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IBAR PROJECT

QUALITY AND ACCESS – THE PORTUGUESE CASE

Work Package 6

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1. Introduction

The present report aims at presenting the global results obtained with the national case study related to Work Package 6 – Quality and Access: the Portuguese Case. This Work Package deals with two main research questions:

1) *What is the institutional policy on access?*
2) *What is the relationship between institutional student enrolments, quality assurance processes and funding strategies?*

Responding to these questions has the purpose of investigating if Portuguese higher education institutions are making efforts in order to comply with ESG, namely in what concerns "the development of information systems, ensuring the collection, analysis and use of relevant information for the effective management of their programmes of study and other activities" (ESG 1.6).

Ultimately, this will help to understand how such efforts enable institutions to assure and improve their quality, as foreseen by ESG 1.1: "Institutions should have a policy and associated procedures for the assurance of the quality and standards of their programmes and awards. They should also commit themselves explicitly to the development of a culture which recognises the importance of quality, and quality assurance, in their work. To achieve this, institutions should develop and implement a strategy for the continuous enhancement of quality. The strategy, policy and procedures should have a formal status and be publicly available. They should also include a role for students and other stakeholders".

The report begins with an overview of the Portuguese access system informed by the revision of literature and of the national legislation on the subject. The emphasis is placed on the characterisation of this system as well as on the major transformations occurred, especially in recent years, in the national access policy.

The report proceeds with a description of the institutional context in order to discuss how Portuguese institutions define their access policies and strategies according to the national legal framework. To undertake this analysis, documents issued by the four Portuguese institutions previously selected for the development of Work Package 5[1] – two universities (HEI α and HEI β) and two polytechnics (HEI γ and HEI δ) – were used. Document analysis was further complemented by the analysis of data from the interviews with different groups of actors in each of these institutions.

Interviews targeted, in each institution, both members of the central management and administration and members of the faculty/schools. The first group comprised the Rector (or, in its place, a vice-rector, or a pro-rector) and the representative of the Quality Assurance structure (or, in its place, the representative of the Senate, of the structure responsible for

[1] As mentioned in the WP5 Report, these institutions were selected with the purpose of constituting a diversified sample of Portuguese higher education institutions, in terms of higher education sub-sector (university and polytechnic), size, and geographic location. Though, due to methodological restrictions, all four institutions belonged to the public system of Higher Education. These institutions were duly described in detail in that same Report.

study programmes, or for the Student Support Services). The second group was constituted by the Dean (or equivalent), the Head of the Pedagogical Council (or similar structure), the representative of the Quality Assurance structure (at unit level), and by two panels, one composed with academics and the other with students (around ten participants in each panel).

Due to methodological restrictions, a selection was made, first, of the scientific areas and, second, of the study programmes to which the members of this second group belonged. The intention was to choose contrasting scientific areas and respective study programmes offered in all institutions, regardless of their sub-sector (university or polytechnic). As a result, two major distinct scientific areas were chosen – *Engineering* and *Arts* – and two study programmes (first cycle level study programmes only), from each area, were selected in each institution: Civil Engineering and Design, in HEI α; Civil Engineering and Communication Design, in HEI β; Civil Engineering and Arts and Design, in HEI γ; and Civil Engineering and Fine Arts, in HEI δ (see table 1).

In the fourth part of the report (Framing the Enquiry), with the aim to explore in more detail institutions' behaviours and strategies promoting student access and progression, data collected from the interviews with the previously defined groups of actors are systematised. This analysis is complemented with data derived from the analysis of the documents, provided by the four institutions, concerning this topic.

Finally, in the Conclusions section, the identification of barriers and examples of good practices in implementing policy and procedures for access dominate the discussion.

2. The Portuguese Access System

Portugal has a binary system comprising some 160 higher education institutions, both universities and polytechnics, public and private. While universities are oriented towards research and knowledge production in order to ensure a solid scientific and cultural preparation (offering first, second and third study cycles), polytechnics are oriented towards applied research to assure theoretical and practical knowledge and its application for the pursuit of professional activities (offering first and second study cycles).

Following the 1974 revolution the Portuguese higher education system expanded at a very fast rate, moving from what was an elite system with low participation rate to a massified system with a gross enrolment rate above 50%, in the early years of the present century (Tavares *et al*, 2008). The governments in power after the 1974 revolution have assumed the need to widen access and expand higher education from its initial elite status, both for social justice and for economic reasons. Nevertheless, the efforts of the governments were confronted with a number of managing paradoxes deriving from contradictions between the socialist egalitarian ideals and factors such as the economic context, lack of resources, pressures from the World Bank and the IMF, etc. (Magalhães, Amaral and Tavares, 2009). Presently, after a great increase in student enrolments, there is a trend of declining enrolments which has created competition for students and new management challenges, including the need to attract students, to establish quality standards and to define institutional identities (*Ibidem*).

Access has been one major area of state regulation of the higher education system since it has significant consequences for the national economic and social development: the size and composition of enrolments in higher education, participation opportunities for all, social equity and redress, the costs of the system and the contribution to economic competitiveness. Regarding access policies, Portugal is now moving from a quantity to a quality paradigm, to a more clear definition of the binary divide, to a more diversified offer of programmes and to a more diverse public (Magalhães, Amaral and Tavares, 2009).

Successive governments have consistently used access to higher education as a way to regulate the system and parts of its subsectors, which have been centrally overseen by a Ministry responsible for higher education. Access to the public Higher Education System occurs through a nationally centralised and regulated system of *numeri clausi,* which were previously used to control the number of vacancies for every study programme. At present institutions have some autonomy since they can manage and distribute vacancies for each of the study programmes offered within limits previously defined by the Ministry for different areas. Therefore, instead of defining the vacancies for every programme the Ministry defines more aggregated numbers that institutions of higher education are allowed to allocate to individual programmes. In the case of the private higher education sector, the Ministry defines the numbers for the vacancies of individual programmes but applications are governed by the respective institutions, without using the existent centralised placement system (used for the public sector).

There are three main ways to access public higher education:

1. **National competition**, which includes a *general track* (students hold the secondary education diploma or equivalent and do the national exams) and a *special track* for students from Azores and Madeira, for Portuguese emigrants, for

students with disabilities and for militaries. This national competition takes place in two phases. However, if the available vacancies are not filled until the second phase, a third one can be opened locally by the institution.

2. **Special Competition**, for mature students, which includes students older than 23 (students prove their ability to attend the study programme through specific tests carried out by institutions of higher education) and students with other appropriate post-secondary qualifications, for instance a technological specialisation course (Curso de Especialização Tecnológica – CET[2]).

3. **Special regimes**, for instance, for students who are high performance athletes, who come from the Portuguese former colonies, etc.

The majority of students enter public higher education by means of the national competition and the centralised placement system that takes into account students' preferences and their grades in secondary education and in national exams. Therefore, access to higher education is available to all students who have completed secondary education (or equivalent) or fulfil the requirements of the special access routes, such as the regime for candidates over 23 years old. After an education route lasting 12 years (9 years of basic education and three years of upper secondary education), the condition for becoming eligible to enter a higher education programme combines the student's performance in upper secondary education, their performance in national exams (with a 95 minimum score out of 200) in the disciplines that are considered core disciplines for the chosen study programme, as well as the satisfaction of prerequisites, if they exist. Since 1999, the calculation of the access grade for entering the national competition is based on at least 50% of the secondary school grades, at least 35% of national access exams and, at most, 15% of prerequisites.

[2] CET are post-secondary European Qualification Framework Level 4 diplomas.

3. Institutional Context

This part of the report attempts to explain how Portuguese institutions define their access policies and strategies framed by the national policy context. To undertake this analysis, one has resorted to data deriving both from documents issued by four of these institutions – HEI α, HEI β, HEI γ and HEI δ – and from two of the questions answered through the conducted interviews with the two distinct groups of actors of each institution – members of the central management and administration and members of the faculty/schools. This second set of data deals not only with what the institutional policy on access is, and its alignment with the national policy, but also with the strategies concerning access implemented at the level of the faculty/schools and, more specifically, of the study programmes selected[3]. Table 1 presents those faculty/schools and respective study programmes:

Table 1 - Faculty/schools and respective study programmes selected for the study

	Faculty/Schools	Study Programme
HEI α	School of Sciences and Technology (Rural Engineering Department)	Civil Engineering
	School of Arts (Visual Arts and Design Department)	Design
HEI β	Faculty of Engineering	Civil Engineering
	Faculty of Fine Arts	Design of Communication
HEI γ	School of Technology and Management	Civil Engineering
	School of Education	Arts and Design
HEI δ	School of Technology	Civil Engineering Plastic Arts – Painting and Inter-Media

As the access policy is steered centrally, both universities and polytechnics must comply with national access regulations (national examinations). However, there are some areas where direct intervention is possible: definition of special access exams, the choice of exam disciplines for each study programme, setting the minimum access mark, access requirements for students older than 23 years old and study programmes' transferences. One strategy for attracting the desired students could be through targeted study programme's promotion. Overall, the selected HEIs seem often to develop this strategy.

In fact, **HEI α** attracts students from all over the country (Continent and Islands) and also foreign students, coming both from Portuguese-speaking countries and other foreign countries, mainly European. However**,** students still tend to come mostly from the geographical area or region where the institution is located (HEI α, 2011). Driven mainly by this fact, **HEI α** fosters a programme of visits to secondary schools to advertise its current study programmes' offer. Some CETs also work as a way to access HE.

Some differences emerge between *Engineering* and *Arts* regarding study programmes' promotion. Although both programmes conduct school visits, these appear to be more

[3] For practical reasons, the reference to specific study programmes will be aggregated into the two main scientific areas selected for the present study: *Engineering* and *Arts*.

systematised and have a bigger impact in *Arts*. Since this is a recently established programme, it has a proactive policy of visits, its teaching staff developing a lot of effort to advertise it both in the region where the HEI is located and in surrounding regions. In *Engineering*, promotion through visits, fairs, etc., appears less necessary, with the study programme being described as a classical one and, thus, having a great capacity to attract students. However, it was reported that in the 2011/2012 academic year study programme promotion in secondary schools will begin to be done systematically.

HEI β, currently one of the largest institutions in the country, namely in terms of students (around 31,000 students), has also a greater capacity (than, for instance the previous institution - **HEI α**) to attract students. In fact, as documented by Teixeira *et al.* (2009), in this university the demand is greater than supply and since the region is one of the largest in terms of population, student recruitment is mainly local, that is, students tend to come from the city where the institution is located as well as from its suburbs (Teixeira *et al.*, 2009).

Within this HEI, dissatisfaction is noted in *Arts* due to the school's lack of freedom to select the 'best' students (i.e. by portfolio) instead of the students with the best grades and averages selected through the national exams. This is described as contrary to *Art*s schools practice around Europe. Some discontent with lack of autonomy is also noted in *Engineering*. A greater flexibility and possibility of intervention in student selection would be welcomed rather than just receiving students with not much saying in the matter. This is despite the fact that *Engineering*, as it happens in *Arts*, claims to attract the best students according to national access criteria. To raise awareness of study programmes offer, the faculty/school where this programme is offered organises an open week – 'The Engineering Profession' (Profissão Engenheiro) – as well as school visits and presentations.

HEI γ has witnessed, throughout the last years, an increasing growth of its student population. According to the institution, this is due to a strategy towards the offer of diversified study programmes (especially CETs and master programmes), the marketing of this offer, the external promotion of the institution, and the attempt to attract new publics (HEI γ, 2010). Maybe as a result, student population is characterised by a strong geographical dispersion concerning its provenience, though they tend to come predominantly from the Northern coastal districts of Portugal (HEI γ, 2010).

In this **HEI** there is a Support Office that promotes its programmes' offer, in different places, such as in job fairs, professional schools, and secondary schools. Furthermore, open days take place 2 or 3 times a year, giving secondary school students the opportunity to visit the institution. There is also the "Live Science" (Ciência Viva) project, through which the institution hosts students from the 11th and 12th grades. Through these initiatives all the degrees are advertised, namely *Engineering* and *Arts*. However, *Arts* has specific exhibit activities to the outside community (for instance, the presentation of the study programme outputs), with the final goal of attracting students.

In this institution, and besides the national access competition, there are internal access policies related to the new publics, specifically students older than 23 years old and the technological specialisation degrees (CET). There is also a body – the Permanent Council – which includes the president of the institution (**HEI γ**) and the faculty/school directors, where vacancies are discussed and defined, namely concerning technological specialisation and master degrees. This follows a global planning strategy, meaning that the institution has a strategic plan which defines the policies and strategies for attracting students.

HEI δ is a relatively small institution (about 4,000 students) offering study programmes that cover a wide range of training areas and aim at giving students a practice-oriented training designed to improve the access to the labour market (WP 5 Report, 2011). Since the institution is small and peripheral, students are mainly recruited locally (Teixeira et al., 2009). The institutional access policy is also aligned with the national policy. The access of the remaining students, either from the post-graduate level, or students older than 23, is regulated by the institution. The Pedagogical and the Scientific Councils determine the access regulations and are responsible for the selection process of those candidates. There are specificities regarding different scientific fields (Engineering, Arts, Management, Design, Communication, etc.) which are defined by the previously mentioned Councils. In global terms, access to **HEI δ** requires a minimum knowledge on the part of the candidates in basic areas, defined by the Scientific Council. For instance, in *Engineering*, the candidate must have certain knowledge about mathematics and physics; in *Arts*, candidates should prove their skills in this specific area; and in *Management*, they should show some awareness about accounting.

The requirement of such minimum knowledge implies not only the existence of a general quality criterion, based on that minimum level of knowledge, but also the existence, among students, of a certain motivation level enabling them to continue their studies (namely in what concerns the access to masters and post-graduate degrees). For instance, in *Engineering*, mature students are increasing substantially in numbers, which translates the institution's ability to attract more graduate students who already know their objectives and are motivated, dedicated and committed. This is stressed as an asset for the study programme.

Some actions are developed at the faculty/school level to promote the institution degrees and define strategies to attract students. These actions, usually proposed by the director of each degree, aim at degrees' promotion and resort to different strategies, such as seminars in which both secondary school students and teachers are invited to learn about the **HEI δ** offer. There is also an annual event, the 'Science Week' (Semana da Ciência), which is basically a week addressed to the 10th, 11th and 12th grades students, where the institution presents itself, including the way it functions and its infrastructures and equipment. The 'Science Week' is understood as an important outreach activity and is already part of the schedules of many secondary schools. Furthermore, there are other small actions, such as the presentation of the degrees in secondary schools which, together with the previous initiative, allow for a widespread advertisement of the **HEI δ**, at least in the surrounding areas.

In sum, although access to public higher education is centrally regulated, the four institutions under analysis have some autonomy to develop strategies in order to attract students and manage all the procedures related to the special competition access stream, namely the students older than 23 years old and the CETs regimes. Overall, these strategies seem to be much more systematised in polytechnics than in universities which might be explained by a shortage of candidates especially relevant in the case of the first type of institutions. In fact, polytechnics constitute, in the Portuguese context, a true second choice, considered less reputable than universities (Tavares, 2011). Furthermore and within polytechnics these strategies are also more noticeable in *Arts* than in *Engineering* study programmes. In this case the reason may lie in the fact that *Engineering* is traditionally associated with a high social status and with high economic income, therefore holding a greater capacity to attract students.

4. Framing the Enquiry

This part of the Report deals with the research questions framing Work Package 6. The aim is to contribute to deepen the knowledge on the Portuguese institutions' strategies towards the promotion of student access and progression. One resorts to the analysis of data derived from the semi-structured interviews[4] with the central management and administration and members of the faculty/schools of each of the four institutions taken as reference for the study. This analysis is combined with that of the documents issued by each of these institutions on the topic of access.

One of the purposes defined for the Work Package 6 was to understand if HEIs do *collect and disaggregate data on their offers/enrolments/non-completion/graduates*, namely *according to different student cohorts*, and who holds the *responsibility for ensuring and monitoring access* within the institution.

Globally, the Portuguese HEIs represented in the study tend to collect and disaggregate data according to different cohorts. However, not all the data are collected or always systematised and monitored by specific services.

HEI α publishes, since the academic year 2001/2002, a comprehensive annual report which analyses not only the access to higher education, the entrants' profile and the academic performance, but also the tendencies conditioning the offer and the demand of 1st cycle study programmes both at national and institutional level. According to the institution the data of the report constitute a crucial element for the definition of the training offer, vacancies distribution among schools and programmes, academic and non-academic staff management, public diffusion of programmes, student admission and progression policies. There is also an Integrated System of Information allowing the institution to access and systematise information on the drop-out figures both for the whole institution and at study programmes level. The System also provides data on the number of graduates *per* year and *per* study programme.

Regarding the disaggregation of data in order to give information on different student cohorts, **HEI α** states that it occurs only in the case of non-traditional students. However, the strategies to collect data adopted at faculty/school level and, more specifically, at the corresponding study programmes, differ slightly. For instance, in *Arts*, needed data is provided on request.
Overall, data on the above mentioned indicators seems to be less relevant for academics than students' academic performance and success throughout the study programme. The existence of a close relationship between teachers and students allows personal attention to students' progress and hence less reliance on statistical data.

Within **HEI β** data for the whole of the institution (i.e. on student geographic, educational, etc., background; first and second choices; academic results; graduates), except drop-out rates, are collected and is publicly available.

[4] With the exception of the data used in the previous section of the report concerning the answers to the first two questions.

At study programme level a difference emerges between *Arts* and *Engineering*. In *Arts*, no rigorous study is made and a clear idea on the above aspects seems to be lacking. Academics report that data are collected at the time of self-assessments. Teachers produce their own statistics on student performance in the disciplines they teach. In *Engineering*, all the referred data are collected, statistics are produced and used to analyse study programme performance. Recently, this led to the organisation of a workshop (to be promoted every year) with all teaching staff with the purpose to redesign the *Engineering* programme. Attention is paid to curricular units with high failure rates and to variation (between study programmes) in responses to pedagogic questionnaires. Overall, teachers seem to be more concerned with student performance in the curricular units they teach rather than the data in question.

HEI γ mentioned that data collection is done under the requirements of RAIDES, a survey of the Registration of Enrolled Students and Graduates in Higher Education, whose indicators are filled mandatorily every year. The monitoring of this data is done at Academic Services level, the privileged locus for database access in terms of entrances, students, and graduates. The analysis of data is part of the Activity Report prepared by the Board of Directors. The institution, specifically through the Office of Image and Support, also collects data related to *alumni*, with the aim of following their path.

In **HEI δ** data collection is managed by the Academic Services which are responsible for all the statistical data and parameters associated with the academic issues, specifically the number of vacancies, students, enrolled students, and success rates. All these data are systematised in a single database and are available for each study programme director, which is seen as needing to know the number of students of the programme and their success rates.

There is also a Quality Support Office which collects data concerning student success and drop-out rates. This office prepares a survey for new students, allowing their characterisation as they enter the institution, and produces questionnaires every semester enabling students to assess their respective curricular units and teachers. Formally this structure was created in 2007, but only started working in 2008. Therefore, since then the data collection is done systematically while before it was done case by case, for each degree, whenever a given degree was submitted to assessment.

Nuances can be found at the level of different study programmes. For instance, in *Arts* there is an attempt to follow students' path after they graduate. This is made every academic year by establishing e-mail or telephone contact with graduates, namely in order to know if they are integrated in the labour market. A Facebook page has also been created, enabling to retrieve some *alumni* contacts.

Another feature Work Package 6 sought to elucidate is linked with the institutional mechanisms aimed at supporting *the admission and progression of distinct cohorts of students (lower socio-economic groups; ethnic minorities; non-native language speakers; mature students; students with disabilities) and how this vary by academic programme*.

One can argue that, in global terms, the Portuguese institutions analysed are not concerned with the ethnic minorities' issues, that is, they do not treat these minorities differently from the whole student body. However, institutions tend to develop different strategies in order to support other groups of students, such as lower socio-economic background groups, non-native language speakers, mature students and students with disabilities. A special concern with students older than 23 years, with foreign students and with students from lower socio-

economic backgrounds is transversal to all instituions. In order to assure their integration and further progression, institutions tend to develop some initiatives, such as flexible and adjustable timetables for working students, English classes, social services, and tutorials to overcome academic difficulties.

In **HEI α** there is no disaggregated information on students with disabilities or from different ethnic groups. The institution even questions the legitimacy (in legal terms) to oblige students to classify themselves according to specific categories with the aim to gather data. However, students who identify themselves or are identified as having special educational needs are accompanied by a specific office – the Student Support Office.

Strategies aimed at supporting different student cohorts are specifically directed at two particular groups: foreign students and students older than 23 years. For the former, there is an International Relations Office which supports the application and integration processes. Students older than 23 years are not perceived as needing special treatment. On the contrary, being mature, they are perceived as more motivated and capable of adapting. Only in some cases (as in Veterinary Medicine) these students are seen as needing extra support. Therefore, some adjustments are made in timetables to facilitate class attendance and examinations schedules. Students from lower socio-economic backgrounds are supported by the Social Services of the institution, within the terms defined by law. In the case of foreign students, the institution assures equal opportunities through its access system, as foreseen by the Portuguese Constitution. All foreign students intending to attend the institution, as long as they comply with the access requirements, are treated the same way as the national students. However, being aware of the social and cultural integration difficulties felt by some foreign students, the institution has created support structures, namely the Student Support Office and the International Relations Office. Portuguese language classes are also provided (*Erasmus* intensive language Courses, organised within the Centre for Continuing Education).

In the specific case of the two study programmes selected for the analysis, *Arts* and *Engineering*, their representatives recognise the university-wide support mechanisms, namely for economically-disadvantaged students (as scholarships, accommodation discounts in student residences, etc.), students older than 23 years (as specific university regulations) and foreign students (as language courses).

Nonetheless, in both cases differences emerge in terms of services provided in order to support different cohorts of students. In *Arts* a desire of attracting international students translates into curricular units' descriptions available in English and Portuguese. However, this appears to be a pro-active rather than reactive initiative (i.e. not in response to current students' needs). Regarding students with economic difficulties, the faculty/school makes efforts to help them by trying to find employment opportunities through liaison with the labour market. For students older than 23 years there is an internal policy regarding timetables organisation in order to accommodate working students. Some of these initiatives are recognised by the interviewed students. They seem to be aware of the existence of the following mechanisms: scholarships; special entrance conditions for older than 23 years students, along with greater flexibility around exam schedules and class attendance.

In *Engineering* the only distinctive group seems to be the working students group, including the older than 23, which make up a significant proportion. Internal regulations were created in order to improve class attendance and flexibility around exams. To support students' academic performance, the faculty/school offers preparatory courses in mathematics and

physics, which students can attend either before enrolling the study programme or during the first year, to make up for any knowledge gaps. There is also a tutorial system to support the adaptation of first year students. The faculty/school has no strategy to deal with specific cases of students with academic difficulties. Teacher accessibility and the informal teacher/student relationship is seen as facilitating the detection of problems of adaptation, progress, etc., which are dealt informally on a case by case basis. As in the case of *Arts*, *Engineering* students are also aware of some support mechanisms, as the support to students from Timor, facilities for disabled students, and student support services, including counselling.

In **HEI β** the Student Support Services offers university-wide support to students with economic difficulties (translated, namely, in scholarships) and disabled students. However, a difference is noted between *Arts* and *Engineering* in what concerns these support structures. In *Arts* there are no formal mechanisms aiming at student support. This is mentioned to happen through the teacher/student relationship, personalised support and teacher attention to all kinds of student problems, which is facilitated by the 'individualised' teaching in *Arts*. Students older than 23 are not deemed to have special needs, thus receive equal treatment. Interviewed students claim to have requested a Student Support Service, but this has not yet been created. However, there is an *Erasmus* office to deal with *Erasmus* students' issues.

Engineering offers mathematics, physics and programming tutorials for students who need extra support (recently extended from 3 to 5 days a week) to compensate for gaps in knowledge from secondary school. To facilitate *Erasmus* students' integration a series of curricular units are taught in English (all the ones that make part of the fourth-year and some taught in the third-year). An additional class will be established, made up of both Portuguese and *Erasmus* students to help integrate the latter and increase the proficiency in English of the former. Teachers, in particular, describe a range of broader, forward-looking, proactive measures meant to improve learning and teaching: design of a new study programme timetable with concern for student needs rather than teaching staff preferences; the existence of a teaching/learning lab – a unit meant to improve learning and teaching quality (for instance a peer class observation project to improve pedagogic awareness; a pedagogic assessment project comparing study programmes with significant different results in pedagogic questionnaires and approval rates to understand the reasons behind; an annual pedagogic exchange day for reflection, dissemination of good practices and pedagogic incentive awards to academic staff with best results in pedagogic questionnaires).

In **HEI γ** the students' economic and financial problems are managed by Social Services. Targeting foreign students, the institution develops various initiatives and activities to attract and to further integrate them, creating a students' service which provides support at different levels. The institution has also been offering, for the past 2 years, some curricular units taught in English, or in both languages (Portuguese and English) that are particularly aimed at students in the *Erasmus* and other mobility programs. In fact, the attraction of foreign audiences is a strategic point to the **HEI**, which hosts many foreign students from different countries, coming from *Erasmus* and *Erasmus Mundus* programmes and from other countries with which it has mobility agreements. For students older than 23 years, as well as for other students, there are additional learning support programmes on the subjects with the highest failure rates. There is also an Office of Image and Support which supports students in several different ways. Globally, the institution has been implementing an open strategy, which aims at promoting the proximity and interaction between the institution and students, between teachers and students and among students. It also tries to foster this proximity in every degree, including in *Engineering* and *Arts*.

In **HEI δ** there is a support service which helps the integration of new students, and different levels of support are carried out by Social Services, targeting students in need, namely with financial problems. Regarding students with pedagogic problems in the different curricular units, especially the ones older than 23 years, there is additional learning support: flexible timetables and support classes (for example, in mathematics and physics, for the case of *Engineering*). There is also a language centre created with two aims: on the one hand, preparing students for the *Erasmus* programme, primarily through the teaching of English language; on the other hand, helping foreign students to learn Portuguese.

Some differences can be found between the two scientific areas under analysis. In *Arts* there seems to exist a closer relationship and communication between teachers and students than in *Engineering*. This helps the integration both of students with learning disabilities and foreign students, since the teachers identify more easily students' problems. In *Engineering* proximity occurs specially amongst students, who mutually support each other. Notably, within both study programmes, students stress that polytechnic institutions in general, and **HEI δ** in particular, tend to be more supportive than universities.

Finally, Work Package 6 aimed at understanding if *changes* have been occurring *over the last decade in the pattern of enrolments* of HEIs and what are the *main drivers of* that *change.* Furthermore, it also intended to identify the *problematic issues surrounding access* and the extent to which these could be linked with the *altering of the institutional approach to quality management.*

One of the patterns emerging in the four institutions selected is the influence of the Bologna Process and the consequent increase in mobile students. The attendance of foreign students is changing the institutional environment, having a double impact: on the one hand, by providing English classes, the institutions are explicitly trying to attract foreign students; on the other hand, English classes are also motivating Portuguese students to go abroad. This exchange is understood as something promoting quality. Another pattern identified is the growth in regional students, driven by the economic constraints the country is currently facing. This is forcing institutions to develop diversified strategies in order to attract students from other regions beyond the one where the institution is located.

The recent decrease in the numbers of traditional students is making institutions more open to new publics, especially those coming through the special competition stream (students older than 23 years and CETs). For many of the actors interviewed, this is a big change for institutions, since it is forcing them to readjust and develop measures to assure and improve academic quality. Therefore, some common measures are being developed in all institutions: additional learning programmes, preparatory programmes in core disciplines, tutorials, etc.

HEI α has experienced an increase in the number of students older than 23 years, as well as in demand from the region. Potential reasons for the latter are the improved offer and the economic cost of students moving away from home. *Arts* has noted a growing demand (including from other regions), an increase in the number of first options and in the minimum entry grade, which has been translated into higher quality incoming students (with better prior preparation, greater motivation and responsibility). This trend is believed to be the result of an intensive advertising policy (i.e. HEI's staff visiting secondary schools to publicise offer and establish personal contact with secondary schools' teachers); a policy of participation in competitions and the winning of national prizes; and student satisfaction. *Engineering* also

reports an increase in the number of first options with positive effects on student quality (increased preparation and motivation). There has also been an increase in the number of students older than 23 years, seen as highly motivated, and an increase in local students given economic constraints linked with leaving family household.

Driven by the changes in student composition, currently more diversified and with different needs, the school of *Arts* of the **HEI α** has recently addressed to its Pedagogic Council the responsibility to establish quality monitoring procedures applicable to all study programmes. In *Engineering* quality reports drafted at various levels (study programme, department, school) and student questionnaires raise student issues to be addressed, despite the low response rates.

At **HEI β** there has been a growing number of students from beyond the region, including international students (currently making up more than 10%). The institution has limited the number of students older than 23 years to the minimum limit imposed by the Ministry (3%). Since the demand of traditional students is high, the institution does not need to recruit this category of students.

However, differences can be found between the two scientific areas. In *Arts* there has been an increase in the number of students older than 23 years, but the imposed limits prevent higher enrolment rates for this category of students. In *Engineering* there has been, in recent years, a reduction in the number of students who choose it as a first option, which may be explained by the less attractiveness of Engineering study programmes in general, the decreasing number of students at national level and the high failure rates in mathematics entrance exam, which is mandatory for this study programme. There is also a perception of an increasing number of regional students (most likely for economic reasons).

In **HEI γ** the openness to new publics through the alternative access stream (namely the students older than 23 years and CETs) constitutes a very important global change. The masters' students also constitute a new public that was not significant for the institution before. The mobility procedures (of foreign students, but also of mobile students between higher education institutions) have also changed and are assumed as bringing quality to education and to the institution. Student origin has also changed, having increased considerably the number of students from the region, despite a large number of students still coming from other regions of the country, mainly from the North. Moreover, despite the institution being in a more peripheral position than other institutions and eventually having, because of that, greater problems in attracting students, it has doubled the number of students, having currently around 7,500 students.

However, *Engineering*, which was once the study programme with more students in the institution (about 550 undergraduate students), has decreased the number of enrolments. This may be due to the fact that *Engineering* is now a challenging and problematic field not only because of the national economic crisis, reflected in a stagnant labour market, but also because the study programme has a large competition, namely from the **HEI β**.

HEI δ is currently experiencing a certain lack of candidates, mainly because it is a peripheral polytechnic. In the last 10 years, a trend of filling only 50% of all the vacancies made available in the first phase of the national competition has emerged. For the 725 vacancies available in the first phase of the academic year 2010/2011, only around 300 candidates

applied. Nevertheless, this decrease is not homogeneous: while in *Engineering* this number has decreased over the recent years, in *Arts* it has increased.

Another pattern detected is the significant number of students from the region that choose to study in other HEIs but that after their first year decide to change from institution and apply to **HEI δ**. This seems to be due to the fact that some students do not easily adjust to their first option universities or polytechnics, failing the first year. Furthermore, each academic year there are almost as many regular students (entering through the national competition) as students entering through the special competition, namely students holding a degree or a CET. Therefore, the lack of candidates from the national competition is also being balanced with these types of students.

It is also noticed that the students' academic quality is decreasing since they enrol in the institution with a lack of basic skills. This is something transversal to all degrees of **HEI δ** and is assumed as a general concern. Moreover, in general, the institution does not constitute students' first choice: the majority of the students from the district where the institution is located are dispersed among other institutions, with the best students going to universities, the second best students tending to go to other polytechnics, and only the remaining applying for **HEI δ**. Consequently, the quality of the students tends to be lower. In recent years, another pattern is emerging: students enter the institution at younger ages (17 and 18 years old) and are, therefore, rather immature.

Globally, the difficulty of attracting students, mainly due to the geographic location, is pointed out as the main restriction to the quality policy of the institution, being responsible for lower success rates, a lower number of graduates and a higher cost of students' education, which are all negative indicators for the institution, despite of the number of quality initiatives it might have.

5. Conclusions

The global results achieved with the national case study reported in Work Package 6 – Quality and Access: the Portuguese Case – enabled answering the two main research questions: *What is the institutional policy on access?* and *What is the relationship between institutional student enrolments, quality assurance processes and funding strategies?*

Overall, Portuguese higher education institutions seem to be developing their own specific institutional policies on access. Although aligned with the national legal framework, institutions have some autonomy to develop strategies and initiatives in order to attract students aside the national competition. This is the case, in all the four institutions selected, for the recruitment of students older than 23 years, of foreign students and of students holding CETs. However, resorting to such initiatives seems to be more evident among those institutions with lower demand rates within the national competition.

Also in general terms, institutions tend to develop structures and mechanisms, not always formalised or systematised, aimed at collecting some data on students' enrolment, graduates and dropout rates. Nevertheless, the collection of these data does not seem to derive from an explicit strategy directed at improving access but is rather a response to legal requirements, namely the ones regarding quality assessment of study programmes. Still, this seems to enable institutions to be more aware of the potential public they might attract.

Furthermore, one can conclude that Portuguese institutions are developing systems designed to support specific groups of students: students older than 23 years, foreign and CETs students, and students experiencing both economic and learning problems. The first three groups currently constitute the major 'new' publics of institutions.

The changes in student academic profile along with the increase in the number of students needing support seem to raise concerns with academic quality. This has been fostering the development of instruments directed at assessing and assuring quality. However, so far this does not seem to have been impacting the definition of new strategies to diversify funding. In fact, none of the analysed institutions expressed a concern with the attempt to define such strategies.

Based on these conclusions, one can argue that, although not always in a strategic way, these Portuguese higher education institutions are developing information systems enabling the collection and the potential analysis of relevant information. In some cases, this information is being used in the management of faculty/school and study programmes. Therefore, ESG 1.6 seems to be only partially accomplished since not all the data are collected and systematised by formal structures specially designed for that purpose.

The same can be verified at the level of the accomplishment of ESG 1.1. Although institutions develop efforts in order to assure and improve quality, such efforts seem to be in a very early stage. In fact, it is not totally clear from the analysed data the existence of objective policies and procedures for quality assurance, neither of a quality culture in what concerns access. In fact, when institutions refer to quality they are addressing much more the academic quality of

students rather than the quality culture, procedures and instruments to assure the quality of the institution and study programmes.

The analysis underlying Work Package 6 has also contributed to identify some barriers and good practices regarding the implementation of policy and procedures for access among the four Portuguese institutions under analysis.

One of the barriers identified by **HEI α** has to do with the national regulations on access, which are seen as constraints, namely the limiting *numeri clausi* system and the fixed number of study programmes (inflexibility to change from year to year). The institution finds it difficult to play with *numeri clausi* distribution between study programmes as faculty/schools are reluctant to give up places. However, not having *numeri clausi* is considered as constituting a threat to institutions located in the interior of the country (such as the case of **HEI α**), given student preference for coastal HEIs.

Other difficulties identified by the **HEI α** are the high costs for students in attending it, the low financial resources of students, and the limited number of places in student residences (for only 10% of students), implying higher living expenses. The timing of the application period, very close to the start of the academic year, is another issue as it prevents good planning of the academic year.

Specifically in the case of the two scientific areas under analysis – *Arts and Engineering* – the barriers identified, besides referring to the interior location of the **HEI α**, are constituted by: the fact that both study programmes have been recently created, which represent a disadvantage in attracting the best students; the difficulty of students in accessing culture, given the location; the limited economic capacity and resources of the institution (especially in *Arts*), or in accessing the institution's campuses away from the city centre (especially in *Engineering*); and the lack of technical equipment and facilities, translated, for instance, in few rooms open for study during exams, or the limited functioning period of the library (again, especially in *Engineering*).

In the case of **HEI β**, one of the barriers to the implementation of policy and procedures for access lies in the fact that grades used as selection criteria for HE access are "unreliable indicators of student quality". Hence there are high failure rates in some disciplines, despite high grades, and some study programmes fill up with students who chose them as third, fourth or fifth options, with implications on their motivation.

Other obstacles are translated by: the difficulties of students in adapting to higher education, given the differences in pedagogic approaches between HE and secondary education; or the poor student attendance to classes. Specifically, students identify as an obstacle teaching and student assessment failing to take into account the needs of students older than 23 years. For instance, some teachers have the expectation that students should attend their classes, not making information available in other ways for students to access it, or resisting to work with distance-learning web platforms for supporting teaching and learning.

As in the case of the **HEI α**, also in **HEI β** specific obstacles are mentioned by the actors representing the two scientific areas under analysis. In *Arts* such obstacles include: the impossibility of selecting students and the effects of this on quality (*Arts*); the poor overall education level of families and a not very demanding basic education, affecting students' work habits, discipline and success; student lack of autonomy; or the limited financial and

material resources of the institution constraining teachers' work. In *Engineering* the barriers are represented by the negative impact on student quality of the attempts to avoid mathematics as one of the access exams (for instance by changing the study programme name), as well as the existence of study programmes accepting high numbers of students older than 23 years, with negative effects on programme performance, staff motivation, and the training of graduates.

Finally, in the case of the two polytechnic institutions – **HEIs γ** and **δ** – one of the most critical barriers identified was the increasingly lower educational background of students. Students are seen as accessing higher education weakly prepared and with limited skills in core disciplines, such as mathematics. These insufficiencies are even more emphasised by **HEI δ** since it rarely constitutes students' first choice (rather, it is often the second, third or even fourth choice); so, it never ends up having the 'best' students.

Another barrier within polytechnics, specially emphasised by a dean of the **HEI δ**, is a certain blurring between the roles of polytechnics and universities, and the corresponding need to better define the different missions of these two distinct types of institutions.

A last barrier identified, namely by **HEI δ**, is constituted by its geographical location, perceived as too peripheral. In fact, the interior location is pointed out as being the main cause for the increasingly low number of candidates, at least in the first phase of the national competition. However, in **HEI γ**, also located in a rather peripheral area of the country, the number of students, contrarily with what happens in **HEI δ**, has been remarkably increasing over the last years. This can perhaps be explained by a bigger promotion strategy and a stronger policy of attracting students, specifically foreign students and students from other regions of Portugal.

Overall it is possible to say that the existence of a generalised *numerus clausus* system together with a centralised placement system results in low autonomy on the part of the HEIs to select their own students, which constitutes a barrier to the definition and implementation of an institutional policy on access. The way HEIs are trying to cope with this is through the development of strategies aimed at increasing the number of students that access HE through special competition streams: post-graduation and mature students (older than 23 years). Institutions with high reputation and that are able to attract enough traditional students develop strategies to attract higher numbers of master and PhD students, while less prestigious institutions address their efforts towards mature students, trying to increase the number of older than 23 years. These may well explain why Portuguese HEIs are keen to develop measures to promote and market themselves in their own region, at national and even international level. The competition for students is indeed a reality in the Portuguese higher education system.

As mentioned, among the four Portuguese HEIs it is also possible to identify the existence of 'good practices' regarding the implementation of policy and procedures for access.

In **HEI α** the existence of an Admission Office supporting applications and an online application system are referred as examples of such practices. Some other actions seen (namely by representatives of both *Arts* and *Engineering*) as good practices are, for instance: the personalised teaching and the close teacher/student relationship, facilitated by low student numbers, that leads to better learning and performance; the students encouragement to participate in competitions with potential prizes acting as incentives and motivators; or the

faculty/school relationship with the labour market, potentiating practical experiences for students, their contact with the work environment and employability (these last two features being mentioned specifically by *Arts* students).

Although at **HEI β** there was no explicit reference to procedures for access, some of the measures exposed can be assumed as good practices to improve learning and academic performance, namely at the level of *Engineering*. That is the case of the existence of tutorials for students who need extra support or of classes taught in English; the teaching and learning lab (a unit meant to improve learning and teaching quality); the annual pedagogic exchange day for reflection; or pedagogic incentive awards.

In **HEI γ** a number of initiatives taken to attract, integrate and support foreign students can be seen as good practices. These practices are part of a broader strategy for increasing the number of students in the institution, by promoting it and its study programmes among secondary education institutions. That is the case of the "Open School" initiative, which aims at fostering the proximity between these institutions and **HEI γ**.

This proximity is encouraged also in **HEI δ**, along with the promotion of a closer relationship between teachers and students. Indeed, polytechnics (as is the case of **HEIs γ** and **δ**) are globally seen (namely by interviewees) as institutions where the proximity between teachers and students and a more personalised support to students are more significant than in universities.

To conclude it is interesting to note that in the Portuguese case the tension between quantity (access) and quality (standards) is also evident. Increasing the number of traditional and non-traditional students has led to the admission of students with lower educational backgrounds than would be desirable. This is especially evident in the engineering field where interviewees complained about lack of prior knowledge on basic concepts and skills (e.g. maths). This has led to the development of a set of mechanisms and strategies aimed at improving knowledge gaps, aiming at avoiding excessive failure and drop-out rates and longer times to completion, once these are also important indicators of study programmes and HEIs quality.

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