the higher the probability that this group will find common goals and targets that are sufficiently precise to allow for in-depth benchmarking. A smaller initiative also means less investment in organisational matters. Time spent on aspects such as meeting

	SIZE	
	SMALL (13)	LARGE (5)
INSTITUTION	↘	SUB-UNITS (4)
AREA	HOLISTIC (8)	↘
HOMOGENEITY	HETEROGENEOUS (6)	↘
LEVEL: TEACHING	NO (6)	↘
LEVEL: RESEARCH	NO (10)	↘
GROUP	↘	HETEROGENEOUS (5)
DIFFER BY TYPE	↘	YES (5)
DIFFER BY MISSION	↘	YES (5)
DIFFER BY STUDENT BODY	↘	YES (5)
GROUP	MODERATED (9)	↘
GOALS LINKED TO INDICATORS	YES (8)	↘
RECRUITMENT	↘	OPEN (5)
RECRUITMENT STRATEGY	↘	NO (5)
QUALITATIVE METHODS	YES (10)	↔
FOUNDING	↘	CONTINUOUS (4)
FOCUS ON INPUT	YES (8)	↘
FOCUS ON OUTPUT	↘	YES (5)
FOCUS ON PROCESSES	YES (11)	↘
PUBLICATION	PRIVATE (8)	PUBLIC (4)
DISSEMINATION	↘	WHOLE INSTITUTION (4)

↘ = EVEN DISTRIBUTION
 ↔ = OPPOSITE CLUSTER

arrangements or discussions about methodology and approach will be considerably reduced. In this way, size matters in terms of increasing efficiency by decreasing the number of participants. A small size at the beginning of a benchmarking club does not necessarily have to mean that the club stays small.

The bi-variate analysis gives us a clearer picture. First and foremost, it is obvious that opposite clusters are non-existent, with the exception of one characteristic (the use of qualitative methods). In the case of the attitude towards publication, an opposite clustering did not appear because, although many of the small initiatives showed a tendency to keep results private, this was not a large enough percentage of the entire group.

Not surprisingly, according to the bi-variate analysis, large initiatives are heterogeneous in the group structure, differing in type, mission and student body. They all apply an open-access policy without any recruitment strategy, and do not apply qualitative methods, focusing on processes. Many are based on sub-units of an institu-

tion rather than following a holistic approach. Often, many opt for a continuous timeline. Regarding the issue of distribution of results, it is remarkable that, in the majority of the cases, the initiatives stated that results are published both institution-wide and for the public.

In the majority of the cases, the small sized initiatives show a more dispersed pattern. Notably, there is an absence of a research focus in combination with a focus on processes and the appliance of qualitative methods. Most of these initiatives also follow a holistic approach to benchmarking areas, linking goals to indicators. A focus on input is also quite frequent. Many of the initiatives are moderated and quite a number prefer to keep the results private. These findings coincide strongly with the usual anticipation concerning small groups, assuming that the size might have been either one of the first decisions taken, or a logical consequence of a very individual contact-based initiation of the benchmarking.

6. TARGETS/GOALS: VAGUE ↔ WELL-DEFINED

The typology of a benchmarking initiative is closely related to its approach towards target setting. In general, target setting is a condition sine qua non for any benchmarking initiative⁴. When setting targets, an initiative might decide to focus on one specific aspect such as 'facility management' and maybe, if connected with a one-off strategy, only run the entire activity once. The targets will then usually be defined very specifically and in detail. The initiative might, however, also decide to focus on

rather overarching aspects such as, for example, improvement of the service attitude in university administration. As such approaches might involve longer timelines and a broader variety of institutional sub-units, it can be expected that the target setting will be more complex and in some cases more diffuse. Furthermore, in groups that were originally formed for reasons other than benchmarking but started benchmarking later, the targets of the benchmarking process might be vaguer.

	OBJECTIVES	
	VAGUE (5)	WELL DEFINED (12)
LEVEL: TEACHING	NO (4)	➤
LEVEL: RESEARCH	NO (5)	➤
LEVEL: ADMINISTRATION	YES (4)	YES (8)
HOMOGENEITY	HETEROGENEOUS (4)	➤
GROUP: DIFFER BY TYPE	YES (4)	➤
GROUP: DIFFER BY MISSION	YES (4)	➤
OBJECTIVES: POLICY STATEMENT	NO (5)	➤ YES (9)
GOALS LINKED TO QA	NO (5)	➤
GOALS LINKED TO INDICATORS	NO (4)	➤ YES (8)
GROUP: MODERATED	NO (4)	➤
METHODS: QUALITATIVE	➤	YES (8)
FOCUS ON PROCESSES	➤	YES (9)

➤ = EVEN DISTRIBUTION
 ◀ = OPPOSITE CLUSTER

⁴ Although, as „benchmarking“ is a non-standardised description, there are numerous activities naming themselves „benchmarking“ when often merely exchanging ideas or pursuing political reasons such as awareness-raising through clustering.

The survey unearthed that initiatives which claim to have well-defined goals do not show very clear patterns. Most of them, however, focus on administration as well as processes. They also often apply qualitative methods and their goals tend to be linked to indicators. Many of them also have a policy statement.

The initiatives that described their goals as being vague show somewhat more distinguishable patterns. None focus on research (whereas nearly none analysed teaching and nearly all focus on administration), they do not have a policy statement, and goals in these initiatives are not linked to a quality assurance system. In most cases, the goals are also not linked to indicators.

These initiatives are, in the majority of the cases, also not moderated. While missing goals cannot easily be described as the reason for the lack of organisation, one might say that they nevertheless seem to function as an indicator of a rather less organised and sustainability-oriented approach. This criterion perhaps does not carry an overall importance for the shape taken by a benchmarking initiative, as only 25% of the characteristics show an opposing cluster.

7. MEMBERSHIP: OPEN-ACCESS ↔ CLOSED-SHOP PERFORMANCE-BASED ↔ NON-PERFORMANCE-BASED

Co-operative benchmarking is always about exchanging information about one's own institution with that of other institutions – whom may be competitors in some areas. Trust is therefore the main asset of a benchmarking initiative. Hence, the issue of membership is crucial to co-

operative benchmarking initiatives. To further examine the dimension of membership, two main aspects were analysed:

1. Open-access versus closed shop
2. Criteria for membership as performance-based versus non-performance-based

	MEMBERSHIP / RECRUITMENT	
	OPEN (11)	CLOSED (6)
INSTITUTION	SUB-UNITS (7)	↘
AREA	↘	HOLISTIC (4)
LEVEL: TEACHING	NO (8)	↘
LEVEL: GENERAL	↘	NO (7)
GROUP	HOMOGENEOUS (5)	↔ HETEROGENEOUS (10)
GROUP: DIFFER BY TYPE	NO (5)	YES (10)
GROUP: DIFFER BY STUDENT BODY	NO (6)	YES (7)
GROUP: DIFFER BY MISSION	NO (5)	YES (10)
GROUP	MODERATED (5)*	↔ SELF-COORDINATED (8)
RECRUITMENT REGULATIONS	YES (5)	↔ NO (9)
RECRUITMENT BY INVITATION	NO (4)	↔ YES (7)
FOUNDING	↘	CONTINUOUS (7)
SIZE	SMALL (6)	↘
GOALS LINKED TO INDICATORS	NO (4)	↔ YES (7)
METHODS: QUALITATIVE	YES (6)	↔ NO (7)
FOCUS ON OUTPUT	↘	YES (7)
FOCUS ON PROCESS	↘	YES (9)
FOCUS ON INPUT	YES (6)	↘
DISSEMINATION OF RESULTS	WHOLE INSTITUTION (6)	↘

↘ = EVEN DISTRIBUTION
 ↔ = OPPOSITE CLUSTER

* THEREIN: MODERATOR AS PARTNER (4)

A primary distinction is made between a completely open-access (whoever is interested in becoming a member can do so) and a closed-shop membership policy. In any case, the decision on membership is based on criteria which can be either performance-based (and thus indicator-driven - e.g., the amount of external research funding per professor or ranking positions), or non-performance based (e.g., size, location, age, reputation). Both criteria sets could, if the initiative was interested in doing so, be further refined through elaborated weighting systems which grant some criteria more importance than others.

It might be assumed that open-access groups would focus on non-performance-based criteria for membership whereas performance-based criteria would be found more likely in closed-shop groups. If any membership criteria and access procedures are defined, an analysis should be conducted as to whether these criteria and procedures are fixed for the entire benchmarking initiative (given that it is not a one-off activity). In this case, they will usually form part of the statutes or similar regulations that are unlikely to be changed. If, however, the access requirements and procedures are set up as a flexible tool that can change over time according to inter-

nal or external developments (e.g., policy changes, market shifts, etc.), they are more likely to be regulated through measures such as annual activity plans, and closely related to the targets/goals. If weighting systems are applied, they are expected to be designed according to the second more flexible set up, as weights are notorious for over-evaluation and misleading conclusions, and therefore need continuous refinement and adjustment.

In the survey, open-access initiatives were nearly twice as frequent as closed shops. Probably, this is particular to higher education and different from benchmarking in business. The latter are usually moderated and very homogeneous in their group structure. The institutions normally do not differ in type, mission or student body. All the closed shops are small with often clear recruitment regulations. These findings draw a coherent picture, as it makes sense for a closed shop initiative to look for similar institutions rather than differing higher education institutions. One can fairly assume that closed shop activities have a very clear idea about the reason for which they were formed. As they might have a stronger impetus to be strictly organised, the external help from a moderator fits the picture. However, it generates some concern that in most cases, the analysed closed shop

	MEMBERSHIP CRITERIA	
	PERFORMANCE BASED (4)	NON PERFORMANCE-BASED (8)
INSTITUTION	HOLISTIC (3)	➤
AREA	HOLISTIC (3)	➤
LEVEL: TEACHING	NO (3)	➤
LEVEL: INT. CO-OPERATION	➤	NO (7)
GROUP CHARACTER	➤	➤
GROUP: DIFFER BY SIZE	➤	YES (8)
GROUP: DIFFER BY STUDENT BODY	NO (3)	➤
SIZE	SMALL (4)	➤
RECRUITMENT	CLOSED (3)	➤
RECRUITMENT BY INVITATION	YES (3)	➤ NO (6)
MEMBERSHIP POLICY: OPEN WITH REGULATIONS	NO (4)	➤ YES (6)
OBJECTIVES: POLICY DOCUMENT	NO (3)	➤
GOALS LINKED TO QA	NO (3)	➤
FOUNDING	➤	CONTINUOUS (6)
SCOPE	INTERNATIONAL (4)	➤ REGIONAL/NATIONAL (6)
FOCUS ON INPUT	➤	➤ YES (7)
FOCUS ON OUTPUT	YES (3)	➤
FOCUS ON PROCESSES	YES (4)	➤
INTERNAL DISSEMINATION	➤	➤ WHOLE INSTITUTION (6)

➤ = EVEN DISTRIBUTION
 ➤ = OPPOSITE CLUSTER

initiatives did not link their goals to indicators, as otherwise a strong interest in results and the dissemination of these results could be observed. It is also characteristic that these initiatives all claimed to use both qualitative and quantitative methods.

The case of the open-access initiatives creates a different picture. Nearly all of them are heterogeneous in their group structure and differ by type and mission, as well as often in terms of the student body. They also often do not have recruitment regulations. These characteristics are opposite to the closed shop group. Open-access initiatives therefore characteristically set very different priorities; a broad set of members and a liberal membership policy is prevalent. On the benchmarking focus side, many of these initiatives focus on output analysis also using qualitative methods. Very few, but at least some, concentrate on teaching while nearly all benchmark their administrative activities. A large percentage (more than 50%) is based on the sub-units level.

One might say that the decision of either an open-access or a closed shop approach is indeed very influential in setting the agenda and in characterising the entire initiative. On the other hand, the fact that only a third of the characteristics show antithetic tendencies hints that it is maybe not as crucial as one might assume from the individual analysis. However, this criterion is nonetheless of considerable importance and should be one of the decisions requiring special attention and consideration. The second sub-criterion addresses the question of

8. FOUNDING / TIMELINE: ONE-OFF ↔ CONTINUOUS

As mentioned earlier, time set up is another distinctive characteristic. The fundamental difference lay between one-off activities and benchmarking initiatives which are established for an envisioned period of years. Sometimes, a benchmarking group can be established concerning one issue for a very limited period of time and be extended due to its success.

We also found groups which were established for a longer duration from the start, with regulated procedures for prolongation, and sometimes based on annual assessment of the achievements. Thus, the duration of a benchmarking group can vary extensively both in terms of time as well as in arrangements.

In the survey, we found a rather even spread between both varieties. One-off initiatives are often institution-specific with the national scope being moderated. Membership changes are less frequent. They often focus on input and do not include teaching, but do apply qualitative methods and pre-set standards. However, their goals

whether the decision regarding membership in the initiative is based on performance-related indicators or whether access is granted without any reference to the performance of the candidate. Not all initiatives answered this question. Among those that did answer, the majority opted for non performance-based membership. They all stated to show differences in the size of the member higher education institutions. Most of them also do not focus on international cooperation, but on input aspects. Recruitment by invitation is not common and membership access is rather open. Most of those initiatives have a regional or national scope and are run on a continuous timeline. Results are usually disseminated within the entire higher education institution. As a subgroup, those who focus on outputs refer to administration and not to teaching/learning, are self-steered, heterogeneous, and employ pre-set standards.

Initiatives that claimed to apply performance-based indicators for membership access are all small in size and have an international scope. They all focus on processes and outputs, but most of them do not focus on teaching. They usually have a holistic approach to both the institution and to the benchmarking area. These groups are, by definition, normally closed-shops and recruitment by invitation is common. On the other hand, policy documents referring to objectives are not the norm and goals are usually not linked to quality assurance. This is indeed quite surprising considering that they employ quite some effort to select their members on the assessment of performance.

tend not to be linked to a quality assurance system. On the contrary, initiatives intended for a continuous timeline are based on the whole institution (institution - holistic). They are usually heterogeneous in their group structure and all of them differ by size; many also differ by type, mission and student body. They tend to have an open-access policy and consequently, fixed numbers in terms of membership are not often found. Pre-set standards are usually not applied, the focus is on processes, and most of the initiatives do not take a consumer/recipient perspective.

Opposite clusters are very rare, suggesting that the decision regarding the time characteristic of a benchmarking initiative does not automatically pre-define many other group aspects. This assumption is supported by the rather substantial number of characteristics with even-spread specifications in the bi-variate comparison.

	FOUNDING / TIME LINE	
	ONE OFF (7)	CONTINUOUS (11)
INSTITUTION	SUB-UNITS (6)	WHOLE INSTITUTION (7)
LEVEL: TEACHING	NO (6)	▶ (9)
CONSUMER PERSPECTIVE	▶ (9)	NO (9)
GROUP	▶ (9)	HETEROGENEOUS (8)
GROUP: DIFFER BY SIZE	▶ (9)	YES (11)
GROUP: DIFFER BY TYPES	▶ (9)	YES (8)
GROUP: DIFFER BY STUDENT BODY	NO (6)	▶ (7)
GROUP: DIFFER BY MISSION	▶ (9)	YES (8)
GROUP MODERATED	YES (6)	▶ (9)
MEMBERSHIP CHANGES	NO (4/5)	▶ (9)
MEMBERSHIP POLICY: FIXED NUMBER	▶ (9)	NO (9)
GOALS LINKED TO QA	NO (7)	▶ (9)
RECRUITMENT	▶ (9)	OPEN (7)
QUALITATIVE METHODS	YES (5)	▶ (9)
SCOPE	NATIONAL (5)	▶ (9)
PRE-SET STANDARDS	YES (5)	▶ (7)
FOCUS ON INPUT	YES (6)	▶ (9)
FOCUS ON PROCESSES	▶ (9)	YES (9)

▶ = EVEN DISTRIBUTION
 ◀ = OPPOSITE CLUSTER

9. SCOPE: REGIONAL/NATIONAL ↔ INTERNATIONAL

We defined two main types of geographical spreads. A benchmarking initiative might be international or regional/national. In the survey, nearly as many international (understood also as European) as regional or national initiatives were analysed. Many of the regional or national initiatives show a holistic institutional approach. They tend to focus on the administration with emphasis on the input level, usually not taking a customer/recipient perspective. Many of these initiatives are heterogeneous in their group character, often differing by type and mission. In the majority of cases, their goals are linked to indicators but not to a strategy.

The international initiatives prove to be often holistic in their institutional approaches and are on a continuous timeline. While most of them do not focus on teaching, they pay particular attention to input and also process analysis. Additionally, in many cases, their goals are linked to indicators. Overall, the international initiatives seem to be less easily categorized into common characteristic groups than the national ones. However, it seems that if higher education institutions come together on an

international level, they consider the effort only worthwhile if it is envisioned to run for a longer period of time. Possibly for the same consideration regarding investment effectiveness, more often than not, they opt for a holistic approach, which also requires commitment to the project from university leadership.

This criterion shows a rather low opposite-cluster tendency with only 3 out of 16 characteristics with this trend. This coincides with the experience that the first orientation as a national or international benchmarking initiative does not necessarily pre-define the initiative's character in many ways. It is also possible to widen the scope or narrow it depending on the shifting needs of the club as long as other criteria, such as membership regulations and the choice of a closed-shop versus an open-access set-up, allow for such changes.

	SCOPE	
	REGIONAL/NATIONAL (10)	INTERNATIONAL (8)
INSTITUTION	SPECIFIC (8)	HOLISTIC (6)
LEVEL: GENERAL	NO (8)	➤
LEVEL: TEACHING	➤	NO (6)
LEVEL: ADMINISTRATION	YES (8)	➤
CONSUMER PERSPECTIVE	NO (9)	➤
GROUP HETEROGENEOUS	YES (7)	➤
GROUP: DIFFER BY TYPE	YES (7)	➤
GROUP: DIFFER BY MISSION	YES (7)	➤
FOUNDING	➤	CONTINUOUS (6)
MEMBERSHIP FIXED NUMBER	➤	NO (7)
RECRUITMENT BY INVITATION	NO (7)	➤ YES (6)
OBJECTIVES RELATED TO STRATEGY	NO (10)	➤
GOALS LINKED TO INDICATORS	YES (8)	➤ NO (6)
FOCUS ON INPUT	YES (8)	➤
FOCUS ON PROCESSES	➤	YES (8)
DISSEMINATION: WHOLE INSTITUTION	➤	YES (6)

➤ = EVEN DISTRIBUTION
 ➤ ← → = OPPOSITE CLUSTER

10 METHODOLOGY AND ANALYSIS: QUANTITATIVE METHODS YES ← → NO
 QUALITATIVE METHODS YES ← → NO
 PRE-SET STANDARDS YES ← → NO

We analysed the existing approaches concerning methods applied to the benchmarking. This can range from a simple exchange of ideas over comparative analysis through more complex methods such as peer review, to inefficiency analysis based on Data Envelopment Analysis (DEA) or alike, to an overall process comprising of various analytical methods. Three major distinctions were made as to whether the initiatives did or did not apply quantitative methods, qualitative methods, and pre-set standards.

All initiatives in the survey apply quantitative methods, including options such as questionnaires, surveys, data mining, etc. As quantitative approaches usually rely on indicators, we analysed these indicators (how many, what they are measuring, etc.). It was also a methodological question as to whether these indicators were given certain weights, and if so, by which procedure⁵. The majority also employ qualitative methods to unearth aspects of

the higher education experience, such as the quality of teaching or the degree of student satisfaction.

While this criterion does not show any truly antithetic patterns, there are still characteristic differences between those initiatives using qualitative methods and those abstaining from any such use. Those initiatives that stated that they use qualitative methods are slightly predominant, about 60%. They tend to have a holistic benchmarking perspective with well-defined goals, and often focus on processes and inputs. They tend to be small and moderated and normally do not differ by student body. The dissemination of results usually takes place in the whole institution.

The initiatives that claimed not to use qualitative methods show a much clearer pattern. They tend to focus on sub-units in an institution and often exclusively focus on administrative aspects as well as output. All of them

⁵ It is worth mentioning that the weighting of indicators can take two basic forms. The more common one is to allocate the weights accidentally based on mutual agreement of the benchmarking partners, then testing them and possibly re-adjusting them. The more mathematical approach can be seen when applying DEA, as here, where the case-optimal wages for each DMU (decision-making unit) are achieved mathematically and therefore, allow for both multi-input/multi-output analyses as well as bias-free weighting.

QUALITATIVE METHODS		
	YES (11)	NO (7)
INSTITUTION	➤	SUB-UNITS (5)
AREA	HOLISTIC (7)	➤
LEVEL: GENERAL	➤	NO (5)
LEVEL: TEACHING	➤	NO (7)
LEVEL: RESEARCH	➤	NO (9)
LEVEL: ADMINISTRATION	➤	YES (6)
RECRUITMENT	➤	OPEN (7)
FOUNDING	➤	CONTINUOUS (5)
GROUP	➤	HETEROGENEOUS (7)
GROUP: DIFFER BY TYPE	➤	YES (7)
GROUP: DIFFER BY STUDENT BODY	NO (8)	YES (5)
GROUP: DIFFER BY MISSION	➤	YES (7)
GROUP	MODERATED (7)	SELF-COORDINATED (5)
SIZE	SMALL (10)	➤
OBJECTIVES WELL-DEFINED	YES (8)	➤
FOCUS ON INPUT	YES (7)	➤
FOCUS ON OUTPUT	➤	YES (6)
FOCUS ON PROCESSES	YES (10)	➤
DISSEMINATION OF RESULTS	WHOLE INSTITUTION (7)	➤

➤ = EVEN DISTRIBUTION
 ← = OPPOSITE CLUSTER

claimed to have an open-access policy and, as we saw in the section on recruitment and membership policies, to be heterogeneous in their group structure with differences in type, mission, and (in most cases) in questions regarding the student body. Most of these initiatives are continuous and self-steered.

For the question regarding concrete analysis methods applied to the benchmarking process, the project also looked at the application of a pre-set standards portfolio. This means that a benchmarking initiative draws upon a fixed and existing methodology usually developed by an institution outside the group. In the individual interviews, we asked whether a pre-set standards portfolio was drawn from the public sector or from the private business sector. We also inquired whether this portfolio was applied right from the start, thus forming part of the pre-formation strategy, or whether it was introduced in the process of running the initiative.

It is possible that a benchmarking group started off as a rather loose, self-organised group with a less developed set of methods. In the process, it might then have come to the conclusion that a more structured, moderated, and standard-based approach would better fit their goals. The survey showed that the use of pre-set standards is evenly spread.

Initiatives that do not use pre-set standards often focus on teaching (which is an exception within the overall sample). They show a regional or national scope and tend to be self-steered. Recruitment strategies or recruitment-on-invitation is normally not prevalent. Many of these initiatives use a policy document for their goal setting and also apply qualitative methods. They focus more on input than on output and do not provide public access to the results, but do disseminate them within their own institution.

Benchmarking initiatives that are benchmarking against pre-set standards can clearly be described: they often focus on administration on the institutional level (and not on teaching/research); they are moderated; they focus on outputs; they tend to make their results publicly available. Interestingly, it is the initiatives that are rather heterogeneous, differing by type and mission, which make up this group.

Less than a third of the characteristics show antithetic results. This might support the argument that a decision for or against pre-set standards does not necessarily pre-define the further set-up of an initiative; however, if an initiative decides to use pre-set standards, then at least some characteristics seem to derive naturally. It is the disperse nature of the cases with non-pre-standards which leads to a lesser extent to opposite clusters.

	BENCHMARKING AGAINST PRE-SET STANDARDS	
	NO (9)	YES (9)
LEVEL: GENERAL	NO (6)	▶
LEVEL: TEACHING	YES (6)	◀
LEVEL: RESEARCH	▶	NO (9)
SCOPE	REGIONAL/NATIONAL (6)	▶
GROUP	▶	HETEROGENEOUS (7)
GROUP: DIFFER BY TYPE	▶	YES (7)
GROUP: DIFFER BY MISSION	▶	YES (7)
GROUP	SELF-STEERING (6)	◀
RECRUITMENT	▶	OPEN (6)
RECRUITMENT STRATEGY	NO (6)	▶
RECRUITMENT BY INVITATION	NO (7)	◀
MEMBERSHIP CHANGES	▶	NO (5)
OBJECTIVES: POLICY DOCUMENT	YES (7)	◀
GOALS LINKED TO QA	▶	NO (8)
QUALITATIVE METHODS	YES (6)	▶
FOCUS ON INPUT	YES (6)	▶
FOCUS ON OUTPUT	NO (5)	◀
PUBLICATION	PRIVATE (6)	◀
INTERNAL DISSEMINATION: WHOLE INSTITUTION	YES (7)	▶

▶ = EVEN DISTRIBUTION
◀ = OPPOSITE CLUSTER

11. BENCHMARKING FOCUS: INPUT YES ↔ NO
 OUTPUT YES ↔ NO
 PROCESSES YES ↔ NO

Generally, benchmarking can focus on three different aspects: input, output, and processes. The selection of foci also leads to methodological decisions, as some methods (e.g., blue printing) are clearly process-driven whereas others, such as index-based allocation system analysis, would be far more input-oriented. Other methods can be applied to both output and input-oriented benchmarking. Data mining on a snap-shot or time series basis is also directly related to the question of process orientation. Here, useful cross-links can be drawn by advisors who help realise initiatives, advising on which methods might be best applicable for which kind of focus. It was considered an important criterion for the later stage of the project to have suggestions for approaches in starting a benchmarking process. These were based on the advantages and disadvantages of relevant models in relation to the needs and investment abilities of the initiators.

Whereas more than 2/3 of the initiatives focus on processes, the analysis of input and/or output is more evenly spread. This is a rather surprising finding as we assumed, previous to the survey, that most initiatives would consider input aspects more than any other type, as the input-orientation is a typical phenomenon in many higher education institutions.

All those abstaining from input analysis are of small size and claim to focus on processes. The majority also follow a holistic approach to benchmarking areas. In most of the cases, the initiatives are heterogeneous, differing by type and mission. They are usually planned on a continuous basis and most of them show an international scope.

	FOCUS ON INPUTS	
	NO (7)	YES (11)
INSTITUTION	➤	SUB-UNITS (7)
AREA	HOLISTIC (5)	➤
GROUP	HETEROGENEOUS (6)	➤
GROUP: DIFFER BY TYPE	YES (6)	➤
GROUP: DIFFER BY MISSION	YES (6)	➤
SIZE	SMALL (7)	➤
GROUP	➤	MODERATED (7)
OBJECTIVES: STRATEGY	➤	NO (10)
GOALS LINKED TO INDICATORS	➤	YES (7)
QUALITATIVE METHODS	➤	YES (7)
FOUNDING / TIME LINE	CONTINUOUS (6)	➤
SCOPE	INTERNATIONAL (5)	➤ REGIONAL/NATIONAL (8)
FOCUS ON OUTPUT	➤	YES (8)
FOCUS ON PROCESSES	YES (7)	➤
PUBLICATION	➤	➤ YES (7)

➤ = EVEN DISTRIBUTION
 ➤ = OPPOSITE CLUSTER

The initiatives which do indeed focus on input aspects also often concentrate on output. Concerning processes, the distribution varies. Many of these initiatives are based on sub-units (institution-specific approach) and are moderated. While the majority link goals to indicators and apply qualitative methods, nearly none of them has a target strategy. Their scope is usually international.

Opposite clusters are extremely rare, indicating that this aspect is not pivotal for deciding upon a certain track of benchmarking.

The distribution for the focus on output is equivalent to that of the input focus. However, it can be observed that the initiatives that focus on output are much more precisely described than those that do not. In many cases, the latter show an even distribution within a characteristic, but all of them are small in size and focus (besides output) on processes. Most of them follow a continuous timeline. The majority also use well-defined goals and link these goals to indicators, usually not applying pre-set standards and not publishing their results for the general public. They do, however, tend to base their benchmarking on a policy document.

The initiatives focusing on output tend not to apply benchmarking to teaching or international cooperation. They are often based on sub-units (institution-specific) and show a heterogeneous group character, differing by type and mission. In many cases, they are moderated but do not have a policy document, nor do they pursue a recruitment strategy. Pre-set standards are quite common, as is a focus on input. These initiatives also often make their results publicly available. It is worth noting that initiatives with a focus on output show an equal distribution in the size characteristic. This is very unusual as, in the case of most criteria, the parameter value concurs with either the size value 'small' or 'large'. Similar to the case of the input focus, the bi-variate analysis also shows a very limited number of opposite clusters.

The vast majority of the initiatives focus on processes. However, both parameter specifications show rather detailed bi-variate characteristics.

Initiatives focusing on processes very often also follow both a holistic-institutional and a holistic-benchmarking area approach using qualitative methods. They normally do not focus on research or teaching but tend to have well-defined goals. Most of them have an international,

		FOCUS ON OUTPUTS	
		NO (7)	YES (11)
INSTITUTION	➤		SPECIFIC (7)
LEVEL: GENERAL	➤		NO (8)
LEVEL: TEACHING	➤		NO (7)
LEVEL: INTERNAT. CO-OPERATION	➤		NO (10)
GROUP	➤		HETEROGENEOUS (9)
GROUP: DIFFER BY TYPE	➤		YES (9)
GROUP: DIFFER BY MISSION	➤		YES (9)
SIZE	SMALL (7)		➤ equal distribution at size is rare!
GROUP MODERATED	➤		MODERATED (7)
RECRUITMENT STRATEGY	➤		NO (6)
OBJECTIVES WELL DEFINED	YES (6)		➤
POLICY DOCUMENT	YES (5)	➤	NO (7)
GOALS LINKED TO INDICATORS	YES (5)		➤
FOUNDING	CONTINUOUS (5)		➤
PRE-SET STANDARDS	NO (5)	➤	YES (7)
FOCUS ON INPUTS	➤		YES (8)
FOCUS ON PROCESSES	YES (7)		➤
PUBLICATION	NO (5)	➤	YES (7)

➤ = EVEN DISTRIBUTION
 ➤ = OPPOSITE CLUSTER

scope being externally moderated and small in size. They usually also do not differ by student body, but it can not be said that they are predominantly homogeneous either. Although most of them do not have a membership policy implemented with a fixed number, changes of members are rather unusual. These initiatives tend to follow a continuous timeline and are usually willing to spread the results of the exercise within the institution.

Those initiatives that do not focus on processes are extremely alike in their characteristics. All of them are based on sub-units (institution-specific), are specific in terms of the benchmarking area, focus on administration (and not on a general level), and focus on input and output. Their goals are always linked to indicators but, in nearly all cases, qualitative methods were not applied. All of these initiatives show a national scope and are heterogeneous in their group character, with differences in type and mission. They also always apply an open-access recruitment strategy.

As the distribution is anything but even, it is less surprising that there are rather few opposite clusters. A high number of cases in one characteristic allows for variations in sub-characteristics, whereas on the other side of the equation, a low number of cases calls for a more uni-directional spread.

	FOCUS ON PROCESSES	
	YES (13)	NO (5)
INSTITUTION	WHOLE INSTITUTION (8)	SUB-UNITS (5)
AREA	HOLISTIC (10)	SPECIFIC (5)
LEVEL: GENERAL	➤	NO (5)
LEVEL: TEACHING	NO (8)	➤
LEVEL: RESEARCH	NO (10)	➤
LEVEL: ADMINISTRATION	➤	YES (5)
SCOPE	INTERNATIONAL (8)	NATIONAL (5)
GROUP	➤	HETEROGENEOUS (5)
GROUP: DIFFER BY TYPE	➤	YES (5)
GROUP: DIFFER BY STUDENT BODY	NO (8)	➤
GROUP: DIFFER BY MISSION	➤	YES (5)
GROUP	MODERATED (9)	➤
SIZE	SMALL (11)	➤
RECRUITMENT	➤	OPEN (5)
MEMBERSHIP CHANGES	NO (7)	➤
MEMBERSHIP POLICY: FIXED NUMBER	NO (10)	➤
OBJECTIVES WELL-DEFINED	YES (9)	➤
GOALS LINKED TO INDICATORS	➤	YES (5)
QUALITATIVE METHODS	YES (10)	NO (4)
FOUNDING	CONTINUOUS (9)	➤
FOCUS ON INPUTS	➤	YES (5)
FOCUS ON OUTPUTS	➤	YES (5)
INTERNAL DISSEMINATION	WHOLE INSTITUTION (9)	➤

➤ = EVEN DISTRIBUTION
 ⇔ = OPPOSITE CLUSTER

12. LEVEL OF PARTICIPATION: HIGH ↔ LOW

In a benchmarking group, the internal communication as well as the implementation of the endeavour in the member institution is an important characteristic. It is imaginable to have benchmarking groups which only meet once a year with little communication in between and a (stated or unstated) prevalence of political interests, such as increasing reputation through grouping. It is also possible that benchmarking initiatives apply a highly sophisticated methodology requiring high communication levels and therefore calling for a high level of involvement. Therefore, the analysis looks for meeting frequency as well as the use of online conferences⁶. It is furthermore relevant whether communication is always organised or whether a certain spontaneity can be observed. Once more, clarification was asked regarding the level of implementation of the benchmarking and of its results in the institution.

The survey showed that the vast majority of the initiatives consider the commitment as being high. Successful work and a high level of communication are obviously closely linked. As the distribution is highly uneven, a bi-variate analysis is not meaningful.

⁶ This is an increasingly common tool for reducing meeting costs and raising efficiency. However, online conferences are usually only useful for up to 5-6 participants.

13. OUTCOMES AND DISSEMINATION: PUBLIC ↔ PRIVATE

One of the riskiest aspects of benchmarking is the dissemination of results within the benchmarking network and beyond the group. How does a benchmarking initiative deal with the results of assessment and analysis? Does the group share the results among each other? If a group intends to retain a very high level of privacy for each member, thus wanting to ensure that only the respective member will learn about its performance in detail while all other data remains anonymous, a moderated approach might be employed. On the other hand, if a group is self-organised, data might flow rather freely among its members.

We have an absolutely even distribution within the sample between the two characteristics 'private' (i.e., results are not accessible for non-group members) and 'public' (results are published, but often only partly). Those initiatives that claimed to keep their results within the group are often heterogeneous in their group structure and small in size. Changes in membership are not very frequent. These groups usually do not use pre-set standards. The only focus with some domination within this criterion specification is on the input side; the others show an even distribution. All in all, these initiatives do not show very clear patterns.

The initiatives claiming to make their results at least partly public show more secondary features. All of them focus on processes and many also focus on outputs, whereas the input factor shows an even distribution, and teaching is not on the agenda in most of the cases.

While many of them are based on sub-units (institution-specific), they nevertheless often pursue a holistic approach concerning the benchmarking areas. Initiatives which publish results are more often than not moderated, with membership changes being more common and based on a continuous timeline (foundation aspect). In contrast to 'private' initiatives, they tend to make use of pre-set standards. One should expect that initiatives that make their benchmarking results public would always also logically spread the word within their respective higher education institution. However, this is only the case for 2/3 of this specification sample, meaning that 1/3 claimed to inform the public while at the same time keeping results to restricted groups within their own higher education institution. One may fairly assume that this means that in those cases certainly only a very limited scope of results was made publicly available.

Opposite clusters are not frequent, an indication that this criterion is not necessarily of strong impact power for defining the core type of a benchmarking approach.

	PUBLICATION	
	PRIVATE (9)	PUBLIC (9)
INSTITUTION	↘	SUB-UNITS (6)
AREA	↘	HOLISTIC (6)
HOMOGENEITY	HETEROGENEOUS (6)	↘
LEVEL: GENERAL	↘	NO (6)
LEVEL: TEACHING	↘	NO (6)
GROUP	↘	MODERATED (7)
SIZE	SMALL (8)	↘
MEMBERSHIP CHANGES	NO (7)	↗ YES (5/7)
FOUNDING / TIME LINE	↘	CONTINUOUS (6)
PRE-SET STANDARDS	NO (6)	↗ YES (6)
FOCUS ON INPUT	YES (6)	↘
FOCUS ON OUTPUT	↘	YES (7)
FOCUS ON PROCESSES	↘	YES (9)
DISSEMINATION	↘	↗ WHOLE INSTITUTION (6)

↘ = EVEN DISTRIBUTION
 ↗ = OPPOSITE CLUSTER

14. FINANCIAL RESOURCES: MEMBERSHIP FEE YES ↔ NO

Besides the standardised criteria mentioned above, the analysis also took into account questions on finance. Is a membership fee charged and, if so, how high is it? Obviously, a membership fee characterises a somewhat higher degree of commitment. Another question pertaining to resources included: How many staff hours are invested based on full-time equivalences? We previously asked for the number of persons involved in the initiative, but this is not a reliable indicator for the real investment a higher education institution makes into a benchmarking initiative. It is additionally interesting to learn about other costs involved (such as room rent, computer lab time, etc.).

With two initiatives not answering the question, the survey showed an even distribution of specification. Those initiatives charging a membership fee are often specific concerning the benchmarking area and are heterogeneous in their group structure. They tend to focus on input aspects and often disseminate the results within the whole institution. Non-fee charging initiatives, on the contrary, are holistic in their benchmarking area approach. In addition, these groups nearly always focus on administration, often having well-defined objectives and a policy document on which they are based. Dissemination of results is usually restricted to selected groups within the home higher education institution. Opposite clusters are rather rare in this criterion.

	MEMBERSHIP FEE	
	YES (8)	NO (8)
AREA	SPECIFIC (5)	HOLISTIC (5)
HOMOGENEITY	HETEROGENEOUS (6)	▶
LEVEL: ADMINISTRATION GROUP	▶	YES (7)
OBJECTIVES WELL DEFINED	▶	HETEROGENEOUS (7)
OBJECTIVES: POLICY DOCUMENT	▶	YES (7)
FOCUS ON INPUT	YES (6)	▶
DISSEMINATION	WHOLE INSTITUTION (6)	▶ SELECTED GROUPS (5)

▶ = EVEN DISTRIBUTION
 ◀▶ = OPPOSITE CLUSTER

15. ADDITIONAL

Besides finances, the evaluation of the benchmarking initiative at the current point in time was considered important. We looked for the initial motivation to start the initiative, greatest obstacles to the establishment of the group, strategies to overcome such hindrances, pitfalls in the day-to-day routines of the initiative, advantages or benefits gained from the benchmarking, and the most important Do's and Don'ts as advice to starters of a benchmarking activity. The personal evaluation of some existing archetypes of benchmarking initiatives is helpful in developing a useful set of suggestions for users of the handbook.

We asked all interviewed initiatives two descriptive questions: What are the major challenges and benefits of the BI? Do you have any recommendations for institutions wishing to begin or instigate a BI?

5.2 MAJOR BENEFITS AND CHALLENGES OF A BENCHMARKING INITIATIVE

BENEFITS

In terms of benefits, very diverse answers were given. One initiative pointed out that the main benefits would lay with the transfer of good ideas and the reinforcement of the institutional identity and prestige. It is also considered important that the higher education institution might become better placed in responding to calls issued by the European Commission and its agencies, also mentioning the EIT (European Institute of Technology). A legitimisation of one's work against the university leadership was also mentioned. Initiatives also experienced a positive feedback through increased student exchanges and scholarship schemes. In general, they regarded benchmarking as a facilitator for the implementation of objectives set up under the Bologna Process.

One initiative, providing an 'umbrella service', pointed out that the individual members benefited from the concrete benchmarking results, but the organisation also benefited by gaining reputation as a trusted source of information. Another factor is to have a current basis for performance indicators and good practices for institutional governance which can be obtained more efficiently through an organisation like a benchmarking club. Additional value was allocated to the development of direct contacts with other heads or staff members in a comparable university. Others again pointed out that the staff development through benchmarking initiatives was an important asset.

CHALLENGES

Some challenges were also mentioned. One initiative mentioned that the main challenges include "managing the work alongside other commitments which is why it must be a strategic priority, with time set aside and funding for participation." They said that it is "important not to take on too much in any one exercise. Benefits relate to quality improvement of services as per institutional action plans, and the development of collegial networks which can be used for further purposes". Others saw the required long-term commitment as a challenge, particularly if the project is related to a certain individual. Costs were of some concern, but mainly also the question of "are we doing it right?"

The learning value of a benchmarking initiative was mentioned several times. Benchmarking can also be used to identify content in which administrative staff needs further training, or to set new standards and aims. Though, predominantly, as stated by one initiative on behalf of its members, the added value related most to the sheer learning experience. The understanding and improvement of business processes and of the partner institution, as well as their refinement to the implementation of TQM (Total Quality Management) were highlighted. In addition, the more overarching aspect of creating "a cooperative environment where full understanding of the performance and enablers of 'best-in-class' business processes can be obtained and shared at reasonable cost" was noted. Another initiative regarded benchmarking as "a unique opportunity to harvest the experience and expertise of fellow peers". Progressive universities, looking to improve their working practises, would have access to a high level group of other participating institutions with the same goals.

Another factor claimed was the ability to learn from the network and then apply and adapt international experiences to a local situation. "Think globally, act locally" is the trendy phrase that describes this attitude. The overall perspective could be summarised as this: "[University benchmarking is the] involvement in a constructive and progressive review of your own university's working practices, which will ensure a strong and profitable university profile in a highly demanding, evolving and competitive global context."

Others mentioned that if the data collection takes a large amount of time, due to the size of an initiative, the results might easily be outdated. In the case of the initiative that mentioned this challenge, the lag time could add up to 18 months. An organisation which is providing services for institutions found it particularly hard "to get universities to participate and to ensure that comparable data are collected, therefore areas of the benchmarking exercise must be clearly defined". This also relates to a good definition of indicators. The initiatives saw an advantage in long-term perspectives as then "data have been gradually refined". Again, it was mentioned that the results are spread across the entire institution. The implementation of these findings and results of a benchmarking initiative were seen as both the most difficult and most important challenge.

5.3 RECOMMENDATIONS FOR INSTITUTIONS WISHING TO BEGIN OR INITIATE A BI

Many of the initiatives that were interviewed also added some suggestions on what to consider when starting a benchmarking initiative. The following recommendations were made:

1. Appoint a university to be responsible for the tasks in the different working groups.
2. Appoint an external organisation with a good system; benchmark against it.
3. Be prepared to make a commitment over a period of years if improvement is to be achieved.
4. Be willing to show the data.
5. Create a secretariat which should be responsible for the process.
6. Define your main strategic objectives and priorities, then use benchmarking as a strategic tool.
7. Do benchmarking and insist that leadership follow-up (i.e., an annual meeting of owners is crucial to signal the high priority of the benchmarking exercise).
8. Don't be overambitious.
9. Encourage innovation and creativity.
10. Ensure commitment from the top.
11. Focus on the appropriateness of methods in each case and the basis for their selection.
12. Focus primarily on the results achieved and on the sustainability of the positive changes potentially included.
13. Identify your problems and shortcomings (mission/vision).
14. Look for a network which corresponds to your strategic objectives with regard to QA.
15. Make clear from the start what they want to do with the results in their higher education institution. This 'confession' should be continuously renewed and adapted to the changes in the project and the higher education institutions.
16. Make sure that the decision of the higher education institution to participate is reconfirmed with the staff of the higher education institution involved in the process.
17. Make sure the university has full commitment to continuous improvement and decides to use benchmarking results as a tool for change management.
18. Make sure to present and discuss results and implement a working communication strategy.
19. Make the reduction of the results of each individual benchmarking clear to every participant (only the function of showing who is coming in last).
20. Resource the project.
21. Select the benchmarking team carefully, ensuring participants have a strategic understanding of the institution.
22. Set clear benchmarking targets.
23. Set clear priorities and targets to achieve and criteria for success; ensure dissemination of results.
24. Start small then expand as you gain interest and grow in reputation/loyal participation of institutions.
25. The benchmarking exercise should not seek to prescribe how a university should be managed.
26. Try to find out a network which has a similar mission/academic profile, but is different culturally. The difference should not be too big.
27. Use the results for further improvement of higher education management and strategic development.
28. You must feel 'institutionally comfortable'.

5.4 ADDITIONAL RESULTS OF THE ANALYSIS OF BENCHMARKING INITIATIVES

The results of the analysis of benchmarking initiatives also produced some results concerning dos and don'ts of benchmarking in higher education. The results suggest that benchmarking partners are better when selected based on a shared understanding of the benchmarking goals, fields, and comparisons (either very different or very similar cases), which may or may not rely on existing inter-institutional contacts. The effort is supported if the partners have a clear understanding and are able to communicate the expected degree of involvement from the start (time, human and financial resources). This is also the case if immediately from the beginning a high level of trust within benchmarking networks can be established, as sensitive data will be exchanged. Moreover, it seems to be vital that the purpose and goals are made explicit, both internally and in communication with benchmarking partners, and that they are linked to the national/European context of quality assurance and measurements of performance. The survey also shows that goals and purposes of a benchmarking initiative are useless if they are not closely connected to individual institutional strategies and to the development of a benchmarking and quality culture and if they are not fit for purpose, taking into account the diversity of higher education institutions. Overall, it is observable that performance has to be measured with a view to implement agents for improvement.

Another critical factor includes indicators. In the analysis, it became clear that they have to be broader than pure input indicators and should incorporate output measures and/or processes. Both types of indicators, quantitative and qualitative, seem to be necessary, as most issues are best compared by using a mix of quantitative and qualitative methods. In particular, process analysis cannot always rely on quantitative indicators. The relevance of the purpose is vital for their selection; availability of data is not a recommendable reason for selection. In addition, indicators seem to be more useful if they can link outcomes and outputs to inputs.

5.5 OTHER PROJECT OUTCOMES

As shown, the analysis produced an overview of a broad selection of benchmarking practices in higher education. It is also the basis for other products: the guidelines for good benchmarking, an online tool and a handbook in order to assist European higher education institutions in finding the most appropriate type of benchmarking prac-

Benchmarking initiatives are only as good as their own management processes. The analysis showed that any such procedures need clear documentation using a transparent methodology which is communicated both inside the institution and among benchmarking partners. The need for adequate human resources is obvious. Sometimes, carefully selected and trained experts or external facilitators seem to have a positive impact on a benchmarking process, while also being cost-efficient. The data processing should also be streamlined according to the process. An important aspect is quality control and monitoring, not only regarding the implementation of results but mainly also concerning the benchmarking process itself. The measuring of outcomes is not predominant in today's benchmarking initiatives, but it is likely to gain importance when benchmarking becomes a more established method in higher education.

Some interesting findings were connected to the issue of reporting and the publication of results. Surveys, discussions, and feedback loops confirmed that the publication of results is still a difficult issue, as it easily interferes with privacy aspects and confidentiality. As not every participating institution in a benchmarking will look positive in a report, the risks may be deemed considerable. However, if any reporting is done, it should be effective and efficient, producing well-structured, transparent, and comparable information (qualitative/quantitative) with the view to identify good practices and to apply measures which would enhance the credibility and the visibility of the benchmarking exercise.

Additionally, the research produced an extensive bibliography of articles and publications on benchmarking in higher education. Moreover, the project produced a number of interactive events. The project team organised a symposium in Brussels on the 8th of November 2007, the first Europe-

an gathering of more than 100 university leaders, experts and practitioners in the field of benchmarking from more than 20 European countries and beyond. Following a presentation by the European Commission on the modernisation agenda and how the project fits into this context, the symposium considered benchmarking concepts and approaches in both the private and public sectors. It offered participants an overview of preliminary project findings in terms of collaborative benchmarking groups identified thus far. Examples of both national (Poland, Italy, Germany) and international initiatives (ESMU, ACU, ECIU, CHE, IDEA League) were presented, including the benefits that universities have derived from benchmarking exercises, with examples from Aarhus, Politecnico di Milano, Glamorgan and ETH Zurich.

Three practical workshops followed this symposium, with more than 90 participants combined. The first one, organised by UNESCO-CEPES, in collaboration with the Romanian National Authority for Academic Research, was designed to address the issues directly relevant for 'research performance' and to provide opportunities for participants to interact both with a selected number of national research funding bodies and higher education institutions. A number of national examples highlighted how universities can address priorities and existing criteria of national agencies. Emphasis was placed on how procedures for assessing research proposals can be improved and which benchmarking criteria can be best applied to facilitate the area of quality enhancement in research funding applications. Participants were invited to share and compare their own strategies for research assessment and areas for improvement with other institutions, with a view to elaborate upon possible future collaborative benchmarking activities in the field of research.

The next workshop in Berlin was devoted to benchmarking internationalisation. The workshop focused on how to establish and run a successful benchmarking exercise in internationalisation. Important aspects included identifying the right partner, defining targets, choosing the adequate methods, and developing strategies of implementation and quality assurance systems. The workshop was designed to be a highly interactive event including peer consulting with participants bringing concrete ideas for small short-term pilot benchmarking projects to be developed after the workshop.

The third workshop focused on internal quality assurance and the external context for quality assurance, including the newly established register of QA agencies and how higher education institutions can respond within this context. The programme included a review of different examples and good practices for internal institutional quality and a look at individual cases. Small groups of participants reflected on their strategies and processes and learned from other institutions.

As an outcome of the workshops and the entire project, a survey was held among all participating institutions considering the different areas of possible benchmarking (research, internationalisation, quality assurance) that were focused upon during the workshops. The survey provided some insight into how the higher education institutions cope with these different tasks.

As far as research is concerned, responding higher education institutions indicated that they have a publicly available and documented research strategy with formal procedures to assess their research proposals. Peer review processes are applied to all faculties/departments, in the same or other disciplines. Procedures are in place to assess research outcomes; the volume of research proposals provides an indicator to measure research activity.

In the survey following the benchmarking workshop on internationalisation in Berlin, higher education institutions responded that they have an internationalisation strategy backed up in most cases by an action plan and are engaging in recruiting and marketing activities. Quality assurance of internationalisation seems very rare. Indicators on international student and staff exchanges (incoming/outgoing) provide valuable information as to the volume and the degree of diversification diversity of internationalisation. Whereas some institutions have high percentages of international students from few countries, other institutions seem to attract less international students from a broader range of countries.

On the issue of internal quality, most of the responding higher education institutions have a strategic plan which includes provision for institutional internal quality with different arrangements at central level and devolvement to the faculties. Almost all institutions have some staff particularly dedicated to quality issues. Student feedback is used in all of the institutions, while quality handbooks and data gathered on the performance in relation to competitors is used differently among institutions.

5.6 SPECIFIC RESULTS

Throughout the project it became clear that benchmarking in higher education lacks coherent and broadly accepted definitions for key aspects (such as: what is benchmarking at all) and that there are no standard sets of concepts for benchmarking as they exist in business and industry. All initiatives developed their concepts themselves which are then often fit for purpose, making it difficult to derive generalisable meta-concepts. Maybe such concepts do not exist in higher education (a thesis supported by the results of the analysis) or maybe it needs more time and a broader acceptance of benchmarking in higher education to break enough ground for such standardisation.

A more profane difficulty was the lack of information on benchmarking initiatives and the ensuing challenge in locating them. Many do not advertise what they do, precisely because it is a closed-shop affair; some present a 'benchmarking' which, at a closer look, is not what it seemed to be. There is no register or organisation either which provides an information platform for existing benchmarking initiatives. The online tool of the project might be a start for such an initiative.

The most decisive finding of the group analysis was that there exists no dominant model or even a small group of archetypes of benchmarking groups. Clusters are sparse and normally do not stretch beyond 2 indicators. And the impression was that moderated groups are more likely to achieve their intended goals. This is not very surprising as the external moderator is not bound by higher education institutions' internal struggles, nor other obligations and priorities. His or her sole purpose is to keep the initiative on track.

The interviews with the benchmarking initiatives brought about some other key considerations, this time from the perspective of the participating institutions. Some aspects are of high relevance and yet are considered to be extremely difficult. This embraces the selection and identification of appropriate partners and the definition of proper areas of benchmarking activity, particularly the identification of a useful approach. Many initiatives also struggled with finding the right facilitator or coordinator. Groups also sometimes struggle with defining time frames for their benchmarking process. Not the least, it is of critical importance and yet a day-to-day problem to establish appropriate levels of human, technical and financial resources.

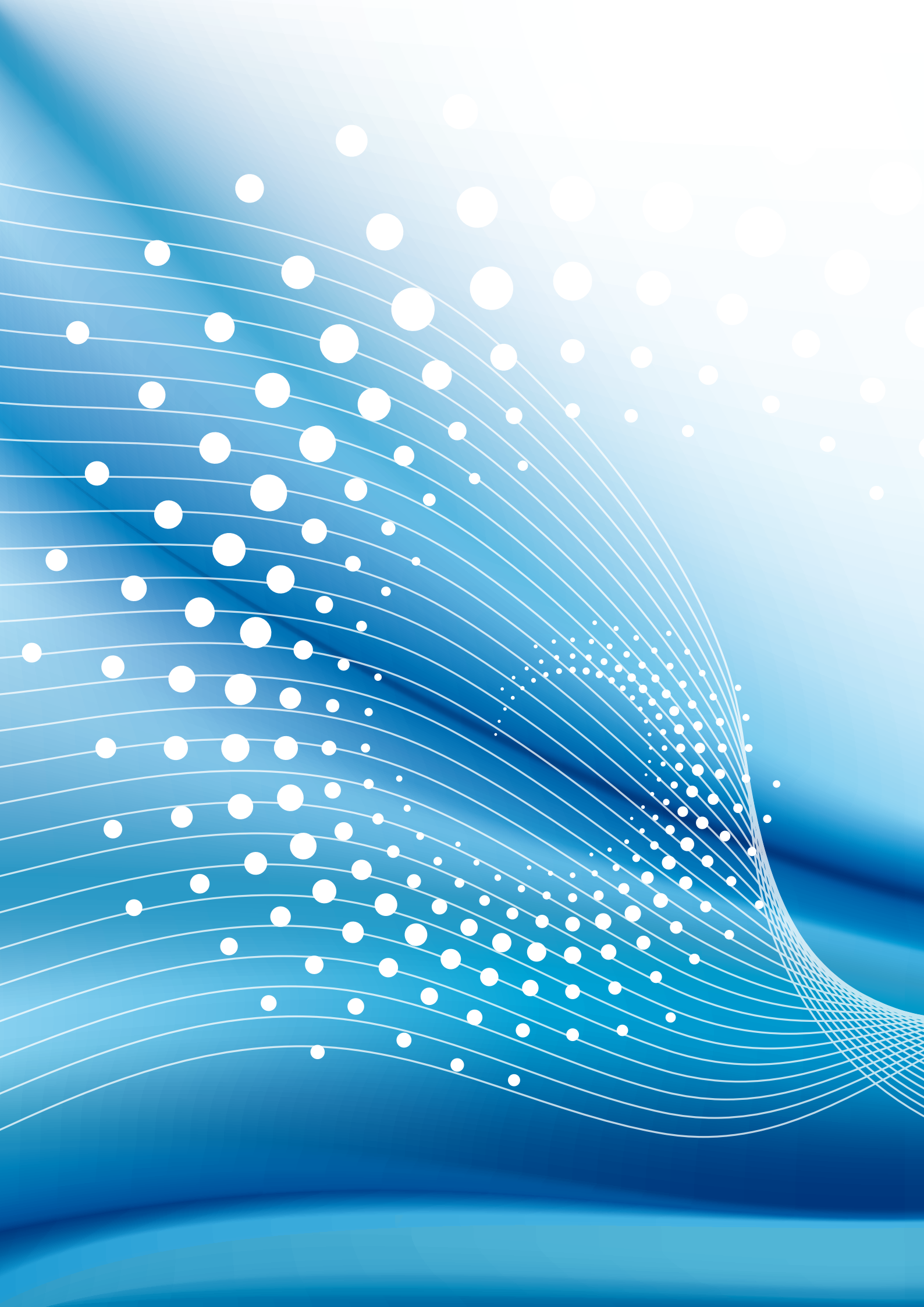
Last but not least, one of the most striking findings was that even in initiatives which invest a lot of time in process management and which are very efficiently run, the produced results often do not find their way into the home universities; in other words, the implementation of results, and thus the process enhancement (the core goal of every benchmarking), is very often not achieved.

Overall, the different approaches (desk research, analysis, interviews, workshops, and survey) produced a broad set of findings, quite a number of them surprising and not anticipated. Benchmarking in higher education is still a very young child with little experience and with even less publicity. But with the increasing role of accountability and process enhancement in higher education institutions, it is likely that benchmarking will gain importance and become a commonly known and frequently used tool in higher education management. The project can provide some information and a discussion platform to foster this process.

A major portion of the desk research had to be dedicated to an analysis of the existing literature on benchmarking in higher education. Although a compilation of literature on this aspect can only be a snapshot of the reality, in part due to the very lively scene and the continuous publication on this issue, it was nevertheless possible to identify nearly 150 articles or books on this subject.

Literature ranges from more theoretical articles through applied studies to overall observations, can be considered a very good information basis for those who want to get involved.

In addition to the full version of this findings' report which includes the literature, it is also available in the project's online tool.



ANNEXES

The background is a gradient of blue, transitioning from a light, almost white blue at the top to a deep, vibrant blue at the bottom. On the left side, there is a vertical column of white circles of varying sizes, some overlapping. At the bottom, there are several white, wavy lines that flow across the page, creating a sense of movement and depth. The overall aesthetic is clean, modern, and professional.

THE FOLLOWING BENCHMARKING INITIATIVES WERE REVIEWED.
EACH OF THESE IS DESCRIBED IN A SHORT OUTLINE.

- 6.1 Aarhus Benchmarking Network
- 6.2 ACODE - Benchmarking in Higher Education (Australia)
- 6.3 ACU Commonwealth University Management Benchmarking Club
- 6.4 Benchmarking Club Fachhochschulen (Germany)
- 6.5 Benchmarking Club Technical Universities (Germany)
- 6.6 ECIU - European Consortium of Innovative Universities – *three benchmarking initiatives were investigated*
- 6.7 ESMU - European Centre for Strategic Management of Universities
- 6.8 HESA - Higher Education Statistics Agency – HEIDI tool (United Kingdom)
- 6.9 HIS - Higher Education Information System (Process-oriented benchmarking) (Germany)
- 6.10 HIS - Higher Education Information System (Indicator-oriented benchmarking 1 university)
- 6.11 HIS - Higher Education Information System (Indicator-oriented benchmarking several universities)
- 6.12 IDEA League - Leading European Education and Research in Science and Technology
- 6.13 Italian University Benchmarking
- 6.14 Leipzig Group (Germany)
- 6.15 NACUBO - National Association of College and University Business Officers (USA) – *two benchmarking initiatives were investigated*

6.1 AARHUS BENCHMARKING NETWORK

History/creation

The Aarhus benchmarking initiative was established in June 2006 and undertaken by the Rector. The BI aims are related to the administration and international collaboration areas, more specifically to quality assurance systems. Viewed as a continuous endeavour, the first phase of the initiative will last 3 years. The BI currently comprises five universities: University of Kiel, the University of Bergen, the University of Göteborg, the University of Turku and the University of Aarhus, and since the beginning of the initiative there have been minor changes in the composition of the group.

Management/coordination

The coordination of the benchmarking initiative in the Aarhus Network is done by the University of Aarhus. The main reason for this is based on Aarhus' strong interest in leading the initiative. The pro-rector of the University of Aarhus is in charge of the project, with the process and results discussed among the deans. Besides an annual Rector's meeting, the partners meet face to face two to three times a year, communicating the rest of the time by email or telephone conferences.

Focus areas

The benchmarking activity focuses on the whole higher education institution at a general level and the actors involved are professors, deans, and administrators, depending on the themes. Concerning the areas currently

covered by benchmarking, these are: Research Funding, Management International Master Programmes and, eventually, PhD studies.

The main focus of the benchmarking initiative is on outputs (each individual university) and on inputs and processes (whole group). A timeline approach was chosen since it takes into account sudden changes in a single period.

Type of universities and geographical area

The five universities that comprise the benchmarking group are multi-faculty universities, with a broad range of science research and teaching. They are situated in the second larger city after the capital city. All of them face a decrease in the number of students in the classical faculties and have a large number of international students, but few, lifelong activities. The main difference between them is their size. In geographical terms, the group members belong to the European Union and EFTA.

Approach

The benchmarking exercise uses both qualitative and quantitative methods. In the first part of the project, most of the focus has been put on the qualitative process indicators, selected depending on the themes. In the next step, quantitative indicators will be used, namely some general indicators and specific ones, depending on the themes chosen by the benchmarking cooperation.

6.2 ACODE - BENCHMARKING IN HIGHER EDUCATION (AUSTRALIA)

History/creation

The benchmarking framework at ACODE was developed in 2003-05, and in 2006, an exercise for an e-learning benchmark was established using the same framework. The aim of the initiative is to use the framework to develop benchmarks for any area/purpose at the institutional or organisational unit level. This exercise is viewed as a continuous endeavour, since these are generic benchmarks with a process that can be used many times by any number of institutions. Since this is an approach rather than a specific use of it, it can include as many institutions as may wish to participate. According to the ACODE experience, the ideal number of institutions involved is between 7 and 10.

Management/coordination

For the use of the e-learning benchmarks, a moderator on a consultancy basis is recommended, particularly for the self assessment part of the process, the peer review of assessments, and the selection of partners for improvement purposes. If the purpose is to use the framework to develop benchmarks, the use of a facilitator is also recommended, as well as a one-day workshop to develop scoping, good practice statements, and performance indicators and measures. The use of this approach can be attested to by ACODE's experience. Concerning frequency and type of contacts between partners, these can vary according to the needs of the individual initiative. An initial meeting or two to ensure common understandings, a face-to-face workshop, and follow-up emails, teleconferences, and site visits (if necessary) are suggested.

Focus areas

The benchmarking framework focuses on the whole higher education institution since it can be used to develop benchmarks for any area/purpose at the institutional or organisational unit level. In addition, the benchmarking activity focuses on sub-units of the higher education institution as the e-learning benchmarks relate to the use of technology in learning and teaching and were developed using the framework. The actors involved are managers responsible for e-learning delivery, such as administrators and academics. Participants must have an enterprising and strategic perspective to participate successfully. Concerning the areas currently covered by benchmarking, these are: e-learning, governance and planning, policy, infrastructure provision, pedagogical application of technology in learning and teaching, staff development and support, and student support. The focus of the benchmarking initiative is on outputs and inputs, as well as on processes. A snapshot approach was chosen since the process is fairly new and designed to provide quality improvement strategies on the basis of a one-off exercise.

Type of universities and geographical area

The e-learning benchmarks have been used in over 10 different Australian universities.

Approach

The benchmarking exercise uses both qualitative and quantitative methods. Concerning peer reviews, their task consists of evaluating the self-assessments of partners with reference to the Scope statement and Good Practice statement for the benchmark.

6.3 ACU COMMONWEALTH UNIVERSITY MANAGEMENT BENCHMARKING CLUB

History/creation

The benchmarking initiative at ACU was established in 1996. It was undertaken by senior leadership aiming to improve management. Viewed as a continuous endeavour, the programme has always been an annual exercise. Benchmarking topics are changed every year and some of them are revisited after a few years. The BI currently comprises between 10 and 15 universities which are all members of ACU and since the beginning of the initiative there have been minor changes in the composition of the group. If participation exceeds 15 universities in a given year, two distinct groups are created with the same topics.

Management/coordination

The coordination of the benchmarking initiative at ACU is carried out by their own network; this choice was based on a clear strategy. Since the institutional leadership involved in the BI is undertaken at a senior level, meeting attendance at that same level is required on an annual basis. Besides this annual senior meeting, email is the most common way of communication between the several partners.

Focus areas

The benchmarking activity focuses on the whole higher education institution at all levels: teaching, research, administration, international collaboration, and research administration. The actors involved are the university's senior leaders. Concerning the areas currently covered by benchmarking, these are: managing government intervention, widening participation, estates and facilities management (during 2007), internationalisation, e-learning, and leadership and governance (during 2008). The main focus of the benchmarking initiative is on processes and a snapshot approach was chosen since it provides what each university is doing at the present time.

Type of universities and geographical area

The universities that comprise the benchmarking group differ by size, type of institution, student body, mission, and geographical location. In geographical terms, the group is strategically spread internationally, all universities being ACU members.

Approach

The benchmarking exercise employs both quantitative methods and a kind of peer-review. However, concerning quantitative indicators, there is a process of information collection about contextual data, although the programme is not considered a quantitative benchmarking exercise. Quantitative and contextual data describe institutions but are not used to measure performance. The only task performed by the peers consists of reporting their findings during workshops. In addition, rather than qualitative indicators, good practices are used, since they help management to improve the university's leadership and its performance.

6.4 BENCHMARKING CLUB FACHHOCHSCHULEN (GERMANY)

History/creation

The benchmarking initiative at Benchmarking Club Fachhochschulen was established in 2000. The BI aims are related to the administration area, more specifically to quality assurance systems and indicators for success or failure. Viewed as a continuous endeavour, the initiative will continue while there are areas of interest to benchmark. The BI currently comprises 12 higher education institutions, and since the beginning of the initiative, 7 institutions have joined the project and 4 institutions have left the group.

Management/coordination

The coordination of the benchmarking initiative in Benchmarking Club Fachhochschulen is done by a moderator on a consultancy basis. This type of coordination was not based on a clear strategy. The several partners meet face-to-face twice a month, communicating the rest of the time via email. The institution's rectors request tasks, receiving meeting proceeds and the final report.

Focus areas

The benchmarking activity focuses on the sub-units of the higher education institution at an administrative level. The actors involved include all staff working within the institution's administration (from Rector to specialised staff). The main focus of the benchmarking initiative is on processes. A timeline approach was chosen since it takes into account gathered knowledge over time.

Type of universities and geographical area

The 12 institutions that comprise the benchmarking group are similar regarding the type of institution, student body, and mission. The main difference between them is their size. In geographical terms, the group members belong to the German higher education system.

Approach

The benchmarking exercise uses both quantitative and qualitative methods. Depending on the theme, relevant quantitative indicators were first identified and then data for each institution were collected. The same process was applied for qualitative indicators, although instead of data collection, the emphasis was put on experience descriptions.

6.5 BENCHMARKING CLUB TECHNICAL UNIVERSITIES (GERMANY)

History/creation

The benchmarking initiative at Benchmarking Club Technical Universities was established in 1996 and was undertaken by two of the most famous Rectors of technical universities. The club is viewed as a continuous endeavour. The BI currently comprises eight technical universities and since the beginning of the initiative, there have not been changes in the composition of the group.

Management/coordination

The coordination of the benchmarking initiative in Benchmarking Club Technical Universities is done by a moderating institution, having full rights concerning input and decision-making. The several partners meet face-to-face four times a year, communicating the rest of the time via email or telephone conferences.

Focus areas

The benchmarking activity focuses on the whole higher education institution at teaching and administrative levels. Concerning the areas currently covered by benchmarking, these are: student services, financing of the professors, and IT-management for administration proc-

esses. In the past, the benchmarking activity covered areas such as financing of the institution, alumni, vacations, and performance indicators. The main focus of the benchmarking initiative is on inputs and processes. A timeline approach was chosen due to the fact that processes change overtime.

Type of universities and geographical area

The eight universities that comprise the benchmarking group are technical universities looking to increase performance and a willingness to cooperate with each other, having similar and comparable problems. The main difference between them is their size. In geographical terms, the group members are national, looking for benchmarks within the same national conditions and regulations.

Approach

The benchmarking exercise employs both quantitative and qualitative methods. Concerning the quantitative indicators, there were 25 indicators chosen for teaching and research. In respects to qualitative indicators, these were used for self descriptions.

6.6 ECIU - EUROPEAN CONSORTIUM OF INNOVATIVE UNIVERSITIES

History/creation

The benchmarking initiative at the European Consortium of Innovative Universities was established in different phases: the first phase began in 2004 with the project Administration of innovative universities; the second one began in 2005 with the project International Mobility of Students; and the third phase started in 2006 with Difuse Project. These projects were undertaken, respectively, by the University Director of Aalborg University, by the President of Swinburne University (Australia), and by the University of Technology Hamburg. The BI aims to relate teaching, research, and international collaboration areas more specifically to the learning exercise. Viewed first as a one-off activity, there is at the present time an interest in discussing and learning more, so it may be renewed. The BI currently comprised 4 universities at phase 1, 4 universities at phase 2 and 7 universities at phase 3.

Management/coordination

The coordination of the benchmarking initiative concerning the Administration of innovative universities and Difuse projects is done by the consortium. A professional consultant is in charge of the coordination of the area International Mobility of Students. The steering committee of the benchmarking project of Administration of innovative universities meets three times a year and many internal meetings at the four institutions. In addition, there was a pre-presentation and final presentation to the ECIU Executive committee. Regarding the International Mobility of Students project, partners communicate by email.

Focus areas

The benchmarking activity focuses both on the whole higher education institution and its sub-units; it is institution-wide, with a particular focus on administration. The actors involved depend on the type of benchmarking/comparison conducted. Concerning the areas currently covered by benchmarking, these are: governance and management structures, strategic planning, human resources and external relations (Administration of innovative universities), and technology transfer (Difuse project). For the mobility project, the main focus of the BI is on both inputs and outputs; for the administration benchmarking project, the main focus was on processes. A snapshot approach was chosen, but it may be renewed.

Type of universities and geographical area

The universities that comprise the benchmarking group have similar missions and characteristics. In geographical terms, the group members are spread internationally; the ECIU has a clear strategy to be European in basic orientation and uses strategic international partners to bring an international dimension to the table.

Approach

The benchmarking exercise uses quantitative and qualitative methods and peer reviews, depending on the benchmarking projects. Questionnaires were used for the Administration and Mobility projects. Concerning the administration benchmarking project, a series of qualitative indicators and quantitative questions were analysed. In the case of the Student Mobility Project, no qualitative indicators were employed. The task of the peers consisted of answering questionnaires, from which SC took best practices.

6.7 ESMU - EUROPEAN CENTRE OF STRATEGIC MANAGEMENT OF UNIVERSITIES

History/creation

The benchmarking initiative at the European Centre of Strategic Management of Universities was established in 1999. The main goal of the initiative is to measure and to promote excellence in university management. More specifically, the program aims to identify and promote best practices; to share ideas and increase awareness of alternative approaches; to gain benefits from an international base of experience; and innovation.

Viewed as a continuous endeavour, the programme works on an annual basis. Since the beginning, almost 40 have joined the initiative, with around 10 universities participating per year.

Management/coordination

The coordination of the benchmarking initiative at ESMU is done by itself since ESMU coordinates the European Benchmarking programme. This choice was based on a clear strategy to provide a European platform for individual universities wishing to engage its benchmarking activities as a learning experience at the European level. The partners meet face-to-face once a year at the annual workshop, communicating the rest of the time by online conferences, via email, or through telephone conferences. In addition, through the benchmarking process, the participants have access to an e-mail discussion group and networking opportunities for exchanges with specialists in the four topics.

Focus areas

The benchmarking activity focuses on the whole higher education institution at a general level and particularly at the administrative and internationally collaborative levels. The actors involved are rectors, vice-rectors, deans, vice-deans, heads of administration, planning officers, academics, administrators, and students. The benchmarking currently covers university management processes. The main focus of the benchmarking initiative is on processes. Both a timeline approach and a snapshot approach were chosen since some topics are 'revisited' (timelines), while others have so far only been benchmarked once (snapshots).

Type of universities and geographical area

The universities that comprise the benchmarking group are either multi-faculty universities or specialised universities and also differ from each other concerning size, student body, and mission. This heterogeneity within the university sector gives a more diversified perspective, widening and strengthening the learning process for the participating members. In geographical terms, the group members belong to the European Union and EFTA.

Approach

The benchmarking exercise uses both quantitative and qualitative methods. The quantitative indicators are obtained through questionnaires for both the context aspect and as guidelines for the self-evaluation report. The qualitative approach focuses on the university's missions and goals and degree of autonomy. Concerning peer reviews, universities meet, discuss and agree what is a good practice after the ESMU panel of assessors (experts) evaluates universities against a set of practices and sends the drafts to the universities.

6.8 HESA - HIGHER EDUCATION STATISTICS AGENCY (UNITED KINGDOM)

History/creation

The benchmarking initiative at Higher Education Statistics Agency was established in April 2007 aiming to build the HEIDI tool - Higher Education Information Database for Institutions. Heidi is a web-based management information service that provides easy access to a rich source of quantitative data about higher education. Viewed as a continuous endeavour, data is collected and updated on an annual basis. Despite the fact that the BI was only launched in 2007, the programme currently comprises 136 higher education institutions and is still growing. However, it is limited to higher education institutions in the UK.

Management/coordination

The service is provided by HESA based on data provided by the institutions themselves. Aside from user workshops, the several partners involved do not meet, unless they arrange to do so privately.

Focus areas

The benchmarking activity focuses on the sub-units of the higher education institution and the actors involved are administrators, deans, and institutional leaders. Concerning the areas currently covered by benchmarking, these are: students, DLHE, staff, and finance.

The main focus of the benchmarking initiative is on outputs and on inputs. Both a timeline and a snapshot approach were chosen; users can choose the time period they wish to view and they can see data by year and over intervals of their choice.

Type of universities and geographical area

The 136 higher education institutions that comprise the benchmarking group differ by size, type of institution, student body and mission. In geographical terms, the group members belong to the UK higher education system.

Approach

The benchmarking exercise uses only quantitative indicators. Each higher education institution defines which are the most useful to them and their institutions/purposes.

6.9 HIS - HIGHER EDUCATION INFORMATION SYSTEM (PROCESS-ORIENTED BENCHMARKING) (GERMANY)

History/creation

The benchmarking initiative at HIS - Higher Education Information System (process-oriented benchmarking) was established at different dates. The BI aims are related to the administration area, more specifically to indicators for success or failure. Viewed as a one-off activity, it was discontinued, as planned. The BI currently comprises several groups and each of them can vary between 3 and 10 institutions; since the beginning of the initiative, there have not been changes at this level.

Management/coordination

The coordination of the benchmarking initiative at HIS is done by a moderating institution as an integral partner. This choice was based on a clear strategy.

The several partners involved in the project meet once a month and over a period of 6-8 months, there are 4-6 workshops; the rest of the time they communicate by email.

Focus areas

The benchmarking activity focuses on the sub-units of the higher education institution at an administration level and the actors involved are administrators. Concerning the areas currently covered by benchmarking, these are: central administration and administration areas in general.

The main focus of the benchmarking initiative is on processes. A snapshot approach was chosen.

Type of universities and geographical area

The institutions that comprise the benchmarking group differ by size, institution type, and mission. The main similarity between them is their student body. In geographical terms, the group members belong to the same country and region.

Approach

The benchmarking exercise uses both quantitative and qualitative methods.

6.10 HIS - HIGHER EDUCATION INFORMATION SYSTEM (INDICATOR-ORIENTED BENCHMARKING 1 UNIVERSITY)

History/creation

The benchmarking initiative at HIS - Higher Education Information System (indicator-oriented benchmarking 1 university) was established at different dates. The BI aims are related to the administration area, more specifically to indicators for success or failure. Viewed as a one-off activity it was discontinued, as planned. The BI currently comprises only one institution, and since the beginning of the initiative, there have not been changes at this level.

Management/coordination

The coordination of the benchmarking initiative in HIS is done by a moderating institution as an integral partner. This choice was based on a clear strategy.

The people involved in the project have face-to-face contact during workshops, communicating the rest of the time by email.

Focus areas

The benchmarking activity focuses on the sub-units of the higher education Institution at an administration level and the actors involved are administrators. Concerning the areas currently covered by benchmarking, these are: central administration and administration areas in general.

The main focus of the benchmarking initiative is on inputs and on outputs. A snapshot approach was chosen.

Approach

The benchmarking exercise uses only quantitative methods. The type of quantitative indicators depends on the area, but in general terms they are linked to efficiency parameters.

6.11 HIS - HIGHER EDUCATION INFORMATION SYSTEM (INDICATOR-ORIENTED BENCHMARKING SEVERAL UNIVERSITIES)

History/creation

The benchmarking initiatives at HIS - Higher Education Information System (indicator-oriented benchmarking several universities) were established at different dates. The BI aims are related to the administration area, and more specifically to indicators for success or failure. Viewed both as a one-off activity and continuous, it was discontinued as planned, in the first case. In the second case, the first phase of the initiative will last 2 years. The BI currently comprises several groups and each of them can vary between 3 and 10 institutions; since the beginning of the initiative there have not been changes at this level.

Management/coordination

The coordination of the benchmarking initiative at HIS is done by a moderating institution as an integral partner. This choice was based on a clear strategy.

The several partners involved in the project meet once a month in an 8 month period, communicating the rest of the time by email.

Focus areas

The benchmarking activity focuses on the sub-units of the higher education institution at an administration level and the actors involved are administrators. Concerning the areas currently covered by benchmarking, these are: central administration and administration areas in general.

The main focus of the benchmarking initiative is on inputs and on outputs. A snapshot approach was chosen, except for facilities management: in this case a timeline approach was used.

Type of universities and geographical area

The institutions that comprise the benchmarking group differ by size, institution type, and mission. The main similarity between them is their student body. In geographical terms, the group members belong to the same country and region.

Approach

The benchmarking exercise uses quantitative methods only. The type of quantitative indicators depends on the area, but in general terms they are linked to efficiency parameters.

6.12 IDEA LEAGUE - LEADING EUROPEAN EDUCATION AND RESEARCH IN SCIENCE AND TECHNOLOGY

History/creation

The benchmarking initiative at IDEA League, a leading network of European education and research universities in science and technology, was established in 1999 and was undertaken by the Rector of ETH Zurich (lead institution). The BI aims are related to the teaching area, more specifically to quality assurance systems. Viewed as a continuous endeavour, the first phase of the initiative lasted 3 years. The BI currently comprises five institutions: Karlsruhe, Darmstadt, Stuttgart, Kaiserslautern, plus ETH Zurich as lead institution. Since the beginning of the initiative, the number of partners has not changed, having no enlargement possibilities.

Management/coordination

The coordination of the benchmarking initiative in IDEA League is done by ETH Zurich. This choice was based on a clear strategy. The heads of IDEA League meet twice a year and committees meet almost each month, depending on the agreed needs; the rest of the time the communication is made by email.

Focus areas

The benchmarking activity focuses on the whole higher education institution, particularly on teaching (a priority), research, and internationalisation. The actors involved are foremost professors, but with some input from students and administrators as facilitators providing specific data and information. Concerning the areas currently covered by benchmarking, these are always directly related to basic academic disciplines. The main focus of the benchmarking initiative is on outputs and processes. Both a timeline and a snapshot approach were chosen, with preference often given to 'timeline' considerations.

Type of universities and geographical area

The five institutions that comprise the benchmarking group are similar in size, in type (i.e., all are polytechnics), and have similar missions. The main difference between them is their student body. In geographical terms, the group members belong to the European Union, EFTA, and are Bologna Process countries.

Approach

The benchmarking exercise uses both quantitative and qualitative methods. Concerning quantitative methods, importance has been given to quantitative information, but not necessarily in the format of indicators. In respect to qualitative methods, a set of qualitative standards reflecting performance in teaching, research, and internationalization has been employed. In addition to peer reviews, various documents and explanatory notes have been used to compare provided information.

6.13 ITALIAN UNIVERSITY BENCHMARKING

History/creation

The benchmarking initiative at Italian University Benchmarking was established in 1999, although there was preliminary work in 1998. There have been six Good Practice projects and the first three were financially supported by the Ministry of the University. Since 2003, the BI has been self-financed by the institutions themselves. The BI aims to relate the administration area more specifically to improve performance. First viewed as a one-off activity, it became a permanent activity due to its success. The BI has overall comprised 36 universities and since the beginning of the initiative, there have been major changes in the composition of the group related to its size: from 10 institutions in 1999 to 21 at present time.

Management/coordination

The coordination of the benchmarking initiative in Italian University Benchmarking is done by a research group based at Politecnico di Milano; however, the design and implementation is highly participative involving both top managers and officers in each member university. The administrative director of Italian University Benchmarking is in charge of the project. The partners have 3 meetings per project in the course of 1 year, communicating the rest of the time by email, telephone conferences, and through the internet.

Focus areas

The benchmarking activity focuses on the sub-units of the higher education institution, such as central services, with a particular focus on administration. The actors involved are administrators and sometimes vice-rectors or delegates from rectors. Concerning the areas currently covered by benchmarking, these are: student services, human resource management, logistics and procurement, accounting and research support. The main focus of the benchmarking initiative is on both inputs and outputs. With reference to the processes, these were presented by the university on GPS. A timeline approach was chosen. On the one hand, this enables a comparison between institutions, and on the other hand, it provides links with operational years of universities.

Type of universities and geographical area

The 21 universities that comprise the benchmarking group are public institutions and differ by size, type of institution, student body, and mission. In geographical terms, the group members belong to the Italian public higher education system. A replica of the study is under discussion with Spanish universities.

Approach

The benchmarking exercise uses both quantitative and qualitative methods. In respect to quantitative methods, two major sets were used: efficiency and effectiveness. Regarding to qualitative methods, these were both subjective and objective.

6.14 LEIPZIG GROUP (GERMANY)

History/creation

The benchmarking initiative of the Leipzig Group was established in 2006 and was undertaken by the institution's Rector. The BI aims to relate teaching, research, and international collaboration areas more specifically to indicators for success or failure. Viewed as one-off activity in the beginning, it was extended for one year.

The BI currently comprises 4 universities and since the beginning of the initiative, there have not been changes in the composition of the group; the number of partners was fixed from the beginning with no enlargement possibilities.

Management/coordination

The coordination of the benchmarking initiative in the Leipzig Group is done by CHE - Centre for Higher Education Development as a moderating institution. This choice was not based on a clear strategy. The several partners meet face-to-face 4 times a year.

Focus areas

The benchmarking activity focuses on the sub-units of the higher education institution at a teaching, research, and international collaboration levels and the actors involved are professors, heads of the departments, and administrators. Concerning the areas currently covered by benchmarking, these are: performance indicators in education and research.

The main focus of the benchmarking initiative is on outputs and on processes. A timeline approach was chosen since the processes will change and can be discussed over the long run.

Type of universities and geographical area

The four universities that comprise the benchmarking group are similar concerning institution type, student body, and mission. The main difference between them is related with their size and organisation of the social science field in departments, faculties, or institutes. In geographical terms, the group members belong to the German higher education system.

Approach

The benchmarking exercise uses both quantitative and qualitative methods. Concerning quantitative indicators, 19 indicators were chosen for teaching and research.

6.15 NACUBO - NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS (USA)

History/creation

The benchmarking initiative at NACUBO - National Association of College and University Business Officers was first established in 1971, relating to endowment management. In 1990, the initiative began relating to the awarding of institutional aid. In 2007, an online, web-based tool was developed for the institutional aid initiative. The BI's aims are related to the administration area; more specifically, the data are used for self-evaluation. Viewed as a continuous endeavour, each project phase lasts 1 year. The BI currently comprises about 750 institutions relating to endowment management and performance, and 425 institutions relating to the awarding of institutional aid.

Management/coordination

The coordination of the benchmarking initiative in NACUBO is done by itself; however, for data collection and production of statistics, consultancy support is required. NACUBO has two face-to-face meetings per year with this consultant (endowment project). This choice was based on a clear strategy. There are no face-to-face meetings with the 750 participant institutions since the data collection is done through questionnaires. However, there exists a validation processes (i.e., built-in checks) to ensure accuracy, which is important for such a high profile benchmarking exercise. The institutional aid initiative does not require a consultant. NACUBO conducts this initiative independently.

Focus areas

The benchmarking activity focuses both on the whole higher education institution and its sub-units; it is institution-wide, with a particular focus on administration. The actors involved are administrators and students, depending on the themes. Concerning the areas currently covered by benchmarking, these are: endowment management and performance and the awarding of institutional aid to students. There are plans to extend the BI to new topics in the future.

The main focus of the benchmarking initiative is on outputs and on processes. A snapshot approach was chosen.

Type of universities and geographical area

The institutions that comprise the benchmarking group differ by size, type of institution (including private and state-supported institutions), student body, and mission. In geographical terms, the group members belong to the USA and Canada.

Approach

The benchmarking exercise uses only quantitative methods. A large quantity of indicators is used for the endowment management initiative.

The extensive bibliography on benchmarking in higher education compiled in the framework of the project is available online on www.education-benchmarking.org

Alstete, Jeffrey W. (1995), *Benchmarking in Higher Education: Adapting Best Practices to Improve Quality*. ASHE-ERIC Higher Education Report No. 5.

Internet: http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/24/3d/97.pdf.

Camp, R. (1989), *Benchmarking: The search for industry best practices that lead to superior performance*. Milwaukee, Wisc.: ASQC Quality Press.

Engelkemeyer, Susan West (1998), *Applying Benchmarking in Higher Education. A Review of Three Case Studies*. In: *Quality Management Journal*, 5 (4), pp. 23-31.

Internet: <http://www.asq.org/enews/education-brief/pdf/qmjv5i4engelkemeyer.pdf>.

Farquhar, R. (1998), *Higher Education Benchmarking in Canada and the United States of America*. In: Schofield, Allan (Eds.), *Benchmarking in Higher Education: An International Review*. London: CHEMS - Commonwealth Higher Education Management Series, pp. 21-33. Internet: <http://www.acu.ac.uk/chems/onlinepublications/961780238.pdf>.

Hämäläinen, Kauko et al. (2002), *Benchmarking in the Improvement of Higher Education*. Helsinki: ENQA Workshop Reports No. 2. Internet: <http://www.enqa.eu/files/benchmarking.pdf>.

Jackson, Norman (2001), *Benchmarking in UK HE: An Overview*. In: *Quality Assurance in Education*, 9 (4), pp. 218-235.

Abstract: <http://www.emeraldinsight.com/Insight/viewContentItem.do?contentType=Article&hdAction=lnkpdf&contentId=839687&history=false>.

Karjalainen, A./Kuortti, K./Niinikosi, S. (2002), *Creative Benchmarking: Designing Sustainable International Cooperation in Higher Education*. Oulu: University Press of Oulu.

OECD (2008). *Tertiary Education for the Knowledge Society, OECD Thematic Review of Tertiary Education: Synthesis Report*. April, 1 - 23. Internet: <http://www.oecd.org/dataoecd/20/4/40345176.pdf>

Salhieh, Loya/Singh, Nanua (2003), *A System Dynamics Framework for Benchmarking Policy Analysis for a University System*. In: *Benchmarking. An International Journal*, 10 (5), pp. 490-498.

Abstract: <http://www.ingentaconnect.com/content/mcb/131/2003/00000010/00000005/art00005>.

Schofield, Allan (1998), *Benchmarking an overview of approaches and issues in implementation*. In: Schofield, Allan (Ed.), *Benchmarking in Higher Education: An International Review*, London: CHEMS, and Paris: UNESCO, pp. 7-20.

Stella, A./Woodhouse, D. (2007). *Benchmarking in Australian Higher Education: A Thematic Analysis of AUQA Audit Reports*, Occasional Publications Series N°13, pp. 1-62. Melbourne: AUQA.

Internet: http://www.auqa.edu.au/files/publications/benchmarking_final_text_website.pdf.

UNESCO – CEPES (2007), *Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions*, compiled by L. Vlăsceanu, L. Grünberg and D. Pärlea, Bucharest, 119p.

Yasin, Mahmoud M. (2002), *The Theory and Practice of Benchmarking: Then and Now*. In: *Benchmarking. An International Journal*, 9 (3), pp. 217-243.

Abstract: <http://www.ingentaconnect.com/content/mcb/131/2002/00000009/00000003/art00001>.

Yorke, Mantz (1999), *Assuring Quality and Standards in Globalised Higher Education*. In: *Quality Assurance in Higher Education*, 7 (1), pp. 14-24.

Yorke, Mantz (1999), *Benchmarking Academic Standards in the UK*. In: *Tertiary Education and Management*, 5, pp. 81-96.





Education and Culture

This report describes the results of a two-year EU-funded project, **Benchmarking in European Higher Education**.

The project findings are the basis of the outputs produced in the framework of the project, i.e. guidelines for effective benchmarking, an online tool, an online bibliography and a handbook on benchmarking in higher education. See www.education-benchmarking.org