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Programme on Institutional Management in Higher Education (IMHE)

**Supporting the contribution of Higher Education Institutions to
Regional Development**

Peer Review Report

Canary Islands, Spain

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The views expressed are those of the authors and not necessarily those of the OECD or its member countries.

This Peer Review Report is based on the review visit to the Canaries in April 2006, the regional Self-Evaluation Report, and other background material. As a result, the report reflects the situation up to that period. The preparation and completion of this report would not have been possible without the support of very many people and organisations. OECD/IMHE and the Peer Review Team for the Canaries wish to acknowledge the substantial contribution of the region, particularly through its Coordinator, the authors of the Self-Evaluation Report, and its Regional Steering Group.

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PREFACE

We have written this report with three main readerships in mind. The first is the people working together to nurture the development of the Canary Islands, an ultra-peripheral region within the European Union and an autonomous region of Spain comprising seven islands grouped as two provinces. We hope that the report will help them along their path of partnership between the region and its universities to guide and bring about the balanced development of the region.

Secondly, the report is intended to have interest, relevance and benefit to others in Spain concerned about balanced national and regional development. Over recent decades, following the end of the dictatorship, Spain's different regions have experienced democratisation and decentralisation as well as rising prospect within the European Union. With the rapid development both of the European Union and of globalisation more generally, the pace of change for regional and local governments has quickened, including decentralisation initiatives. None the less this review suggested that further change in law and regulation is required if a region like the Canary Islands is to develop effectively with its own unique history, assets and circumstances, and its universities are to play a full part in that process.

Thirdly there is the Organisation for Economic Cooperation and Development, which with the Higher Education Funding Council for England commissioned, and along with the region, "owns" this review. The interest of these partners is in learning internationally about the role of higher education in regional development across regions in a number of Member States that are taking part, and others that are not. In addition we hope to interest a wider international readership, and to provide something of value to regions both within and beyond the OECD that are not included directly within this project. The report will be useful to the other participating OECD regions in direct proportion to its relevance and utility for each different region. Obviously it will have particular interest within Spain to those who took part in the parallel Valencia region study, and it may be helpful to consult these two studies together.

Our report is therefore written in a way that seeks to be comprehensible and useful to all these potential readers, and to fellow students of regions and higher education, with a minimum of assumptions about local knowledge, and as few acronyms as possible. We have departed little from the initial draft OECD reporting template in the interest of facilitating inter-regional comparison.

As with the other reports in this OECD project, we have had to write for a particular, highly involved and well informed regional policy and practitioner community; but also for a more remote readership unfamiliar with the local story. Our primary consideration is to give back to the region something of value that will contribute to further development and be evaluative in this particular sense, rather than negatively judgemental. We refer to and have drawn upon the substantial Canary Islands regional Self-Evaluation Report (SER) available on the OECD website.¹ We make no attempt to reproduce or summarise that work; readers requiring more background data should refer in particular to that study.

1 . See www.oecd.org/edu/higher/regionaldevelopment.

We are grateful for the generous hospitality of those who prepared the SER and hosted the Review visit from 16 to 22 April, 2006. High levels of interest were generated by the region's self-review process and by the peer review visit; the subject of universities, their role and funding, featured prominently and as a matter of controversy in the media during the time that the visit took place.

EXECUTIVE SUMMARY

Background: OECD/IMHE review

This review of the Canary Islands region² in Spain is part of the OECD/IMHE project entitled *Supporting the Contribution of Higher Education Institutions to Regional Development* which embraces 14 regions in 12 countries in 2005/2006. The IMHE thematic review project was launched as a response to a multiplicity of initiatives across OECD countries seeking to mobilise higher education in support of regional development. The aim was to synthesise this experience into a coherent body of policy and practice to guide higher education institutions and regional and national governments. At the same time, the IMHE project was designed to assist with capacity-building in each country/region through providing an opportunity for dialogue between HEIs and regional stakeholders and clarifying roles and responsibilities.

Review process

The Peer Review drew on a self-evaluation process guided by an OECD template. This asked HEIs to critically evaluate with their regional partners and in the context of national higher education and regional policies how effective they were in contributing to the development of their regions. Key aspects of the self evaluation related to: the contribution of research to regional innovation; the role of teaching and learning in the development of human capital; the contribution to social, cultural and environmental development and the role of the HEIs in building regional capacity to act in an increasingly competitive global economy.

The Canary Islands self-evaluation was overseen by the Canarias Agency for Quality Assessment and University Accreditation (ACECAU) and a Regional Steering Committee with participation from two universities in the region, business organisations, trade unions, researchers, government-related agencies and NGOs. The Regional Steering Committee was chaired by current regional Secretary of Industry, Commerce and New Technologies, and coordinated by the Executive Director of ACECAU. The direct costs of the project were covered by the regional government.³ The OECD review visit took place in April 2006. The Peer Review Team – Professor Chris Duke (UK), Dr Walter Uegama (Canada), Professor José Ginés Mora-Ruiz (Spain), and Francisco Marmolejo (OECD) – met more than 130 people, including the President of the regional government.

Canary Islands region

The Canary Islands region comprises seven islands located out in the Atlantic far south of mainland Spain and close to the coast of West Africa. The region enjoys a special fiscal status in the European Union as an ultra-peripheral region. The Islands have long been a stopping point and a historical hub connecting Europe, through Spain and in other ways, with Latin America, to some

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2. The official name of the region is “Comunidad Autónoma de Canarias”. In this report, the region will be referred most of the time as the Canaries, or the Canary Islands.
 3. The resulting Self-Evaluation Report is available at the OECD website:
www.oecd.org/edu/higher/regionaldevelopment

extent also North America, and more recently with West Africa. In the last two decades, the region has made a successful transition from primary to tertiary sector economy due to the increase in tourism, along with the ancillary construction industry to build the infrastructure, especially hotel and related facilities, for visitors who in total outnumber the resident population six or seven-fold. Tourism (and related businesses such as construction) is the real engine of regional development, currently representing 37% of GDP. Of course, this narrow economic base has brought prosperity to the islands, but it appears now to be a fragile one due to increased competition from other tourist destinations. There is consensus that the present heavy reliance on tourism and related construction in its current form cannot long continue, since it is necessary to vary and alter the market position of the tourist industry, but also at the same time to diversify the economic and employment base.

On the social and political angles, the region shows significant disparities and tensions. The seven islands are grouped within two provinces and the regional government conducts business between the two main islands one for each province, in Tenerife and Gran Canarias. Competition and sometimes jealousy between each of the seven islands and between the two provincial groups appears to be high, sustained and endemic. Naturally, each island, even if only a few thousand strong, wants what the others all have, such as its own hospital and indeed university. This micro-regionalism limits rational and consensual development, making it hard for leadership at regional and more local levels to move forward.

Higher education institutions' contribution to region building

The Canary Islands has two main universities and an almost invisible local branch of Universidad Nacional de Educacion a Distancia (UNED). The University of La Laguna (ULL) in Tenerife Island, and the Universidad de las Palmas de Gran Canaria (ULPGC) in Gran Canarias, differ in terms of history and missions: ULL is an old and prestigious university, focused on humanities and sciences, and appears similar to "research-led" universities in other continental European countries. In contrast, ULPGC has a more recent history, as it grew out of the merging of small polytechnic university and an ULL campus on Gran Canarias Island. Since its inception ULPGC has been more focused on technical and engineering programmes. Both universities have made a significant contribution to the preparation of qualified inhabitants for the development of the region. During the academic year 2002-2003 both universities had a combined enrolment of 46 330 students, in addition to 7 180 at UNED, providing employment to nearly 3 000 academic staff.

Nevertheless, important issues remain to be addressed, especially in the areas of access, quality and relevance of higher education for the region, and taking into consideration that higher education in the Canaries has a lower performance than the rest of Spain. For instance, pass rates for the admission examination are substantially lower than those for Spain as a whole, and the region is among the lowest ranked in the country. In addition, non-completion rates are almost five points above the Spanish average in the case of one university, and slightly lower than the national average in the case of the other university.

Regarding research, things must be analysed in the economic context of Canary Islands. As the economy of the region changed abruptly from agriculture to services, without passing through an industrial development stage, the business sector in the Canaries is characterised by a predominance of very small firms, and a few big firms which are not regional. This situation impacts decisively on the innovation process, both in terms of the knowledge required and of firms' research capacity. As a consequence of this economic reality, R&D expenditures are very low, even by Spanish standards. It is not a surprise that the Canarian universities allocate few resources to research and very few (or nothing at all) to technology research, with no specific focus on regional needs.

Finally, the socio-political-historical context of the region, as described in the previous section, has an important influence in the way higher education institutions operate. Limited cooperation at the institutional level and a sense of competition and sometimes confrontation among the two universities, are very evident. Perhaps because of this history and the abiding tension if not outright conflict, both universities are seen by those in industry and some in government as being non-responsive to the socio-economic needs of the region in general, although at the same time, recognising their importance and potential for the development of the region. In any case, in a region marked by a high level of competitive separatism, both universities are a vital resource and must take a more active part in the region's development.

Key points from the review

The Self-Evaluation Report and this Peer Review Report inevitably represent a snap shot of an evolving situation, one that is particularly dynamic in the context of Spain where national expectations exist about the gradual harmonisation of the higher education system towards the Bologna process. Bearing this in mind, this Peer Review Report includes a number of specific recommendations for the Spanish Government, regional and local agencies and the higher education institutions. The recommendations (see Chapter Seven) are designed to assist with the evolution of policy and practice with regard to the mobilisation of HEI capacity to support regional development by “reach out” to the community and the community “reaching in” to the HEIs. The following paragraphs highlight some of the most important themes underpinning these specific recommendations.

The national perspective

This is a critical time for the Canaries. The increasing autonomy of Spanish regions gives both opportunity and responsibility to provide leadership and direction, and to turn aspirations into hard reality. The renewal of special status as an ultra-peripheral region within the European Community provides an opportunity for European level support and a distinctive identity, while the Bologna agreement provides necessity and leverage for change in higher education that can be used to advantage.

The Spanish higher education system, like other systems, is changing rapidly under global and European pressures. Laws and regulations can and will continue to change. It will be better if these changes are informed by well thought through needs at regional level, and build in the necessary degrees of freedom and diversity to allow different parts of a large and increasingly decentralised country to develop at different rates and in different ways. The imperative for change from Brussels and the global economy should be counterbalanced by local pressures from within. As a consequence, higher education in the Canary Islands with support from the regional government are in a critical position to engage in a constructive dialogue with the Spanish government and the several ministries involved, as well as with the broader higher education policy community, to secure the changes of law and regulation that prove to be necessary. Some of the key elements of such a discussion include the funding mechanisms, institutional governance, levels of flexibility in the offering of academic programmes, and contracting of academic staff, among others. This Peer Review considers it important for the autonomous region administration, together with its universities, to press ahead with blueprints for development, and where these are barred by national law or regulation, to bring this clearly to the attention of the national government.

The regional perspective

Successful regional development involves the building of partnerships between key actors and agents, and the creation of a shared understanding of the strengths and weaknesses of the region and

the steps necessary to counter threats and realise opportunities. Higher education has an essential role to play in this. This means that the different providers must work much more effectively, both separately and together as a system. These things are only likely to take place if there is a firm lead and direction from the regional government in establishing a higher education plan and system, and in creating and requiring funding mechanisms and reward systems (institutional and individual) that align with these purposes and needs. On the one hand the Canaries government must press and require the universities to adapt in this way. On the other it, together with other regional administrations, must lobby and persuade the national government to make the required changes to law and regulation that will allow resources to be used flexibly to meet the needs of different regions.

The OECD review has stimulated a dialogue in the Canaries about the relevance of their higher education institutions for their own regional development. This opportunity could be seized to develop a strong consensus and a working agenda for action in and for the region. This should clarify the role that the universities should play in being active partners for building and mobilising regional capacity for the Canary Islands. Nevertheless, if this is a key consideration, it is not the only one. The need goes to the very heart of Canaries society and governance: to the apparently deep divisions between the two main islands against each other, between the two groups of islands that they lead as provinces, and between all seven islands in classic small-island internecine competition. The unhelpful competitiveness and duplication occurring between the two universities is a reflection and a manifestation of that history and culture. The universities are victims but now also perpetrators. It is clear that part of the destiny and responsibility of a “real” university is to work within and yet rise above its environment. In this way it may help the process of better developing regional capacity in order for the Canary Islands and its society to plan and look forward with increasing confidence in a difficult, competitive world. This means for the whole region itself as a whole treating capacity building as an urgent requirement, in which both universities must be seen as talented contributors to the process, but also as main subjects for the process, so that their talents and efforts are better used to help the region. This will benefit the universities themselves at the same time. Building integrative capacity means abandoning some old attitudes and habits, and creating the channels and means of working together.

The HEI perspective

How far do ULL and ULPGC have the will and the capacity already to work more fully for regional development? In today’s present and expected environment, it is essential to better connect and engage the universities with the different sectors and stakeholders in Canaries society, but also to connect them in productive synergy with each other, with UNED and other institutions in and beyond the region.

In other words, higher education institutions in the region can work more effectively and can further connect powerfully and continuously with their society by being part of a purposeful development system. This requires political will to clearly commit to creating and supporting a real higher education system for the Canaries – rather than just a cluster of institutions – in a process that includes the definition of a realistic but also ambitious timetable, involving the leadership of both ULL and ULPGC in the dialogue and decision making at all points. This will undoubtedly require more rationalisation of resources, roles and responsibilities between the two universities, and much greater capacity for students as well as staff to work at and with both places, for example taking specialisations from the other university within their degree programme. This rational collaborative development should include UNED in respect of facilities and outreach in each island, and especially to those most remote and least well served.

This new environment, both enabling and directive, would need to include clear arrangements for allocating resources in relation to regional policy priorities, and for auditing performance against these priorities, with more specific objectives and even numerical targets. Universities are full of intelligent creative people who find ways of optimising outcomes from new opportunities. So long as morale is good and ambitions are high, this quality tends to produce a natural equilibrium between individuals and groups of staff achieving personal ambitions and job satisfaction, and the universities themselves contributing well and being highly valued for what they do for their society.

In addition, there are some key requirements on the universities to be able to move more confidently to engagement with the region for its development. This applies not only to a necessary modernisation of academic and administrative processes, but also, and no less important, to a profound review of the roles and responsibilities of the Social Council, the University Foundation and, even more, the modalities of the processes leading to the definition of the leadership in both institutions.

Conclusion

The Canary Islands are facing major challenges which have profound implications for both higher education and territorial development. If the main stakeholders in the region are clear in the intention to treat regional capacity building as an urgent task, the region and its universities can turn the Canaries' distinctive and sometimes unique features to advantage. There is a great deal of devil in the detail of what has to follow, but the process of reflection initiated due to the OECD review may serve as a good basis for a comprehensive process aimed at further improving the interface between higher education and the wider society regionally. It is up to the region and its main stakeholders to move ahead.

ABBREVIATIONS AND ACRONYMS

ACRONYM	ENGLISH	SPANISH
ACECAU	Canarias Agency for Quality Assessment and University Accreditation	Agencia Canaria de Evaluación de la Calidad y Acreditación Universitaria
CES	Social and Economic Council of the Canaries	Consejo Económico y Social de Canarias
CCOO	"Comisiones Obreras". Trade Union	Sindicato Comisiones Obreras. Sindicato
DGFIIT	Directorate General for Industrial Development and Technological Innovation	Dirección General de Fomento Industrial e Innovación Tecnológica
DGUI	Directorate General for Universities and Research	Dirección General de Universidades e Investigación
EU / UE	European Union	Unión Europea
FTE	Full time equivalent	Equivalente a tiempo completo
GDP / PIB	Gross Domestic Product (GDP)	Producto Interno Bruto (PIB)
HEI	Higher Education Institution(s)	Institución(es) de Educación Superior
IAC	Astrophysics Institute of Canarias	Instituto de Astrofísica de Canarias
ICT / TIC	Information and Communication Technology (ICT)	Tecnología de Información y Comunicaciones (TIC)
IMHE	OECD's Programme on Institutional Management in Higher Education	Programa de Gestión de Instituciones de Educación Superior de la OCDE
OCTI	Office for Science, Technology and Innovation	Oficina de Ciencia, Tecnología e Innovación
OECD / OCDE	Organisation for Economic Co-operation and Development (OECD)	Organización para la Cooperación y el Desarrollo Económico (OCDE)
OTRI	University Offices of Science and Technology Transfer	Oficinas de Transferencia de Resultados de Investigación
PDCAN	Canarias Development Plan for 2000-2006	Plan de Desarrollo de Canarias 2000-2006
PEINCA	Strategic Plan for Innovation in the Canaries	Plan Estratégico de Innovación de Canarias
PIC	2003-2006 Integrated Plan for R+D+I	Plan de Desarrollo Integrado de Canarias 2003-2006
PRR	Peer Review Report	Informe de Revisión Externa
PRT	Peer Review Team	Comité de Revisión Externa
R&D / I+D	Research and Development (R&D)	Investigación y Desarrollo (I+D)
R&D&I / I+D+I	Research, Development and Innovation (R&D&I)	Investigación, Desarrollo e Innovación (I+D+I)
SER	Self-Evaluation Report	Informe de Auto-evaluación
SME	Small and Medium Size Enterprises	Pequeñas y Medianas Empresas
RSC	Regional Steering Committee	Comité Regional para el Proyecto OCDE/IMHE
UGT	General Workers Union. Trade Union	Unión General de Trabajadores. Sindicato
ULL	University of La Laguna	Universidad de La Laguna
ULPGC	University of Las Palmas de Gran Canaria	Universidad de Las Palmas de Gran Canaria
UN / ONU	United Nations (UN)	Organización de las Naciones Unidas (ONU)
UNED	National Distance Education University	Universidad Nacional de Educación a Distancia
USC	University Social Council	Consejo Social de la Universidad

1. INTRODUCTION

1.1. Evaluation context and approach

This review of the Canary region⁴ in Spain is part of the OECD/IMHE project entitled *Supporting the Contribution of Higher Education Institutions to Regional Development*. The project involves the participation of fourteen regions across twelve countries.

The project was initiated by OECD/IMHE in spring 2004 in response to a wide range of initiatives across OECD countries to mobilise higher education in support of regional development. There was a need to synthesise this experience into a coherent body of policy and practice that could guide institutional reforms and relevant policy measures such as investment decisions seeking to enhance the connection of higher education institutions (HEIs) to regional communities. Current practice needed to be analysed and evaluated in a way that was sensitive to the varying national and regional contexts within which HEIs operate.

The aim of the IMHE project is to compare and evaluate the efficiency and effectiveness of regional initiatives and partnerships, to provide an opportunity for dialogue between higher education institutions and regional stakeholders, to assist with identification of roles and responsibilities of stakeholders, to provide advice at national level on the impact of policy initiatives, for example funding initiatives at a regional and institutional level, and to lay the foundations of an international network for further exchange of ideas and good practice.

Each of the participating regions has been engaged in a self-review process followed by site visits by international review teams. Participating regions have designated Regional Co-ordinators and Regional Steering Committees (RSC) to oversee the process. Each regional review is conducted by an International Peer Review Team (PRT) with two International Experts, one being the Lead Evaluator, as well as a National Expert and a Team Co-ordinator. The entire project is coordinated and led through project management at the OECD secretariat and a Project Task Group which is also charged with the task of nominating the members of the Peer Review Teams. Each regional review produces two independent reports, a Self-Evaluation Report (SER) and a Peer Review Report (PRR). All reports are published online on the OECD project website for the benefit of the participating regions and a wider audience. A final OECD synthesis report, drawing from the experiences of the participating regions and a comprehensive literature review, will follow in 2007.

The focus of the IMHE project is on collaborative working between the higher education institutions and their regional partners. It seeks to establish a regional learning and capacity building process.

In the case of Spain, in addition to the Canarys, the region of Valencia is also participating in this IMHE project.

4. See footnote 2.

1.2. The conduct of the evaluation

Self-evaluation process and Self-Evaluation Report (SER)

The self-evaluation exercise of the Canarias region was coordinated by the Canarias Agency for Quality Assessment and University Accreditation (ACECAU is its acronym in Spanish), an official but autonomous entity recently created by the regional government to provide quality assurance to higher education in the region. Active participation from higher education institutions, government-related agencies and businesses was pursued.

The entire cost of the project was about EUR 172 400. The direct cost of EUR 69 600 was covered by the regional government, through a special budget assigned to ACECAU. In addition, it is calculated that EUR 102 800 was provided by the different participating institutions as “in kind” contribution, mostly considering the hours dedicated by participating staff.

The learning and capacity building was undertaken through a process of wide consultation within the universities, and in conjunction with regional partners.

A Regional Steering Committee (RSC) was formed for the project. It was composed of representatives from the administration of the two universities in the region, business organisations, trade unions, researchers, government related agencies, and NGOs.

The RSC was chaired by Mrs. Maria Luisa Tejedor-Salguero, former rector of Universidad La Laguna (ULL) and current regional Secretary for Industry, Commerce and New Technologies; and coordinated by Mr. Néstor Torres Darias, Director of ACECAU. These meetings contributed to the development of a common understanding about the project’s aims and importance, as well as to shaping the language, and style of the report.

In addition, the Regional Coordinator commissioned the writing of the SER to a group of six social science and economics researchers from the two universities in the region. This working group was coordinated as principal author by Mr. José Luis Rivero Ceballos, a professor at ULL currently serving as President of the Social and Economic Council of the Canarias (CES), another public semi-autonomous entity.

A first draft of the Self-Evaluation Report was produced in October 2005. This document was distributed for feedback among the different stakeholders in the region, including the RSC. Formal input was provided by most of the sectors involved in the project.

On 8-9 November 2005, a pre-visit by Mr. Francisco Marmolejo from the OECD/IMHE Secretariat included meetings with the regional coordinator, the authors of the commissioned self-evaluation report, members of the local steering committee, and a variety of stakeholders including government agencies, business organisations, trade unions, research centres, community-based organisations, and universities. Meetings were held in the two main islands, Santa Cruz de Tenerife and Las Palmas de Gran Canaria.

The main objectives of the visit were to prepare for the OECD review visit in Spring 2006, to achieve a shared understanding of the processes and objectives of the review, to develop a first draft for a potential programme of the review visit, and to discuss logistics for the trip. During the different meetings the authors of SER were able to gather additional input from the different stakeholders which were later used in the development of further revised versions of the document.

The visiting PRT member in November gained an impression of extremely positive and productive interaction with local stakeholders, and of a common understanding of the project purposes and review process. It was also evident that the working group needed to do additional work to produce a final version of the SER more attuned to the project guidelines and more inclusive of different stakeholder perspective.

A further revision of the Self-Evaluation Report was disseminated among relevant stakeholders in March 2006 and was the reference point for the PRT visit and work in April. It became evident during and following that visit that more revision and refinement was needed to bring the SER to a satisfactory and accurate final state, a reflection of the groundbreaking nature of this project for the region. At the same time the preparation for the visit, the SER process and the pre-visit as well as the main visit later were all steps in the process and signs of the latent benefit to be derived in the OECD project.

While the sense of good understanding and common purpose at the pre-visit was echoed in the main visit, what emerged to the PRT during the full visit was the extent to which so many of the key players in the region as a whole and in different sectors shared a similar understanding and a view as to changes that were needed, but also a common fatalism that it could not occur as old patterns of relation and behaviour were too strong. Addressing this became a main issue for the PRT in preparing this Report.

International peer review

The international Peer Review Team (PRT) comprised Professor Chris Duke (United Kingdom) as Lead Evaluator, Dr. Walter Uegama (Canada) as the second International Expert, Professor José Ginés Mora-Ruiz (Spain) as the National Expert, and Mr. Francisco Marmolejo (OECD) as the Team Co-ordinator.

In January 2006 a revised draft of the Self-Evaluation Report was submitted to the Peer Review Team, supplemented by additional background materials.

The OECD review visit took place from 17 to 21 April 2006, including a total of 22 meetings in which over 130 individuals participated. Among others the team met with the rectors of the two universities and their respective leadership teams, as well as, for two hours, the President of the regional government. Most of the activities were held in Tenerife island, although a full day of meetings in Gran Canaria was included (see appendix 3 for the full programme of the visit).

Only two of the four PRT members understood and spoke adequate Spanish. Most of the meetings were conducted in Spanish. Professional simultaneous interpretation was provided to two of the team members in some sessions, with other more informal arrangements for sequential or “whispered” translation in others, usually by PRT members or other subject experts taking part in the particular session. Care was taken not to leave the non-Spanish-speaking PRT members out of the informal conversations that tended to precede and follow the more formal set parts of the meetings.

Regular discussions were held on a daily basis among the members of the review team. As a final formal activity, during the last day of the visit, a meeting was held with members of the RSC and most of the contributing authors of SER. At this meeting the PRT presented some initial observations. These were discussed, including some foreshadowed possible recommendations for the Peer Review Report. The meeting concluded by sharing ideas about future options for sustaining the momentum and carrying the process forward. These ideas are reflected in different parts of the discussions and recommendations that follow.

Future plans

The Canaries SER represents a major piece of groundbreaking work for the region. There is no recollection of a similar effort being conducted in the past. In addition, taking advantage of the fact that the region of Valencia conducted a similar effort, issues discussed, and recommendations being made by OECD in the respective Peer Review Reports could be used and even emulated with benefit by other regions in Spain. Some of the recommendations being issued by two separate peer review teams have implications at a national level. The Regional Coordinator for the Canaries has indicated an intention to continue the work started by their participation in the project. There is a plan to publish a booklet that will disseminate the results of the review to a general public audience in the region, and to hold a symposium involving stakeholders and a wider interest group around the issues.

The Peer Review Team recommends that those involved with this review in the Canaries undertake joint efforts with those involved in the parallel study in Valencia, in further disseminating the results and using the two projects as a basis for discussions at a national level.

PRT further recommends that regional dissemination be pursued within the Canaries autonomous region (see also chapters 6 and 7).

1.3. The structure of this report

The following chapter sets out more fully the scene for the Canaries review. Chapter Two also sets out the role of HEIs in the development of the Canaries region within the fast-evolving, national higher education policy context.

Chapter Three examines issues to do with the contribution of research and development, and innovation, to regional development in the Canaries, while Chapter Four discusses teaching and learning in a parallel way. The very brief Chapter Five considers wider approaches to development – the social, cultural and civic agenda. Its brevity reflects the marginality of this agenda as yet to the Canaries universities. Here we look beyond the purely economic, asking whether there is a wider sense of higher education as a factor in balanced sustainable development or, if not, whether this might be a desirable development and one that is in prospect.

Chapter Six is in the judgement of the Peer Review Team a crucial one. It looks into capacity building for regional cooperation in the Canaries region. Unless there is the will and a capacity to work collaboratively and productively to a development agenda neither the region itself nor its universities will move forward in the way that many clearly desire. Meanwhile the clock is not standing still.

In the final chapter we provide a summary of conclusions both for the region and for wider comparison, drawing together the various recommendations that arise in the different chapters.

This report is based on a review of the SER and other documents, and on interviews conducted during a week-long site visit. It can be no more than a snapshot of an evolving process of development. It can make observations and suggestions. It is intended to be formative and developmental rather than judgemental in any narrow sense; indeed it cannot pass any kind of summative judgement. On the other hand it does seem probable that, with sustained will and firm purpose, the current OECD project can be used by the region and its universities as the trigger to start a beneficial development spiral that many with whom we spoke would like to see and contribute to.

2. THE CANARIES REGION

2.1. The geography and special status of the Canary Islands

The Canary Islands are the most remote of Spain's autonomous regions, located out in the Atlantic far south of the mainland and close to the coast of West Africa.

There are seven islands, grouped within two Spanish provinces. The government of the autonomous region conducts business between the two main islands one for each province, in Tenerife and Gran Canaria, a costly arrangement. Competition and some times jealousy between each of the seven islands and between the two provincial groups appears to be high, sustained and endemic.

A sense of insularity and isolation, of being special, different and disadvantaged by what in Australia came to be called the tyranny of distance, may be a characteristic of most island communities. It is certainly a strong feature of the Canary Islands, often it seems accompanied by a sense of deprivation and disadvantage not entirely supported by the facts. (See the Canary Islands Self-Evaluation Report, SER, for quite comprehensive data on the Canaries compared with the rest of Spain.) There is an important question how real is this disadvantage of distance in an era of new information and communications technology (ICT), when money, jobs and even at times people move so quickly and freely. No less important is the question whether irrespective of what technology enables and statistics say, the feeling of disadvantage is itself a serious obstacle to ambitious development of the region.

The Canary Islands enjoy a special status in the European Union as an ultra-peripheral region. Whereas many EU regions of serious disadvantage are about to lose the economic benefits of being recognised as priority regions for development, the Canary Islands will continue to enjoy priority status by virtue of isolation; in this respect, as also in respect of quality of life, at least, remoteness brings a benefit.

The Islands have long been a stopping point and a historical hub connecting Europe, through Spain and in other ways, with Latin America and to some extent also North America. Fortunes have waxed and waned in this respect with changing means and costs of transport. A current controversy that is setting environmentalists against economic development concerns the extension of a main Canary Islands port facility. The President of the Canaries also explained and showed us plans for the development of an "inter-islands highway" to make travel between parts of the Canaries better, and hopefully to reduce the separatism and relative disadvantage that is felt within the region as well as by comparison with other parts of Spain.

The continent and peoples of Africa, including those in the North and West, broadly the Sahel region, represent a problem and a crisis of conscience for the world in the 21st century. It seems certain that the area will be geopolitically significant in coming years, both as a source of materials as well as in market terms. More immediately, its political significance makes it a natural focus of attention in terms of development and development aid. The current flow of illegal immigrants, and the high mortality among those who attempt the trip unsuccessfully, is a source of acute moral as well as political concern. This, together with the important potential for regional economic development, may redefine the Canary Islands from being merely an ultra-peripheral territory far from the heart of Europe to becoming a nerve centre for West Africa relations of strategic significance.

2.2. Economic circumstances

The Canaries have tended to suffer economic vulnerability from being largely reliant on a narrow economic base, in former times one or other primary produce, with rising (mainly) European affluence and cheap mass air transport now the tourist industry. This has boomed in recent years, along with the ancillary construction industry to build the infrastructure, especially hotel and related facilities, for visitors who in total outnumber the resident population six- or seven-fold. The region has made a successful transition from primary to tertiary sector economy, but that does not leave it with grounds for complacency as the future is contemplated.

This narrow economic base has brought prosperity to the islands, but it appears now to be a fragile prosperity. The growth of conventional tourism must be finite in these small territories. Control and restriction on new building has already taken the place of unfettered growth. It is recognised that the infrastructure is already overstrained, and that more extension of the “costa del cemento” kind will destroy some of the Canaries’ unique as well as fragile ecosystems. There is a wish to drive tourism upmarket, making it profitable, still viable and competitive, in the face of new tourist venues where labour costs and prices to tourists are lower. Going downmarket is not an attractive or even economically feasible option. Going upmarket into specialised kinds of tourism, *e.g.* ecotourism, represents a different kind of investment, and a more promising long-term future, even if travel costs rise and make the region less accessible to the mass tourist. One natural asset that the region enjoys and may increasingly exploit to promote tourism is its felt safety compared with many newer tourist venues such as Egypt and Turkey. More obviously it has a wonderful natural environment, beautiful countryside and beaches, and some unique flora and fauna.

Neither tourism nor construction demands a large proportion of highly qualified staff, one being a classic service sector industry, the other a largely blue-collar employer which is now likely anyway to prove static or even to contract somewhat. These are not sectors with which the Islands’ two universities have engaged in any significant way; indeed universities traditionally tend not to take much interest in the lower skill service sectors except in some specialised areas of business and management. This means that there is virtually no connection between the sectors employing the great majority of the Islands’ workers and its universities. Moreover, the tourist business, although well organised in terms of trades associations and well led in terms of thinking about the longer term future, is classically a small or very small and occasionally medium enterprise sector, with few large employers able and confident to engage with higher education. Furthermore, the larger employers within this sector are controlled by off-shore chains, often with their own staff development programmes.

Many in the Canaries are clearly well aware of the unhealthy high dependency on two sectors. They realise that this cannot change overnight. A twin-track economic strategy is implied: taking tourism upmarket into the higher value end of the spectrum and upgrading existing buildings rather than extending a concrete sprawl on the one hand; and diversifying into new – almost inevitably knowledge-based – sectors on the other. The region is famous in scientific circles for its astronomy facilities. Largely because of its natural assets of clear skies and high land, the Canaries is the location for a major European project with spin-off benefit to the University of La Laguna (ULL), but only limited synergy and growth potential for the local economy, other than as a direct employer. (Some entrepreneurialism is displayed in using facilities as a tourist attraction but the scope for spin-off industrial growth is modest.)

Later in this report we give thought to how the region can identify and try out new areas and kinds of economic growth which connect directly with its unique assets, taking advantage of these to raise the region’s profile and redefine it as a venue for certain key forms of intellectual and productive

activity. Value-adding to surviving kinds of primary production is an obvious possibility but of very modest possible scope; finding new niches vital to a global sustainable future and “naturals” for the region shows more promise, but the stakes are higher and a different kind of integrative planning is required. Examples put to the Peer Review Team as part of current long-term strategic thinking included water management, and the containment and restoration of land suffering desertification, both initiatives for which the archipelago provides essentially a natural laboratory.

The PRT also felt that these new, knowledge-based areas of economic activity call for partnerships or collaborations with ultra-regional organisations, but more so with the universities of the Canaries. A proactive, systematic, multi-sectoral (universities, government, business) strategic planning and development initiative would serve the region well.

2.3. Social aspects

Less tangible than geography and economics, but no less important, are cultural and social aspects of the region. We have touched on these in referring to insularity and an almost resentful hard-done-by attitude towards the better connected rest of the world, and especially mainland Spain, which underplays the quality of life advantages of the region, and could if embraced and communicated have hard economic pay-off in terms of the inward migration of capital and qualified knowledge workers.

The Peer Review Team found itself asking frequently “what is it about the Canary Islanders?” that makes them so locally competitive. What might at the least be trade-offs between the islands, and even stronger collaborative win-win strategies, seem to elude the islands and its people, so each island, even if only a few thousand strong, wants what the others all have such as its own hospital and indeed university. This fractious micro-regionalism is a real obstacle to rational and consensual development, making it hard for leadership at regional and more local levels to move forward. We asked ourselves, apropos both the whole region and its islands, and with respect to the two universities, why these old feuds are kept alive. So long as they are alive and well, the region is put at risk as it is unable to operate and to present itself confidently as a uniquely attractive region with a common character and purpose. It is not clear that there is any particular “villain” – more a pattern of cultural reproduction that may need strong “naming and shaming” if it is not to put the region’s future at unnecessary risk.

One particular feature of this small-island situation which we consider further in chapter 6 is that as in small nations like New Zealand everyone in a position seems to know everyone else. There are multiple meeting places, with different common and overlapping membership of different bodies. Many people move around the public sector and in and out of the universities which are themselves part of the civil service in Spain. In this circulation and community of the elite there might be the potential for strong development through shared understanding and purpose (indeed the Team gained an impression that despite the insularity it was possible for newcomers to be incorporated into this culture and managing elite quite fast). In practice, as we discuss later, it appears to be more of a barrier to than a force for change.

2.4. Higher education in the Canary Islands

The Canaries have two main universities and a third almost invisible institution, Universidad Nacional de Educacion a Distancia (UNED), which is the local branch of the national Spanish distance education university. The University of La Laguna (ULL) in Tenerife Island is an old and prestigious university. Its norms, working relations and practices, along with the values and drivers of its academic staff, appear very similar to those in other continental European countries. There is no evident corporate sense of a mission to do with the social and economic needs of the region, more interest in academic disciplines than employability skills and labour market enhancement, and a

personal reward system that in most traditional universities is weighted almost entirely in favour of high quality academic research publication. Individual scholars, and even groups and whole departments, may have a different outlook, but as a university ULL would look familiar to scholars from almost any traditionally research-led university. So far as the Peer Review Team could discern, there are limited signs of effective modernisation of management using the powerful now not even new, electronic information systems for planning and monitoring institutional performance. ULL at the time of the visit was carrying a rising annual deficit and was locked in public debate with the regional administration about its financial deficit and management.

The second university, University of Las Palmas de Gran Canaria (ULGPC) grew out of a former ULL campus on Gran Canaria Island focused on engineering, as an alternative to develop a single regional university system under a single management. The decision and the process were contested, and although it was some two decades ago the memory is fresh and bitter in many memories. This history and the genesis of ULGPC continue to dominate institutional policies and relations today. Key players in the processes leading to the creation of the second full university are still in leadership positions. The universities differ in character, reflecting their different origins, but the competition appears to be unproductive and wasteful rather than healthy.

Perhaps because of this history and the abiding tension if not outright conflict, both universities are seen by those in industry and some in government as being non-responsive to the socio-economic needs of the region in general. ULGPC with its more applied polytechnic origins is by nature closer to economic and labour markets needs, and also has a much more modern business-like feel about visitors such as this OECD team. The competition between the two main islands may however even mean that people are reluctant to make comparative judgement that might advantage their island's (or province's) university over the other one. Certainly from the regional development perspective of this OECD study ULGPC appeared much further ahead in thinking about the region's needs and building its own growth and success around engaging with and trying to meet these. This is not to say that one university is better than the other in collaborating and rationalising effort, with each other or with UNED, to meet the largest quantum of needs in the most efficient and economical way.

Interestingly, the terms of reference for this review did not include UNED, but through the course of the meetings it became apparent that this institution is currently active and has the potential for being of more significance, independently or in collaboration with the two universities, for the Canaries. If one looks at universities located in other island nations or clusters of nations, such as those of the South Pacific or the Caribbean, one finds that distance education forms a prominent part in the teaching strategies for such regions.

In chapter 4 we return to this subject and discuss, as a basis for a central recommendation of this Report, the need for the Canaries region to develop a true, planned, complementary and interactive *system* of higher education including all three institutions referred to here. Universities – no doubt like many other forms of organisation – are notoriously self-preoccupied; so collaborating with competitors in a common third purpose that requires wider stakeholder involvement in institutional development and direction is never easy. Stout sticks and tasty carrots may be needed.

The situation is made more difficult by limited powers and lack of a clear strategy and plan for higher education, as well as lack of control of the main purse-strings, on the part of the regional government. Later in this report we indicate the need to loosen up central control of higher education through common rules and curriculum at national Spanish level. European and global forces are pushing this like other national higher education systems towards Bologna standardisation on the one hand and greater diversity as well as entrepreneurialism on the other. Canary Islands higher education,

with its small scale and sharply identifiable tensions, offers a handy case study and test site for the further devolution and modernisation of higher education in Spain.

2.5. Political dimensions – the difficulty of driving change

The fifth dimension for sketching the context and condition of universities and regional development in the Canary Islands is the political. The Peer Review Team does not underestimate the difficulties involved in driving unsettling change, however necessary, in a small intimate community like this – intimate yet deeply divided by old and new rivalries between island, provinces and now also universities.

There is a national and regional tradition of weak regional government. Political allegiance anchored in the seven islands and the electoral system means that a government contemplating significant change that will upset one or another territory or interest group is likely to alienate political factions and end up out of office. In this situation of great political and social complexity, the result tends to short-term planning and small changes with an eye to the next election. It is hard to drive change in these circumstances, despite a widely shared perception that the region faces an uncertain and quite probably an unhappy future if it cannot diversify and internationalise before one or another crisis breaks as a result of forces beyond the islands and beyond its control.

More specifically, given the status of implementing principles of devolution and perhaps caution and lack of initiative at regional level, there is no regional policy for higher education or for science which can serve as the reference point for shaping and resourcing the universities in line with the needs of the region. There is also no effective regional level university funding system. The rules at national level appear ill-attuned to local conditions and needs, with too little discretion allowed to the region and lack of flexibility in interpreting and implementing rules and legislation.

3. THE CONTRIBUTION OF RESEARCH TO REGIONAL INNOVATION

3.1. The context for research and innovation in the Canaries

The SER presents a throughout analysis of the current situation, including its potential importance and relevance, and of problems about the contribution of research to regional development in the Canaries. A good part of the time of the Peer Review Team with regional stakeholders was devoted to discussing problems to do with R&D matters. The Canaries are no exception. It is quite common to talk in a generalised way about the impact of universities in regional development but to be talking only about the impact of research, when teaching and learning activities are equally or probably more important, especially in places like the Canaries. In any event, the familiarity of this attitude facilitated our understanding of the theme approached in this chapter.

It is worth to remark, as the SER did, that the economy of the Canary Islands changed abruptly from agriculture to services, without passing through an industrial development stage; and that in this new economy, tourism (and related businesses such as construction) is the real engine of regional development, currently representing 37% of GDP. The business sector in the Canaries is characterised by a predominance of very small firms, and a few big firms which are not regional. In 2004 only 6.4% of companies had more than 10 employees, whereas 47.2% had no employees at all. In addition, only 5.2% belong to the industrial sector. This situation impacts decisively on the innovation process, both in terms of the knowledge required and of firms' research capacity.

The other relevant fact is the insularity regarding the mainland, and the double-insularity of small islands in regard to the main ones. The rivalry between both main islands, whether "real" or somehow provoked and kept alive, is very visible. The two universities are located on the main islands, as are the public research centres. Consequently the smaller islands are isolated in relation to knowledge production and transfer. These issues are central to explaining most of the analysis, comments and recommendations that we present in this chapter, and in the whole report.

The high dependency on tourism is considered by most people to be dangerous, especially in respect of declining tourist numbers. However, for others there is an opportunity to develop new ways of offering this service with higher quality, more added value, and a more ecological and cultural approach. Currently, despite tourism being the most important sector of the Canaries' economy, relationships between universities and the sector are almost non-existent. Although the Canaries no longer see tourism as the only source for growth, a new perspective on the sector is still required. This quest could be a basis for stronger collaboration and new possibilities for universities and regional economy.

The Peer Review Team recommends that further collaboration between universities and the most important economic sector of the region, the tourism sector, be strengthened.

Stronger collaboration will benefit both universities in resources, economic relevance and social recognition, and the tourism and related sectors, in developing new high quality approaches. This recommendation does not contradict attempts to attract high technology-based industries which could

also have a future in regions as the Canaries, especially those which do not require heavy transport. These two development strategies should go hand in hand.

The Peer Review Team recommends to universities and the business sector to work together in looking for collaboration for diversifying the economy, especially in those technological areas where the Canaries may have a comparative advantage.

3.2. Investment and outcomes in Research, Development and Innovation

As a consequence of this economic reality, R&D expenditures are very low, even by Spanish standards, which are very low, in turn, by OECD standards. The proportion of regional GDP for R&D was only 0.61% in 2004. In Spain it was 1.07%, and in the OECD countries it reached 2.26% in 2002. As relevant as this low expenditure in R&D is the low participation of private companies. In the Canaries, public institutions, basically, the two universities, and research institutes related to them or to the central or regional government, account for 78.53% of total expenditure. Consequently, the R&D system is basically public, and more focused on basic science than on the region's needs. The main sources of R&D funds in the Canaries, as in other Spanish regions, are the central government and the European research programmes, both given in a competitive way. The share of the Canaries in national funds is 2.21%, and in Spain's EU funds 1.5%. Both figures are below the proportion of researchers in the Islands, which is 3.1% of the Spanish total.

Funds and individual incentives for regional development are very scarce. On the other hand, no specific risk capital market exists in the Canaries for innovative businesses, and the share of Spain's risk capital market is only 1%. Consequently, financing depends almost exclusively on grants from innovation programmes, which are quite limited.

As the SER points out, "the Canarian universities allocate few resources to research and very few (or nothing at all) to technology research, with no specific focus on regional needs". The Lisbon strategy agreed by EU member states in 2000 proposed an expenditure of the 3% of the GDP on research and innovation shared by public and private sources. Public authorities, universities and companies in the Canaries need to think seriously about this.

The PRT was made aware that the regional government is now developing a new financial model for universities with some interesting traits such as: using the social impact of universities as a financial variable; developing special support for research of excellence in priority areas – astrophysics, sea sciences, bio-technology and bio-medicine, tourism, transports, electronics and nanotechnology; measuring the links of the university with the environment; and co-financing practical work in enterprises and pilot programmes on entrepreneurship, among others.

The objective is to provide more support to research centres and universities, but asking from them, in exchange, for a higher commitment towards outcomes, especially outcomes more directly related to regional needs. In the government scheme, universities and researchers have to gain credibility if they want to request more support. They have to show that they are doing research – basic, applied or innovation, but in any case relevant research. This approach is basically correct.

The Peer Review Team recommends developing and implementing a new policy and a new funding model in agreement with universities and research centres. This policy should be a tool for developing research related to regional development. Apart from using more efficient tools for promoting research, more private and public financial effort in research and innovation is also necessary as part of a long-term strategy for regional development.

3.3. Planning research and innovation

There are many organisations involved in planning R&D in the region. Apart from central government ministries, at regional level there are at least three bodies involved: the Directorate General for Universities and Research (DGUI); Directorate General for Industrial Development and Technological Innovation (DGFIIIT); and the Office for Science, Technology and Innovation, attached to the Vice-Presidency of the Canarian government. There is also an intention to plan R&D in the region, launched by the regional government, as in the Strategic Plan for Innovation in the Canaries (PEINCA), the Canarian Development Plan for 2000-2006 (PDCAN), and the 2003-2006 Integrated Plan for R+D+I (PIC).

Most of the individuals interviewed by the PRT pointed out the lack of coordination and the erratic development of these plans and, in general, the lack of a consistent regional policy on research and innovation. Evidently there is limited coordination and obvious duplication among the different agencies involved. Others remarked that the scarce funding available – EUR 42 mill in total from regional sources – limits further involvement of research centres in linking research efforts with strategic priorities in the plans. In conclusion, it seems that the system needs more coordination and a stronger financial effort.

The PRT considers that it would be desirable to define a scientific and innovation regional policy for the long term, involving all the relevant actors. In addition, the PRT recommends more coordination among related state government agencies in the areas of education, science, technology, and innovation in order to avoid perceived duplications in their scope, activities and use of resources.

Achieving this objective would require, as well as political will, defining a true regional policy aimed at the long-term development of the Canaries. A long-term strategic plan is shared task to be done by the government, the universities, the research centres and the business sector. This plan has to link the current and planned research capabilities of universities and other research institutions, to the strategic priorities of the region, fostering collaboration for research on a regional dimension. The process should be open to consultation with all stakeholders, as has been mentioned in Chapter 2 of this report.

3.4. Strengthening ties between universities and the business sector

It was widely mentioned during the PRT visit that ties between the universities and the business sector in the Canaries were scarce. The small size of most businesses and their typology perhaps reduces the possibility of research-based innovation, and adds difficulties to building a stronger relationship. Nevertheless, we observed that the lack of a culture of cooperation between businesses and the universities could be the most relevant factor. The relationship is stronger at ULPGC, where there is a better link with industry, probably because it is a younger university and has had, since its foundation, a more technical and practical orientation. As a sample of this lack of understanding, some opinions from university circles included the following:

- The discourse about lack of interest in universities on the business sector provokes a pernicious effect, with negative consequences for local institutions. Sometimes the government agencies have a tendency to look for advice and help to other Spanish institutions instead of asking the support of the local institutions.
- The lack of interest from the university side is a pretext of the business sector for not supporting universities.

- There is limited social support especially for considering new technologies and cutting-edge knowledge-based new industries. Companies are not interested in research, due to the dominance of the tourism industry. They do not see the economic benefit of collaboration.

On the other hand, people in the business sector opine:

- There is a social generalised perception that universities are isolated from the real needs and issues that the society in general is dealing with. Small companies see the universities as distant from their needs.
- There is a big gap between the research agenda and the realities of the region. The university is not looking at the future. The business sector is adapting to the needs of the environment at a faster rate than universities.
- Universities demand too much from the government, but lack effective contact with the enterprises.

These opinions show a serious lack of understanding between on both sides. On the one hand, some people in the university community claim that academic-oriented research is the only real duty of universities, while others claim that there are not more relations because the business sector is not interested. On the other, some people in the business sector look at universities as something distant, not useful, even arrogant; others even believe that it is better to avoid collaboration with universities because they are getting behind in the innovation process. This misunderstanding has extended to the point where one university has been portrayed as behaving unprofessionally and illegally, because it has started consultancy and service activities which are perceived as an illegitimate, competitively unfair intrusion into the territory of the business sector.

The obstacles and problems impeding ties between universities and business are cultural, institutional and operational. Probably all of these exist to some extent in the Canaries. Nevertheless, a survey carried out in the Canaries and mentioned in the SER found that businesses did not have a common view of the factors that prevent their relations with universities; around 40% did not identify any single factor as being significant. Perhaps the best explanation for this high percentage is that the idea of having links with universities never crossed people's minds. There is a long way to go before closing the gap between universities and the productive sector in the Islands.

It is evident to the PRT that *the Canarian universities and the business sector have to develop much stronger links for mutual benefit and for benefit of the whole region*. Resolution has been attempted, such as the creation of a working group to discuss new forms of collaboration, but they have not been effective enough. A stronger connection will benefit universities in several senses: it will bring additional resources to institutions that need to increase substantially their investment in research and innovation; it will bring expertise in practical matters of people from the external, non-university world; it will bring continuous feedback to improve what universities are doing and, especially, what universities are teaching; and it will bring a stronger sense of being useful to the economic development and to society at large. The business sector will get many benefits: it will learn that universities can provide many possibilities for improving innovation in their business; it can help to transform teaching and learning, thus obtaining better educated graduates that in the medium term will improve the economic capacity of their companies; and they will have the opportunity of being socially responsible and increasing the cultural, social and economic wellbeing of their region.

The PRT recommends that universities and the business sector, with the help of the government, establish a forum for developing, first a mutual understanding, and secondly, stronger relationships between universities and the business sector.

Some of the elements that may be considered in this plan, as suggested by interviewees, are as follows:

- Fixing permanent channels of communication
- Requiring academic staff to understand better what happens in the “real world”, perhaps offering them temporary positions in companies
- Offering people in the business sector positions as associate teachers instead of using this category for other objectives
- Including in the regional financing model, the social impact of the universities as a variable to be awarded
- Increasing fiscal incentives for companies investing in research at universities
- Improving staff incentives for developing external activities
- Having universities as partners in science and innovation parks
- Attracting top-level researchers to the Canaries.

3.5. Current and new perspectives on research and innovation

The Canaries’ researchers are mostly engaged in basic research with little attention paid to the economic relevance of the outcomes. Basic research outcomes (publications or *sexenios*) are below the Spanish average, and the data are worse when we look at the number of patent applications, or the amount of external resources won by universities through contracts. These are very low for the theoretical potential of the Canaries’ universities. Two different approaches for research in the two universities are very clear in these data. Indicators of publication show higher performance by ULL, while indicators related to external activities show better performance by ULPGC.

Applied research is scarcely related to the social and economic reality; regional development is not a main issue in the research agenda. It is quite obvious that there lacks matching between regional firms’ knowledge needs and universities’ knowledge offer. As a consequence, there is no outstanding experience related to regional development.

Regional innovation policies have not yet developed appropriate mechanisms to promote research cooperation between business, universities and public research bodies. ULPGC has defined a knowledge transfer strategy. At ULL, such a strategy has yet to be established. Nevertheless, ULL is making efforts in this sense, mostly through the individual involvement of some academic staff.

The Government of the Canaries established a system of individual economic incentives rewarding research and other academic activities for academic staff in the Canaries universities. The system is quite generous compared with similar systems in the rest of the country. Nevertheless, the results have not yet led to the full effectiveness of the system.

The PRT considers figures for research outcomes not to be very impressive. There is room to improve the involvement of institutions and researchers in basic and applied research. However, the lack of research oriented to regional development is most dramatic. Changing this requires strong effort by institutions and individuals.

The PRT recommends using the current individual incentives for research in a more efficient way to improve basic research, and especially regional development activities.

The research and innovation potential in the Canaries is good. There is a significant number of public research centres (both universities and several independent research institutes); a considerable number of researchers (over 2000 FTE); a relatively broad and diverse technology offer; and some groups high in research excellence. With this potential as background it would be feasible to make confident plans for promoting research and innovation, basic and applied, but specially related to regional development through cooperation between business, universities and public research bodies.

The Canary Islands need to look for new spaces for innovation. High technology, scarcely related to regional development, is over-valued everywhere. It is not necessarily the only or the main source of development, with the exception of some few hubs in the world. Universities should collaborate to develop the current resources of the Islands, but also in the search for new potential niches. In this sense, a new approach to tourism should be a source of collaboration between universities and the business sector. Research and consulting of interest to the tourism industry could be a space for collaboration. Environmental concerns, quality control of food, and cultural tourism are areas where the tourism sector could be eager to get support from universities, especially in light of the idea being explored by the business sector to expand its operations and know-how to other parts of the world.

The knowledge society is not going to be exclusively supported by high technologies. The demand for all types of services, social, cultural, sporting and leisure activities could be a main source of employment in the future. Humanities or Social Sciences have an important role in this future. To forget this is to miss the opportunity for better and more harmonious social development. These areas, and not only high-technology, will bring to the universities unexplored possibilities for developing joint activities with the business sector.

In a similar sense, exploring mid-range technology activities could open an enormous area of opportunity. Sectors for possible development and collaboration that should be explored include: alternative energy, mid-level technology, and secondary industry or service-related technologies.

The *Instituto de Astrofísica de Canarias* (IAC) is an example of success with 300 staff, 100 researchers, 65 doctoral students and a fully international orientation. The IAC has many possibilities for technology transfer, dissemination of science and technology, and preparation of human resources. This Institute is, to some extent, a geographical accident, based on the clear skies on the Islands. Nevertheless, this is not the only “accident” that can be used as an advantage. Other possibilities of development also based in the specific position of the Canaries include:

- The special status of the Canaries in the EU with a specific programme for R&D could be a key opportunity for developing research strategic goals in the Islands, bringing new companies attracted by fiscal incentives unique in the EU.
- The central position between Europe, South-America and West Africa could be a source of opportunities for commerce and logistics associated with trade with these regions.

- The Canary Islands could be a hub for channelling aid and trade from Europe to Africa. The House of Africa or the Ibero-American Institute are projects on the agenda of the regional government that could bring new opportunities.

After analysing all the possibilities of development and the possible scenarios, *the Peer Review Team recommends that the Canary Islands universities take advantage of a wide variety of current and expected possibilities of development for the region, behave proactively, and become more effective agents for change.*

Universities should help to shape the future of the region. They cannot deny and should not miss the opportunity of serving the well-being of the people of the Canary Islands. Universities should be active agents of innovation in many technological areas. At the same time they cannot ignore the critical importance of research in social sciences, arts and humanities, for integral and integrative regional sustainable development, especially in a region where services are the main resource. *Universities should better link their current and planned research capabilities to the strategic priorities of the region.* This may all seem obvious, but it represents a massive change in attitude and behaviour for discipline-based academics.

3.6. Exploiting university research

Knowledge transfer to companies is a recent phenomenon in the Canary Islands, as it is stated in the SER. Three mechanisms for knowledge transfer from universities to the business sector can be identified: patents and licences; science parks, incubators and spin-offs; and research and consultancy contracts established with firms.

The number of patent applications by Canary Islands research centres to the Spanish Patent Office is low, as is mentioned in the SER. On the other hand, some people declared that patent and patent licensing mechanisms are non-existent with no incentives for the commercial exploitation of patents and inventions. The PRT impression is that the application of university-based research to industry is very low, slightly higher in ULPGC.

The PRT recommends that more efforts should be undertaken in order to increase the applied character of research in the Canary Islands' universities. Institutional and legal facilities for developing this objective should be considered seriously. The PRT recommends the development and implementation of policies promoting innovation, and regulating and protecting intellectual property at institutional level.

The second transfer mechanism is to create a favourable environment for the emergence of spin-offs. ULL has no incubator or technology park at the moment. ULPGC created in 2000 a Science and Technology Park where at the moment 23 new businesses have been created, although no additional evidence about its success rate was provided to the PRT. This Park seems to be a good opportunity to diversify the business sector. It seems that there are legal limitations for developing spin-off companies – although a legal reform undertaken at this moment by the central government is going to change the situation favouring the participation of researchers in companies. In spite of these recent efforts, during the interviews the PRT perceived limited knowledge and lack of incentives for spin-offs. Technological parks are a great opportunity. They deserve the full support of government, the business sector and universities.

The Peer Review Team recommends establishing new science and technology parks and giving full support to the existing one.

Most knowledge transfer by staff at the Canary universities takes the form of technical advice or consultancy contracts. In general, contracts are arranged via the university office of science and technology transfer (OTRI by its acronym in Spanish). Coordination among the different OTRIs, or a Canary network of such offices has not emerged as yet. In addition, University-Business Foundations have been created in both universities. From a legal point of view they are private corporations, and consequently more flexible for undertaking entrepreneurial activities. The ULL Foundation was created in 1987 with partners such as the Chamber of Commerce, banks, and other major corporations. Under similar criteria the University Foundation of ULPGC was created in 1983.

Both foundations collaborate in many activities, including a shared office in San Antonio, Texas. This collaboration is a good example to follow, perhaps the only formal collaboration between both universities. A couple of aspects of the foundations deserve comment. On the one hand, as the SER remarks and we have perceived, information published about the results of the Foundations, especially in the case of ULL, is short on detail. The PRT was not able to gain a full understanding of the financial results of its activities. On the other hand it seems that there is a duplication of roles between OTRIs and the foundations, especially again in the case of ULL.

The Peer Review Team recommends redefining the role of OTRIs and foundations, improving the transparency of their results, and improving coordination between the different bodies in charge of transferring university knowledge.

The two universities and the government of the Canary Islands have developed dissemination policies. The university web sites include links to research groups, available technology, OTRIs and Foundations, as well as information on annual research grant applications. Two good experiences in this sense are the Canarian Innovation Portal (www.pic.itccanarias.org) with connections to the universities, OTRIs, and the Canarian Technological Institute, along with details of available technology, risk capital, research funding applications etc., and the new portal opened in the EU server (www.cordis.lu/canary-islands) which provides general information and details of the most important scientific infrastructure and research centres in the Canary Islands. Both deserve support. In addition, dissemination of the relevance of universities' activities for the whole population should be commended as an additional way of establishing links between the universities and society at large. Society has a right to know what researchers receive and contribute.

The Peer Review Team recommends that a plan be developed for better disseminating the research efforts and outcomes that the Canary universities do, to strengthen relationships with the society.

This will eventually result in mutual benefits. It might be linked to the "knowledge house" proposal put forward in Chapter 6 below.

3.7. Collaboration between research institutions

It has been mentioned repeatedly by different stakeholders that ULL is the historical university, larger, more traditional and more focused on Humanities and Social Sciences. Consequently it is perceived as more isolated, with limited connections with the business sector, and more disconnected from the social context. In this sense the general opinion on ULPGC is more positive. It is agreed that it is closer to technical fields, has fewer difficulties in connecting with the needs of the employers sector, and has more connections with the business sector. The Peer Review Team considers that these opinions are based, to a certain extent on current reality but that it is likely that the differences may be in part just stereotypes. Reality is probably richer and more complex than this simplistic approach.

The Team learnt during the visit about the traumatic genesis of ULPGC, and the circumstances of its segregation from ULL. It also learnt that in one historical moment two possibilities were considered: having only one university with several campuses, or having two independent universities. Finally, the second option was taken. Probably it was a right decision.

Nevertheless, the decision was to have two independent universities, not to create adversary universities. Collaboration between the universities appears almost non-existent at institutional level, and very limited at the individual level. Only 33 out of 1 918 research documents over a certain period of time were jointly produced by people from both universities. Collaboration with research centres outside the Canaries is also limited, and participation in European projects, and consequently collaboration with other European universities, low. This situation exacerbates the feelings of isolation that are negative, both for academic life but especially for regional development.

There are many examples around the world from which to learn how collaboration among institutions has been productive for the institutions themselves and for regional development. This is true in places where the potential of individual universities is high. In the case of the Canaries, where the potential of each institution alone is limited, collaboration is not just something desirable; it is imperative for both institutions. If the universities want to compete in the global arena they need to joint efforts, design research and teaching programmes together and jointly develop innovation with the economic sector of the Islands. It is desirable also to have a common marketing strategy in advertising internationally, as a way to attract new companies, researchers and students. The size, capabilities and specific characteristics of the Canaries do not allow the universities to work independently, still less with the current negative competition.

It is remarkable that the Foundations of both universities, probably because for them the weight of history is lighter, behave more collaboratively. This is an example to follow; it could be the germ for extending collaboration to the rest of the institutional bodies. Another example is the collaboration between both university libraries in sharing materials.

The government should plan, with the participation of both institutions and other research centres, to develop collaboration at institutional and individual level. Joint initiatives between institutions and individuals, especially focused on regional development, should receive incentives as a way of developing the level of competitiveness of the Canaries' system of science and innovation.

The Peer Review Team recommends fostering collaboration for interdisciplinary and inter-institutional research and teaching with a regional dimension. This is an urgent need for regional development and for increasing the external competitiveness of the Canaries universities. The government of the Canaries should develop an incentive system to foster collaboration between institutions and individuals at regional level.

4. THE CONTRIBUTION OF TEACHING TO THE LABOUR MARKET AND TO SKILLS DEVELOPMENT

4.1. Introduction

Universities in developed countries generally are seen as having three main areas of service: research, teaching and community service. Teaching, along with research, has become the core activity most associated by the outside community with university life. The third area, service to the community, is often relegated to a lesser role within the university culture than research and teaching, a fact that has raised serious questions among various segments of society, particularly with regard to publicly funded institutions.

An initiative like this OECD set of projects brings the external community more strongly into the operational considerations of the university community. It calls for a greater focus by the academic community on the external communities and their needs and preferences, whether commercial, economic, cultural or social. The term commonly associated with this broadened model of university perspectives is “engagement”, and leaders and institutions in various corners of the globe have deliberated extensively on this concept.

Our interviews with the various stakeholders confirmed the findings of the self-evaluation report (SER) that give primacy to research, even when discussing the question of engagement and potential contributions by the university to regional development. Teaching was a topic that the review team often had to proactively raise and discuss, especially at the ULL. The fact that not one person came to the session scheduled at ULL for discussions with the general faculty spoke volumes to the Peer Review Team. Limited attention was given to relations of the university with the broader cultural and social sectors, their educational needs and the role of universities in answering to such needs.

Noteworthy from the SER was the relatively low rate of participation in higher education among younger adults in the Canaries (Table 2.4 in the SER). The problem is particularly severe among males. In addition, calculated on the basis of 18 year olds in the population, the percentage that passed the entrance exams in 2003 among those in the Canaries was less than 84% of the average for Spain overall. A major contributing factor to the latter statistic is the fact that the Canaries have the highest rate of non-completion of pre-university education in the country, even though the completion rate may be higher than the European average, considering that only Sweden has higher completion rates than Spain.

When considering these statistics against the backdrop of the economic make-up of the Canaries, one must consider the nature of work opportunities for highly skilled/educated young people in the Islands and the composition of the economy itself. The implications of these will be discussed in the text that follows.

4.2. Localising the learning process

The self-evaluation report points to the redundancy of programmes between the universities and also to the focus, for the most part, on standard disciplines and curricular designs. ULL has more of a

traditional liberal arts history and rhetoric, while ULGPC was a re-organisational outcome of turning ULL centres in Las Palmas de Gran Canaria into a new university merging its engineering with other tertiary educational units. There is acknowledgement today of extensive redundancy or overlap of the educational offerings of the two universities.

A significant inhibiting feature with regard to the localisation of programmes is the nature of the Spanish government's direct involvement in the design of curricula, particularly in first and second cycle degree programmes. These requirements tend toward a level of homogeneity in the offerings throughout the country, including of course the Canaries.

In some programmes, the Team noted that localisation is addressed to some extent through the offering of elective courses with a regional focus. Also, it was mentioned that ULPGC, as a relatively young institution, decided to offer programmes from the national catalogue that were most pertinent to the region, for example Marine Sciences and Tourism.

Once programmes are established, they tend to persist, even when demand has fallen. While recognising that valued traditional features of most universities, such as tenure and academic freedom, are jealously (and to some extent, properly) guarded, it is critical in the modern era that mechanisms for adaptation and change be a regular part of university management.

Key findings from meetings of the Peer Review Team with regional stakeholders included the following:

- Curricula, especially at ULL, are not linked to regional priorities or stakeholders for the most part. Talks with major stakeholder groups were marked by a conventional view of the universities of the Canaries being isolated ivory towers.
- There was little or no evidence of disciplined engagement of the various stakeholders, particularly business and even the public sector, to identify needs and preferences. One anecdote is highly informative. In the meetings in Tenerife with representatives of the region's foremost economic sector, tourism, it was noted that while there was reasonable engagement of the industry by individuals at the university in developing their continuing education and Master's programmes (expertise rather than academic postgraduate degrees), the baccalaureate programme involved nobody other than the faculty themselves in the design, development and delivery of the programme.
- The universities' Social Councils (Consejos Sociales), while required by the national legislation and other policies as a mechanism for linking the university with important components of the economy, society and culture of the Canary Islands, were not seen as particularly influential or productive, especially at ULL.
- Perhaps most fundamental with regard to university operations and service was the absence of a consistent and integrated view of the overall Canaries region. Each university views the other with suspicion and looks at the province of their location as their primary concern, rather than the overall region. Moreover, enrolments confirm the regional appeal of each university, with very few people from each province enrolling in the university of the other.
- There was near-unanimous agreement among all stakeholder groups, including the universities themselves, that such a viewpoint is counterproductive and divisive. But unfortunately this widely expressed agreement was accompanied by a broad feeling of hopelessness with regard to being able to do anything about it.

- There clearly is no concept of a “higher education system” for the Canaries. This issue will be dealt with in some detail later in this report. Almost all stakeholders, including the office of the President of the Canaries region, see such a system as desirable but virtually impossible to achieve.
- The absence of a system-wide perspective has the effect of potential lack of articulation of programmes and courses between institutions; thereby leading to the need for course by course reviews should transfer credit from one institution to the other be required. (It can be argued however that this is more related to academic staff behaviour than to institutions. It is perfectly possible to transfer credits, but decisions are taken by academics at department level who may decide that transfer is acceptable in theory, but not enough learning has occurred.) Clearly, given that there are only two public universities serving the region, an articulation system can be established relatively easily. In the Province of British Columbia in Canada, a system comprising over twenty institutions, including several internationally ranked research universities, has developed a full system of course by course articulation that assures transfer of full credits earned from one institution to another.

4.3. Education for regional and local employment

If either university is seriously interested in offering programmes to provide regional public and private sector employers with qualified graduates, the first order of business is to identify the qualifications required to be of utility to these organisations. Only after determining a clear definition of such needs can a curriculum and educational experience for students be effectively designed.

Secondly, having determined the types of competencies required in graduates, the size of the employer market within the Canary Islands needs definition. Just how many university educated personnel do the businesses of the Canaries require each year, and what is the forecast demand over, say, the next decade?

In terms of the regional market for university graduates, two features of the economic structure are critical: the dominant role of tourism, and the dominance of small enterprises that make up the economy – 94% of Canaries business enterprises employ fewer than 10 people, with more than half of these employing none.

Given the foregoing, *the Peer Review Team recommends that students be prepared for such employment within their programmes of studies.*

The SER observed that, for the most part, the curricula of the applied areas educate people for traditional concepts of employment, a concept diminishing throughout the world but even more severely at odds with the regional economy. Also, at the end of Section 4.2, the SER states that “over-education of Canary Island graduates seems to be a general problem”. Whether it is “over-education” or poorly focused education is an important question. With few firms in the region having the scale and character to require university educated personnel the market for liberally educated graduates whom the employers would train to specific needs is limited.

Given these features of the economy, *the Peer Review Team recommends that electives or concentrations in areas such as entrepreneurship, languages and hospitality be emphasised or even form a requirement in programmes of study. Such requirements, with safeguards that they not intrude on the selected majors of undergraduate studies, should not jeopardise the candidacies of those graduating with plans for further studies at the postgraduate levels elsewhere in Spain, Europe or beyond.*

The Peer Review Team further recommends that a business approach, perhaps unpalatable to pure academics, be considered in designing programmes of study to best serve regional development. In general, many businesses consider four areas in their analysis of the products or services to offer for success: (1) the market; (2) the human and other resources of the company; (3) the competition, i.e. providers of similar services or products; and (4) the nature of the product. For universities focussing on employable graduates, the market is the employer group; the “company” is composed of the academics and other resources of the institution or system of higher education; the competition is other universities and training organisations; and the product is the programmes and the graduates it produces or, in the case of continuing education, the value added as recognised by the clients.

4.4. Proactive engagement of prospective employers: Assessing the needs of the market

Many universities elsewhere engage in very proactive programmes with private and public sector employers to assess their needs and to persuade them to look seriously at their graduates as candidates for employment. Personnel from the universities actively engage prospective employers, and encourage them to visit the institutions to give presentations, hold interviews, etc.

Another technique is to “pre-sell” graduates through internship and cooperative education programmes in which undergraduates are placed with corporations, government agencies, etc to gain exposure to such operations and to display students to the employers. In cooperative, or sandwich, programmes students are given academic credit for the semesters or periods spent with the employer.

The starting point is the market of local employers. What is the nature of this sector in the Canaries?

Several critical features are clear from the SER and the review visits:

- The region has to deal with the characteristics of small island economies such as difficulties of infrastructure, and isolation.
- The nature of the economy is almost entirely small enterprises with almost half the firms having no employees and most having fewer than ten.
- Tourism is the dominant sector, attracting some 12 million visitors a year.
- Tourism has a strong industry association to serve its interests, including training and development activities.
- A significant factor in studying the organisations that make up the employer market for graduates is that the larger employer organisations are primarily public sector – various levels of government and their bureaucracies.

Given these features, what are the needs for which universities are uniquely qualified to provide?

The Peer Review Team recommends that universities directly engage the business and other communities to define the attributes and skills that the graduate must have. Seriously and well planned surveys and other forms of research designed to identify what employers want is critical. Just how job-ready do they expect graduates to be? Do the employers provide orientation and skill development training programmes of any significance? Do associations of SMEs do so?

So what evidence is there that the universities in the Canary Islands engage in such analysis? While official mechanisms such as the Social Councils and Foundations are required, they vary in terms of their role and effectiveness. They fall well short of their potential, and of the aspiration of their more ambitious members and champions.

The Peer Review Team recommends that the Social Councils be developed as important and effective means for the engagement of the universities with their communities, and that the national government make such adjustments as may be necessary to enable this. It also recommends

- *Disciplined analyses that will provide the kinds of information required*
- *Other forms of linkage with the various stakeholders so that communications and mutual confidence building is achieved*
- *Devices such as joint task forces to address directly analysis of the economy, its labour requirements, and the ways in which the university can offer education and training that advances this agenda.*

4.5. The “company” and the “competition” – Academic and other resources of higher education in the Canary Islands

The second analytical dimension, and how it is defined, is one of the most critical considerations regarding higher education and its potential contribution to regional development in the Canary Islands. As discussed elsewhere, a fundamental question whether public higher education in the region can be seen as one coordinated system, or just as two separate and independent institutions operating autonomously.

The Peer Review Team recommends that the region establish a process for the careful consideration of this issue, and to seek a model that optimises the resources required for the effective delivery of research, teaching and service to the Canary Islands. This issue was raised by every sector interviewed by the Peer Review Team.

Accordingly, the PRT recommends that the Government of the Canary Islands, consulting with the rectors of the two universities and representatives of the major economic, cultural and social organisations of the region, establishes a formal initiative to address rigorously the pros and cons, and the ways and means, for establishing a regional system of higher education.

Such a review must engage directly a broad spectrum of stakeholders, going beyond the surface rhetoric of such discussions to analyse the teaching programmes, the faculty and staff requirements, and the research agendas of the universities against the backdrop of the needs for university services of the economic, cultural and social sectors of the region.

A system of higher education would re-define who the competition is for provided university services. Currently, the principal competitor for each university is the other Canary Islands institution. For a system of higher education, the competition becomes other regional providers and institutions from beyond the region. With modern information technology, hundreds of institutions from throughout the world have the capacity to deliver their instruction in the Canary Islands.

In this respect, the Peer Review Team recommends that the formal review called for above include directly the Universidad Nacional de Educación a Distancia (UNED), currently seen as a competitor but potentially a valuable ally, particularly in the delivery of instruction to physically

remote regions and to persons engaged in busy lifestyles that limit options such as full-time attendance or even physical attendance at a campus or centre.

4.6. The “Product” – the educational programmes

The PRT recommends a disciplined and discipline-based review of the programme and course offerings of the universities and UNED.

This review should look at

- The suitability of programmes and offerings for the requirements of tertiary education in the global context, in terms of quality and appropriateness.
- The primary needs of the region for highly educated people.
- The disciplinary and interdisciplinary programmes required for best serving the regional development of the Canaries.
- Redundancies and gaps in the offering of the institutions vis-à-vis demand.
- The forms or means by which such instruction should be delivered.
- The effectiveness in terms of access provided to segments of the Canaries population, including those located remotely from the two main campuses and those outside the ages of the traditional university student cohort.
- Existing faculty resident in the universities, and the gaps and redundancies inherent therein.

Based on the foregoing examination of the higher educational demands, requirements, resources and offerings in the Canaries, an overall assessment of the optimal allocation of limited resources can be completed. Planning and control of the process is essential to ensure rigour, as is authority to access information and the freedom and confidence to make strong recommendations. Whether the business analysis described above or other models are used, it is vital that such a multivariate analysis be completed, to provide the insights required for informed planning,

Given the nature of the economy, PRT recommends that a centre of excellence in entrepreneurial studies and development be considered. This could be a comprehensive centre operated collaboratively by the two universities and UNED, directly engaging appropriate sectors of the Canaries economy and government, to offer

- *An undergraduate concentration in entrepreneurship drawing from an assortment of relevant disciplines.*
- *A vigorous programme of continuing education for entrepreneurs.*
- *An advisory centre accessible to fledgling entrepreneurs and their enterprises.*
- *An incubator for guiding the development and nurturing of new enterprises for the Canaries.*
- *Such a centre of excellence could draw participants from beyond the Canaries, and lead to synergy among enterprises both regional and beyond.*

4.7. Strategic dimensions of student recruitment

For those components of university teaching that are geared to the supply of qualified graduates for local employment, *the Peer Review Team recommends a criteria-based programme of student recruitment. The role of the national government in respect of compulsory entrance examinations and first cycle programmes may represent an obstacle, although there is room for planning new programmes within the remit allowing regions to define content. The PRT recommends that the Spanish government considers what changes are required in order to allow such an approach to proceed effectively.*

It was clear from our visits that the two universities see the school-leaving population of the Canaries, that is to say the graduates of the secondary schools, as the primary clientele to be served. More accurately, each university sees the graduates from schools in its respective province as its main clientele. A secondary segment comprises the region's older adult population. Even so, the participation rate of secondary school graduates in university studies is significantly lower in the region than it is elsewhere in Spain as a whole.

Additionally, the PRT noted that the enrolment of foreign students at the two universities is very low, even at the graduate level, and particularly at ULL. Juxtaposed with this is the fact that a significant number of more prosperous Canaries citizens attend universities away from the islands, particularly in other parts of Spain.

Concerns were expressed by various groups whom we met that talented young natives of the islands were leaving ("brain drain") for the peninsula and elsewhere. In the global economy, this is a growing phenomenon for many countries. The federal government in Canada has created two national initiatives to build infrastructure and improve salaries and research support, to stem the flight of talented academics to the wealthier, better endowed institutions in the United States.

This raises the question whether the higher educational institutions have a student recruitment strategy, other than to be the principal provider of university educations for the youth of their respective provinces. *The Peer Review Team recommends that the universities vigorously explore the possible opportunity and benefit to be realised by recruiting students from the peninsula and from Latin America.*

Students from outside the region add to the economy of the region and introduce a cross-cultural dimension to the undergraduate experience for students from the local region.

There was evidence of some limited inter-institutional agreements and even joint programmes with outside universities. *The PRT recommends that more inter-institutional agreements be struck with universities in such targeted regions both to supply students for the region and to enrich the educational experience for students from the Canaries.*

ULPGC has developed distance education programs to serve students in more remote regions of the islands, and for mid-career learners. Recruitment through distance offerings could be a significant dimension for both universities in providing instruction to other than the traditional younger cohorts from the two main islands. *The PRT recommends the formation of partnerships with UNED and between the two universities to seek a more resource-effective model than the autonomous one that now characterises the region.*

Much mention was made by the people whom we met about the need for multilingualism among graduates, to be effective in an economy that is so dependent on non-Spanish-speaking customers and

collaborators. *The PRT recommends considering partnerships with institutions from countries other than those that are Spanish-speaking, to create joint venture programmes to serve this need.*

4.8. A regional system of higher education?

Some of the foregoing discussion raises the most fundamental of questions. Is there a real concept of and a prospect for an integrated system of higher education for the Canaries, as distinct from competing institutions operating independently? How is such a system to be established? What features or criteria should be used to establish or distinguish a system? These could include programmes, transferability of credits, students, employer interests, network of locations, distribution of courses and programmes, forms of delivery, and the optimisation in the allocation of resources.

On this topic there was near-unanimity: there is no system of higher education for the Canaries. The two major institutions act very independently of each other and the Universidad Nacional de Educacion a Distancia (UNED) is a separate and independent operation. Indeed, rather than the collaboration and cooperation that would be expected within a system, the most common term used by nearly all stakeholders in describing the behaviour of the two universities was competition.

Through the accidents of history, there is a strong distinction in the expressed programmatic focus of each university. ULL has a traditional liberal arts emphasis and the ULPGC, with its polytechnic origins, a more applied and technical one. Nevertheless, there was evidence of considerable overlap, and more disturbingly, a relative absence of collaboration and cooperation in the planning, development and offering of programmes. The offerings of each university would be greatly enriched if students were enabled and encouraged to consider electives from the other institution within their programs of study. If the combine network of campuses and centres of the two institutions were available for the delivery of programmes and support services, the islands would be much more deeply served.

One aspect of the operations of UNED in particular caught the attention of the PRT. At ULPGC, much more so than at ULL, there is interest and development in distance education. Yet one of the few programmes that they provide at a distance duplicates one offered by UNED, according to a UNED representative.

Distance education programmes, properly and responsibly delivered, require considerable investment at the front end in research and course preparation. A team comprising subject matter expert(s), course designers versed in open and distance teaching and learning methodologies, and media experts spends considerable time and energy in the development of learning materials best suited to the student profile and the demands of the subject matter. UNED develops its courses in this fashion at the Madrid headquarters, and features a very extensive array of programmes and courses.

4.9. Higher education and the nature of organisations of the new era

Many publications have dealt with the issue of the changing nature of higher education resulting from the transformation of society that information technology and other advances have triggered. In various continents, organised analyses and initiatives have been established to bring discipline to such analyses.

In the United States, many institutions have rethought their roles and behaviour. The traditional concepts of the isolated centre of learning, of independent research and faculty-driven curricula were challenged and re-articulated by major organisations such as the Carnegie Foundation for the

Advancement of Teaching and the Kellogg Commission on the Future of State and Land-Grant Universities.

A seminal work was the 1990 publication, *Scholarship Reconsidered: Priorities of the Professoriate* by Ernest L. Boyer, then President of the Carnegie Foundation. This proposed that scholarship, the core role of academe, must take a broader perspective beyond the traditional views of pure research. Scholarship must go beyond the traditional practice of research within one's discipline to look for relationships across disciplines, to inform practice through application, and to share this knowledge broadly to benefit a broader community. He termed these:

- The scholarship of discovery – research, the search for new knowledge, discovery.
- The scholarship of integration – interdisciplinary pursuits, scholarship at the boundaries of disciplines and interpretation across them, synthesis.
- The scholarship of application – to serve the interests of a broader community, the application of new knowledge to issues facing a broader community and society.
- The scholarship of teaching – to use one's scholarship to educate a spectrum of people and organisations – “the work of the scholar becomes consequential only as it is understood by others”. (p.23)

Derived from these concepts, an energetic dialectic ensued over the next decade, giving rise to the concept of the “engaged” university, one that is engaged with its various stakeholders. In the United States, the Kellogg Commission on the Future of State and Land-grant Universities and Colleges described such an institution as one that features

- Responsiveness to the needs of our communities and other stakeholders.
- Respect for partners, in jointly defining problems, options, and solutions with different sectors of the community.
- Academic neutrality to bring scientific rigour to the analysis of contentious issues.
- Accessibility, to make university expertise and instruction accessible to a broad range of sectors.
- Integration of the research (new knowledge), teaching (transmission of knowledge), and service (applied knowledge) dimensions of the university.
- Coordination within the institution to optimise the use of scarce resources.
- Resource partnerships in the form of strategic alliances with government, business, cultural organisations and other stakeholders.

The foregoing models and points can serve to inform the task of identifying university traits and activities that effectively connect the institution to its region and its development. *With regard to teaching and learning to serve regional development, the Peer Review Team recommends an thorough and disciplined analysis, using criteria such as these derived from Boyer, for the Canaries region and its universities.*

Profound change in the nature of employment must also be taken into account. In the past, the general expectation of employment was a career in one field, often with one employer. Now the nature of employment, triggered by information technologies and the changing shape of industry and of organisational patterns, is for shorter terms, requiring periodic re-education and re-employment. The average university graduate today will make several changes of career through his or her working life.

This raises the importance of lifelong learning for the new economies. As knowledge is created and applied at ever increasing rates, the need for renewal becomes critical. Universities must create policies and organise resources and activities that enable them to be responsive in a timely fashion while maintaining quality assurance that is consistent with the academic standards of the institution. But while ensuring instruction of high quality, the universities must also be flexible, capable of meeting emergent and future learning needs that serve the Canaries and its citizens on the basis of the learner needs, rather than informed solely by the histories and sacred purity of traditional disciplines. Multi- and inter-disciplinary instruction, bringing together the knowledge required to inform the requisites for practice, will likely be the norm rather than the exception.

Informed by such perspectives, Donald Langenberg, former President of the University of Maryland System, described learning for the new era as:

- *Perpetual* – learning will be lifelong, as required
- *Distributed* – learning will take place in many places rather than just on traditional campuses or centres
- *Interactive* – learning will occur not as a transmission of knowledge from the learned (the university professor) to the learner but will result through the interaction of learners with learners, learners with the learned, and the learned with learners.
- *Collaborative* – what needs to be learned will be determined by the learners, their employers and associated and other agencies, rather than independently and solely by the university.

Traditionally such practices were seen to be the domain of extension and continuing education units rather than the main academic units. In the context of today's business, industrial and cultural organisations, such features of instruction are measures of the overall engagement of the university with its many stakeholders, including the undergraduates and postgraduates, and integrated into the mainstream of teaching and learning endeavour.

5. THE CONTRIBUTION TO CULTURAL, SOCIAL AND ENVIRONMENTAL DEVELOPMENT

The brevity of this chapter reflects the modest ambitions of the Canary Islands universities as institutions expecting to contribute to wider regional development. Where a sense of “third leg” or “third strand” mission and identity exists, as tends to be more evidently the case at ULPGC than at ULL, it is mainly confined to a modest number of teaching or research projects having relevance to economic development, either industrial innovation or preparation for the labour market.

The Self-Evaluation Report presents a catalogue of activities which in one way or another are relevant to some aspect of social or cultural development or to the environment. Some are the regular programmes like medicine and humanities that make an obvious and vital contribution to the health and cultural well-being of a society. Others are very particular cultural and sporting events, or the use of university cultural and sporting facilities for and by parts of the community.

What appears to be completely lacking, perhaps because of the absence of a public debate and consensus in the region about planning for the long-term future of the Canaries, is any sense that the wider and longer term social, cultural, environmental, and indeed political and civic, agenda is important for the region’s healthy and sustainable development – and that the universities as key knowledge makers and users have a central educative and developmental role in these fields.

At another (research-led) university, with a medical school, involved in this OECD project, the whole region is seen as a kind of laboratory for epidemiological and other studies feeding directly into the region’s health policies and practices, to which medical students contribute as part of their training. The Canary Islands SER refers to sports that are for its own students only; this other university has a vigorous programme for engaging the local communities, especially the more heavily disadvantaged, in sporting activities like junior school football. This is an end in itself, but it also draws working class and marginalised families into the orbit of the university, such that they may come to see it as a place to which even their children may aspire. Thus the use of sporting facilities is part of a widening participation access strategy.

From the SER it is apparent that both universities engage in vigorous programmes of extra-mural activities. Enrolments are substantial; the geographical reach extends well beyond the main centres on the main islands. It would not be unfair to suggest that in the main these programme address the personal, intellectual and cultural needs of the middle classes, with occasional ventures into the more “activist” social and cultural arenas such as the training of community project workers and the sustainable development forum mentioned below.

With few exceptions however these offerings are a collection of seminars or courses rather than integrated programmes. There are a few exceptions. One is the Canarian Forum for Sustainable Development initiative, a forum enabling regular consideration of an issue of huge importance to the region, given the massive annual influx of tourists and the development that has occurred to accommodate them. This initiative is exemplary in terms of the cooperation of the two universities in concert with a variety of governmental and other agencies addressing a central problem facing the Canaries.

The Peer Review Team meetings with various stakeholders in the region during the review produced very little comment and few observations regarding the role or potential role of the universities in the cultural and social realms of the region.

It is encouraging that the extra-mural and continuing education operations of the universities look to address issues of the region. They collaborate extensively with other organisations and with each other, and engage a broad range of resources and knowledge resident in the professional and other communities of the islands. From the perspective of this study they represent a cutting edge test site for community engagement and for widening the mission of the university in operational terms as distinct from rhetorically. In many universities elsewhere in the world the continuing education unit is a locus for experimentation with regard to courses, programmes, alternative delivery modes, etc.

An organised system of experimentation, review and assessment, and adoption into the regular stream of teaching and learning could be of significant value to the institutions, particularly with regard to serving the educational dimensions of regional development. *The Peer Review Team recommends that the two universities review and strengthen arrangements whereby continuing education can serve both as a site for experimentation and innovation and as a mainstream influence in the universities' wider development.*

More broadly *the Peer Review Team recommends that future high-level regional consideration of the future role of the Canaries universities and of a prospective higher education system includes consideration of the wider (social, cultural and environmental) development needs of the region, and the part that the universities might play in this.*

6. CAPACITY BUILDING

6.1. Empowerment for action at the highest level

The Peer Review Team concluded that in the case of the Canary Islands, building the capacity to take and execute decisions in strong partnership was the key to any future development to which the universities might make a strong contribution. This means either creating new systems of communication or better using existing arrangements. We conclude that the solution lies in doing both. Some arrangements can be significantly strengthened and made more productive. But some new consulting, planning and action-taking arrangements are also needed.

One central point on which all are agreed, in a region marked by a high level of competitive separatism, is that all universities should increase communication and collaboration. On one hand, the old and prestigious University of La Laguna (ULL) cannot be left out of the equation as a “cultural island”, an ivory tower in the traditional but pejorative sense. It is too vital a resource. We sensed that the self-evaluation report (SER), for understandable reasons, was possibly less critical of the lower energy displayed by ULL institutionally over taking part in the region’s development than it might have been. On the other hand it was also less generous to the achievements of the “brash upstart” new University Las Palmas de Gran Canaria (ULPGC) from a perspective of trying to contribute to development than would have been possible.

As a Peer Review Team we are confronted with the same requirements of tact and judgement as was the SER. We set out to be honestly and constructively critical. This could enable all partners to move forward together on a basis of well-founded self-confidence, and mutual valuing and respect. There is all but universal consensus that ULL has a great deal to offer, that much that is good already occurs at local operational levels within the University, but that the sense of leadership, management and direction must change sharply if it is to realise its full potential.

If this is a key consideration for building and mobilising capacity it is not the only one. The need goes to the very heart of Canaries society and governance: to the deep divisions between the two main islands against each other, between the two groups of islands that they lead as provinces, and between all seven islands in classic “small-island” internecine competition. The unhelpful competitiveness and duplication occurring between the two universities (see chapter 4 and elsewhere in this Report) is a reflection and a manifestation of that history and culture. The universities are victims but now also perpetrators. It is the view of the Peer Review team that part of the destiny and responsibility of a university is to work within and yet rise above its environment. In this way it may help the process of developing a regional economy and society that can plan and look forward with increasing confidence in a difficult, competitive world.

The Peer Review Team recommends that the region itself as a whole treats capacity building as an urgent requirement. As this task is addressed it needs to involve the universities as talented contributors to the process, but also as main subjects for the process, so that their talents and efforts are better used to help the region. This will benefit the universities themselves at the same time. Building integrative capacity means abandoning some old attitudes and habits, and creating the

channels and means of working together. *The Peer Review Team therefore recommends that the two universities be treated as active partners in the development of this capacity.*

Several features for capacity building are already in place, but not perhaps used as well as they could be. One case of which the PRT was made aware during the visit is the role of the regional Economic and Social Council (CES). This semi-independent body of 18 has a wide membership. Its remit requires it to examine and inform the regional government on policy issues of the government's choosing. It also allows it to examine other subjects which the Council considers important. It is one of several bodies monitoring and publicly reporting on regional trends, presenting data as a basis for intelligent policy making. Another capable body likewise monitoring, analysing and publicising trend data, naturally from a more partisan perspective, is the umbrella employers' federation, CCE.

Absent from CES are the universities themselves. It might be argued that the Council is already too large and complex in terms of interests represented. But if the universities are to contribute strategically to regional development – and to be held accountable in one important place where key regional stakeholders come together to help advise and shape the future – they should be there, as well as working at other professional and technical levels of regional planning with different areas of expertise. Therefore *the Peer Review Team recommends that consideration be given to adding the rectors of the two universities to the membership of CES.* This is not literally possible at present, since CES is the nationally regulated meeting point of trade unions and employer associations. However, experts can be appointed to the CES as individuals, and this device could be used; also *the Spanish government might consider whether some change of regulation affecting CES would now be helpful.* Whatever new mechanisms are found to be necessary, the Canaries already have a potent tool in the CES and other similar organisations that should be used to the full.

Other capacity building arrangements in place at other levels might also be strengthened, such as the Universities' Foundations and Social Councils, to which we turn in a moment. At the highest level however it seems to the Review Team that there is visionary and far-sighted leadership at the regional level in the office of the President of the Autonomous Community and the person of its present incumbent; but that it and he lack the means to give effect to this vision quickly and directly enough for the needs of the Islands. This requires a) widely shared ownership of the vision and b) commitment and confidence to bring it about.

The PRT therefore recommends that the opportunity of this OECD review be seized to develop a strong consensus and a working agenda for action in and for the region. This should clarify the role that the universities should play. This might be done by creating a time-limited Task Force, led by a strong, effective and well respected senior member of the community (the Team can identify at least one very suitable person for such a role) and serviced by an appropriate secretariat and executive arm (for which the Team has an obvious agency in mind).

The Task Force could take the two documents, the region's own *Self-Evaluation Review* and this external *Peer Review Evaluation*, as a starting point, initially holding an open seminar to consider the recommendations. The Task Force would be small, high-powered, and sharply focused on identifying key priorities facing the Canaries. It would consult widely to secure the highest possible level of buy-in and ownership involving all the main public, private and civil society parties and interests. It would create an action plan over perhaps an initial five year period. The Task Force could be time-limited in the first instance but developed into a permanent public standing forum or commission if it proved successful at building capacity with greater transparency and commitment to action than now exist.

All or most of the ideas essential to shape the future are already in the public arena. There is a widely shared view that things cannot be allowed to drift along at too leisurely a pace. The risks that

face the Canaries if it simply proceeds along its present economic trajectory are too great. The difficulty is in bringing them together with a commitment to action.

6.2. Networks and social capital

Political leaders in many countries have adopted the language and some of the ideas written about extensively by social scientists in recent years concerning social capital, and also the slightly related notions of social inclusion and exclusion. The term social capital draws attention to the wealth of opportunity that networks of friends and contacts bring to those rich in such contacts, and conversely the price that is paid by those who lack these connections. There are interesting links also between social capital and access to and use of lifelong learning opportunities.

The downside of social capital is that it can lock people into a small closed circle of friends and contacts who look inward, cutting themselves off from outside influences, ideas and opportunities. This is where it can be a mixed blessing, maybe a net cost to marginalised ethnic minority and other disadvantaged communities, reinforcing a static culture which is conservative rather than open to change.

In the case of the Canaries, the Peer Review Team became aware of a curious aspect of the quality of public life among senior stakeholders whom it met. On the one hand, it seemed, everybody knows everybody, as tends to happen in small stable regions, and indeed in whole nations of the size of, for example, New Zealand – the whole nation feels like one “big village”.

Not only that, but the Team was constantly finding that someone who now played a key role in government or a governmental agency had been, and was probably returning to, a senior position in one of the universities, or *vice versa*. The fact that university personnel are civil servants and can take long periods of leave or secondment, retaining the status of professor and returning maybe years later, means that inside knowledge, understanding and experience of how different institutions and cultures work is very widely shared.

This might appear to represent a high and positive quantum of social capital that would ease decision making and the carrying out of changes; one might expect a shared culture and strong informal networks to be a positive force for the society. Capacity is there. It does not require building. Indeed most important decisions could be (and perhaps are) taken during the frequent and daily comings and goings between the islands’ airport that characterise the lives of those charged with making and carrying out policies.

On the other hand, as has been indicated earlier in this report, the team was surprised by two things: the apparent failure to carry out the ideas and intentions that many people apparently thought to be sensible and timely; and the lack of confidence, even at the very top, that changes could actually be carried through. It seems that the great reservoir of social capital shared by senior members of Canaries society actually serves as more of an inhibitor than a facilitator of change.

Why should this be? To some extent the whole region, as an extreme peripheral region within both Spain and Europe, feels itself to be at a disadvantage – marginalised and vulnerable, as in some ways it certainly is. Here we see the negative side of social capital, turning inward and resistant to outside influences if not to outsiders as such. Secondly, this insularity is replicated and even amplified between the two provinces and between the seven islands. Political power is fragmented and embedded in small communities, each vying to have the same as or more than the others, pulling apart rather than pulling together. For a politician and even for an administrator this is a hazardous context in which to take tough decisions and to say no. Resources are finite. They cannot be multiplied by

seven so that each island has its own complete set of everything. But rationalising resource allocation means saying no to instinctual claims for the same of everything. Saying no may mean losing power.

The third explanation is also obvious. If uncomfortable changes are pushed through from a position of authority one year, and a year later people change positions in the familiar cycle of “musical chairs”, the change-makers may find themselves in distinctly uncomfortable positions. They may be back among colleagues resentful of the changes that they drove through; and some of those who feel resentful may now be in a position to make their lives still less comfortable. Social capital and close informal networks where “everyone knows everyone” are a fact of life, but they appear to represent a main barrier rather than asset to productive and ambitious development in the Canaries.

A possible fourth explanation applying especially to the universities is that the legal framework is rooted in a traditional university model that nobody tries to break. This may be because they think it is not possible, and in fact depends on central government. But nobody seems to be pushing in this direction. The civil servant status and environment represent comfort and security. Why change the governance if our current system can be defended as the “most democratic in the world”?

It is important to set out this analysis. On the surface it may appear unhelpful, since these are deep social forces not amenable to change by law or regulation. On the other hand, recognising the asset as also a liability may go most of the way to resolving it, once its cost to the whole community is seen. The same informal contacts and even “clubbishness” may be used to positive common purpose if there are forums and other ways to enable open consideration of the Canaries’ long-term interests to which all are a party – and of the high risk and cost of not making changes that allow the region to take a firm hold of its own destiny.

This section of the Report contains no recommendations. Its task is to call to attention a major, intangible, and almost unspoken barrier to regional development in which the universities are required to play an unfamiliar and less than easy role. The hope is that identifying and naming the characteristic of this “ultra-peripheral” region will be a basis for releasing the energies and ambitions that are undoubtedly widely available, and actually making them happen. The same source of energy and camaraderie that has a conservative influence today might then be turned to become the vital basis of capacity to plan and steer development – and to engage both of the universities in full and as a higher education system – in its attainment.

In practical terms this mean the regional administration from the President down having the political will, the confidence, and the capacity to act at regional level – creating more integrated transport systems and appropriate tax regimes, connecting the universities with the employment sector, tackling wider and longer term environmental issues, committing to the vital areas and priorities for the future, and generally leading by example in moving the islands from internal competition towards a more collaborative mode.

6.3. Connecting the universities

This section is about capacity building in two respects: mainly about connecting and engaging the universities with the different sectors and stakeholders in Canaries society; but also about connecting them in productive synergy with each other, and with UNED and other institutions in and beyond the region. Although there is overlap, we make some separate observations about the structure and management of the universities in the section that follows.

The two universities appear to be different in many vital respects. Given that this OECD project is about higher education institution’s contribution to regional development, we have the difficulty that

the younger, more technologically oriented institution will naturally appear more suited to such an agenda than a much older and more traditional university in which historic academic values and norms are deeply embedded. There is unquestioning agreement that the older University of La Laguna is a vital and valued asset that the Canaries cannot afford to leave to the side; *it is in the interest of ULL therefore to confront energetically its own choice of futures and the extent and ways to which it puts regional development at the heart of its mission.*

Seen thus, both universities express a belief in engagement with and service to the community of the Canaries, but this intention is more confidently expressed at ULPGC, which sees its fortunes as more inalienably bound up with the Canaries, than does ULL. Here the “universality” of the university tips the balance more in favour of international academic reference. Academic publication in well-known journals no doubt weighs more heavily in staff promotion and reward systems, while work under “third stream” community service carries less weight.

It was remarkable to the Peer Review Team that not one person turned up for the ULL session when academic staff were to meet with us. More generally, the preparation and seriousness with which ULPGC planned and managed the visit spoke volumes about what lay “behind the words on the page”. In other words the history and culture of the two universities still pulls them strongly towards different reference points. Putting regional development at the heart of mission, strategy, resource allocation, accountability and reward systems comes more naturally to ULPGC than to ULL and it is addressing this agenda much more confidently.

There are many ways in which universities attempt to connect with their regions in different countries. In the broadly Anglo-Saxon world these are more developed, and have become central to creating and managing *entrepreneurial universities*. There has been and there remains conflict and anguish about what this means for university autonomy and academic freedom. Broadly speaking, these tendencies are less developed in continental Europe. Among the new EU members formerly in the Soviet Union, dramatic political and economic change has included more dramatic change to higher education provision than among the older EU members. In each of these, including Spain, however, there are pressures to become more entrepreneurial and engaged. In some countries Bologna harmonisation is being used as a means to press change on reluctant universities.

For the Canaries, there is an inescapable national policy context on which we touch below, that frames and constrains what can be done and how quickly. Nevertheless, it is for the Canaries as an autonomous region to determine where it wants its higher education to go, and to achieve this in dialogue with the universities. A well functioning higher education system, as discussed and commended in chapter 4 above, requires both the will and the power to plan and allocate resources, mainly between ULL and ULPGC but also with UNED and indeed other prospective private sector and overseas university provision to the Canaries as well. These are issues that system planners in other OECD countries confront and have to take a position about.

How far do ULL and ULPGC have the will and the capacity already to work more fully for regional development? What enablers and what sanctions are required to bring them together as part of a purposeful development *system*, without damaging their capacity to evolve as strong, highly regarded universities that value academic endeavour and bring credit and resources to the region from around the world? We make several specific recommendations, and identify some of the real or imagined obstacles that must be negotiated to turn this aspiration into a vibrant system.

In order for the universities to connect powerfully and continuously with their society, the PRT recommends that the government of the autonomous region clearly commit to creating and supporting a higher education system for the Canaries, and develops this system to a realistic but also ambitious

timetable, involving the leadership of both ULL and ULPGC in the dialogue and decision making at all points. This will undoubtedly require more rationalisation of resources, roles and responsibilities between the two universities, and much greater capacity for students as well as staff to work at and with both places, for example taking specialisations from the other university within their degree programme. This rational collaborative development should include UNED in respect of facilities and outreach in each island and especially to those most remote and least well served.

The PRT further recommends that both universities be represented, and required to contribute actively, to present and new autonomous region policy forums wherein the future of the regions is debated, planned and carried out. These recommendations, if acted on, will create the context for effective university engagement at a regional level, such that both main institutions can manage their affairs within a clear, purposeful structure.

This new environment, both enabling and directive, would need to include clear arrangements for allocating resources in relation to regional policy priorities, and for auditing performance against these priorities, with more specific objectives and even numerical targets. Universities are full of intelligent creative people who find ways of optimising outcomes from new opportunities. So long as morale is good and ambitions are high, this quality tends to produce a natural equilibrium between individuals and groups of staff achieving personal ambitions and job satisfaction, and the universities themselves contributing well and being highly valued for what they do for their society. *The PRT recommends that the Canaries government develop a transparent system for funding and rewarding the universities that will enable and require them to work for regional development priorities.*

There are many ways in which the direction and work of universities can be channelled to contribute to economic, social and civic development. This OECD project provides an opportunity to compare practical examples, and see which most fit the special circumstances of the Canaries, from among science, technology and business parks, incubators, industry and other clusters, joint investment in co-owned R&D, and so forth. We do not specify in detail what would most fit the circumstances of this region. This will follow and flow out of the prior capacity building proposed above, which will enable the region, including its universities, to agree priorities and then determine the best mechanisms to achieve these.

Just one example, featured in a parallel study within this OECD project, may be mentioned here as especially relevant and potentially significant for the Canaries, given the very public story of competitiveness rather than collaboration in the common wider good. The North-East region of England has a highly successful and widely acclaimed joint *Knowledge House* through which the (five) universities of the region make known through a shared and neutral “front door” what services are available and broker requests for help from universities to the appropriate places. If ULL and ULPGC were to act similarly this would signal a change towards service and collaboration working together, that might send out an important message inside both universities and to the region at large. *The Peer Review Team therefore recommends that the two universities in the Canaries examine the case Knowledge House and other similar examples, and create a similar joint brokerage service.*

The region does not however begin with a blank page. There are many successful “local” examples of collaboration between individuals and sections of both universities with stakeholders, as partners from the wider community. *The PRT recommends that a simple, sharply focused census be taken of recent and current experiences of university partnerships for development (whether with public, private or third sector bodies) in the Canaries.* This will give a benchmark against which to measure progress. It will also provide useful exemplars of how things work in this region, and perhaps answer the concerns of sceptics who may say that such things are not possible because this “ultra-peripheral region” is unique, or that collaboration between the two universities is not possible.

Other existing assets of the Canaries' universities are their *Social Councils* and the *University Foundations*. The first is intended to involve stakeholders from across the wider community in the universities' development and direction, the second to serve as a means whereby resources can be generated and channelled into agreed areas, with a wider degree of entrepreneurialism than mainstream administrative rules and traditions allow. As explained in chapter 4, the university in the Canaries, and perhaps in Spanish higher education more generally, is not traditionally entrepreneurial, being managed under a State tradition in which rules and curricula are determined centrally and academic staff belong to the government service.

Although they are separable concepts, in practice engagement and entrepreneurialism (or being enterprising) almost inevitably go together. Moreover, the pressure that universities are under in mass or universal higher education systems throughout the advanced world requires them significantly to diversify their sources of income, and to manage it in a much more professional, and indeed commercial, way. In fact, despite this tradition, the level of freedom is higher than people think. True, there are many rules, but there is also room to act. Apart from excessive rules, the problem is that most leaders are not entrepreneurial at all. In the case of the Canaries the difference between the two universities is very striking, yet both have the same legal structure.

The two University Foundations appear to have the necessary ambition and the potential to play a key role in capacity development, engagement and income generation. They also connect with the Social Councils, and they need to connect strongly with internal business finance and other administrative units within each university. Moreover they appear to be able to cooperate with each other in ways that the universities' main leaderships and administrations find difficult. *The PRT recommends that each university reviews the functioning and performance of its Foundation, including its relations with university administration and the Social Council, with a view to strengthening the capacity to initiate and to deliver projects.* In particular the Foundations need clarity and control over their financial affairs; we found what appeared to be high levels of ambiguity and an absence of clear knowledge about business aspects of the work, with respect to the ULL Foundation.

One key aspect of capacity building for engagement concerns the governance of universities. Given its importance, we treat this separately in the next session. Before moving to this, let us note some possible objections, delaying devices, or bolt holes, that might cause purposeful capacity building to stumble.

One is the argument that the Canaries and its universities are so different – and indeed disadvantaged by remoteness – that these things are not possible here. In fact the argument “different and unique” is almost a watchword for all universities, and special pleading is commonplace in many regions, not only in seeking advantage against other regions with central government. Global forces are universal, relentless, and take no account of special pleading.

Secondly there is the concern that planning a system involves such interference that universities lose their distinct character as autonomous institutions protecting academic freedom. In fact Spanish universities promise to move further out of the orbit of government under European and global pressures, but at the price of being more businesslike and entrepreneurial, less dependent on one paymaster. The protection of freedom to explore and express ideas is essential for a healthy university and society. Spain with its memories of dictatorship knows this as well as anyone. On the other hand it abuses the term to use it to fend off accountability and audit in a publicly funded institution. Universities need robust – and transparent – financial management systems (see below). Institutional autonomy does not extend to non-accountability, and academic freedom does not mean being paid for whatever teaching and research takes one's fancy.

A third reservation is that engaging with the region's needs may cost the universities their international standing and lower the quality of their research. This is a powerful argument in a time of competitive world league tables based mainly on prestigious publication. The fact that Spanish universities work in a language other than the dominant academic vehicle – English – extracts an unavoidable toll. But there are also powerful and cogent arguments about the nature of knowledge and knowledge making in modern complex societies which can be placed alongside the older Boyer typology cited in chapter 4, to make a case for anchoring one's reputation and future much more in the kind of research or knowledge-production now widely referred to as Mode Two.

Finally, there are constitutional realities about power and authority. The central government retains control of key framing elements of Spanish higher education, and this is, and can be used as, a valid reason why change is difficult. *The Peer Review Team however recommends that the autonomous region administration, together with its universities, press ahead with blueprints for development, and where these are barred by national law or regulation, bring this clearly to the attention of the central government.* It may well be that others in the higher education policy community will speak with a similar voice, and that well reasoned change in curriculum, examinations, regulations to do with finance and Social Councils etc., can be altered by quite speedy due by process.

6.4. Internal arrangements and the management of change

We have noted above some key requirements on the universities to be able to move more confidently to engagement with the region for its development. We were impressed by the highly structured and purposeful presentation to PRT by the top management of ULPGC on our visit. This set out fully the financial and wider systems for managing business and budgets, and for monitoring and regulating progress, reporting and accounting, together with internal review and an apparent capacity to study the data and improve on the basis of this feedback.

If such systems exist at ULL they were not made known to PRT. The reports of relative financial performance (ULPGC in healthy surplus after working off a significant debt over recent years, ULL in deepening deficit and at the time of the visit in very public direct conflict with the regional government in its quest for further subvention) tend to confirm our view that *ULL needs to develop modern and reliable IT-based financial and management information systems to enable it to operate openly, confidently and professionally* in the more businesslike world which universities now have to occupy.

We have also referred above to the Social Councils that on the face of it should be the most central means whereby the universities connect with their environment and other stakeholders exercise a valid interest in the direction and even the management of their universities. In more and more other countries and universities the Council, with a majority of outside or lay members, has become a key means of ensuring university responsiveness and accountability to the societies that support them. Issues of academic freedom and interference are in the main dealt with in mature and non-antagonistic ways.

On paper the Spanish Social Councils look to have an important role, but in practice we understand that generally, as in the Canaries, their practical value is low. We have the impression that they are not well serviced by the administrations. The Councils, buried in paperwork, cannot see the wood for the trees; their role may therefore be largely formal rather than strategic. *PRT recommends that the Government of the Canaries initiate a review of the working of the Social Councils, looking also at the experience of other Spanish universities but also at models of university governance elsewhere, with a view to giving the Councils the status and authority required for effective*

partnership in governance. If this leads to a need for legislative change at national level, this can be addressed once the case is made, based on evidence and a clear rationale.

One other major change appears necessary and takes the form of a further recommendation in this Report. As the Team looked into the dynamics of university management and the often fraught relations with government especially over resource allocation and accountability, it became clear that the role of the Rector as chief executive is crucial and problematic. The Rector has both too much power and too little. As an elected *primus inter pares* of the academic community he or she stands behind academic autonomy as a bar to effective higher education system development, seen as interference in university affairs. The Rector also has the ability to use the media to make his/her case and to influence the regional government. However, Rectors are weakened by their limited-term elective character. It is unrealistic to expect unpopular decisions necessary for change from a Rector, who will probably return to the ranks of the professoriate, to those who elected him or her. (The same problem writ large makes the leadership role of President difficult in a community as fragmented as this region of seven islands.) It appears to PRT that the balance between freedom or democracy and professionalism and accountability is tilted too far towards the continental European tradition for these times.

PRT recommends that further consideration is given to the feasibility that in future the Rector in the Canary universities be appointed, and not elected. This requires a search and selection committee made up of appropriate university and other stakeholders. The details of this approach are well tested and can be adopted and adapted with ease from a number of other systems. The difficulty arises not in creating a rational model, but in biting the bullet within the Canaries, and then securing the change required at national level to make this possible. In realising that this is difficult and controversial, PRT has no hesitation about making the recommendation. Before that, however, this also requires a change of the law governing higher education on the part of central government. *The Peer Review Team therefore recommends that as a prior step the Government of the Canaries press the central government to change the way that universities are governed in this and other respects raised in this Report.*

This is not the place to specify in detail all the other internal changes required for both universities to be enabled to engage more confidently and fully with the future development of the Canary community. For example, we did not look in detail at the way that internal mechanisms connect with and support the work of the Foundations, except to note that the link appeared closer and stronger in ULPGC than at ULL. Indeed, in the hope that it is not too invidious, *PRT recommends that in terms of modern information-based management systems, joint initiatives in which the two universities “share and compare” should now be taken.*

These would benefit both, although the initial flow of experience and gain would for natural reasons be from ULPGC to ULL. Such joint endeavour, publicly modelling cooperation and common purpose, especially initially in the engagement and outreach areas of the work, will encourage fuller collaboration down the line, and – equally or more important – tell potential partners in all sectors that both institutions are serious about putting wasteful rivalries and a painful history behind them. In this way they become part of the solution rather than part of the problem for the whole region.

6.5. Towards an integrated learning region

In summary, an increasingly urgent need is now seen by many stakeholders across many sectors in the Canary autonomous region: to be able to create more effectively a vision for the medium and long term future, and to be able to produce confident priority-setting, planning and management. This must involve the active participation as well as consent of all part of the Canaries “pulling together”.

Without this, the risks that threaten the Canaries, economically, environmentally, and then socially, are unacceptably high. Without such purpose and collaboration the potential of the region, including its location – “ultra-peripheral” from one perspective, but a vital hub for the future from a different geopolitical perspective from another – cannot be realised.

There is the capacity, as the President of the autonomous region, in an extended session, made clear to us, for the whole region to become a more strongly integrated, networked, proactive learning region. Internal communications and the movement of people and especially ideas can be much improved. The heavy dependence on tourism and allied construction work can be tempered by change of thinking and behaviour already well under way in this forward-looking sector, while other “new economy” prospects based in knowledge can be initiated and trialled.

It is vital for the Canaries to gain skill and confidence as a region by being successful. The notion of a learning region, identifying and building on the resources, distinctive or unique features, and the indigenous capability and wisdom of its people, is becoming commonplace as national governments wrestle with impossible puzzles in an unstable global environment. The new power of modern ICT (information and communication technology) wedded to older skills of research and inquiry, provide the means to turn threats into opportunities, and to base policies in good data well analysed and well used.

It is evident that universities, with their wealth of highly qualified and talented people, should be engines for the development of learning regions. ULL and ULPGC together (but separately) contribute much already. If the separatism and competition that characterise the Canaries and of which the universities are an integral part can be turned around, the future for this remote island region is good.

What might help to change the all-pervasive and rather debilitating doubt and scepticism that contributes to a culture of conservatism and reluctance to think big and look far ahead? One answer is to learn more together by doing more together. Cooperating in a few ambitious yet potentially manageable and fruitful big regional projects could assist a beneficial spiral of further development through cooperation.

The Canaries and ULL are justly proud of an astronomy institute which is a European venture located in this region. It may be timely to look for other big collaborative ventures that will attract enthusiastic support and resources from Europe, Spain and different parties including the private sector within and beyond the region, to widen the repertoire of successful world-class ventures for which the Canaries become more famous. Examples suggested to the Team during its visit included major studies of desertification, and of alternative energy sources, as well as ventures to do with new forms of tourism itself, environmental management and the management of water. *PRT recommends that the region engage in forum-style consideration of key issues such as these that matter globally as well as locally, with a view to firmly pursuing two or three such ventures that locate universities' capacities at the heart of the prospect.*

6.6. The national level and beyond

This chapter concludes with a brief word about the national government and the wider world beyond. It would be naïve to pretend that there are no constraints from the central administration in Madrid. This sets the framework and rules for higher education. It would be foolish however not to embark on the path of planning a vigorous higher education *system* for the autonomous region because of these constraints. The Spanish system, like other systems, is changing rapidly under global and European pressures. Laws and regulations can and will continue to change. It will be better if these changes are informed by well thought through needs at regional level, and build in the necessary

degrees of freedom and diversity to allow different parts of a large and increasingly decentralised country to develop at different rates and in different ways. The imperative for change from Brussels and the global economy should be counterbalanced by local pressures from within.

The Peer Review Team therefore recommends that the administration and universities of the Canaries develop a common understanding of their future needs, and that both parties sustain dialogue with the Spanish government and the several ministries involved, as well as with the broader higher education policy community, to secure the changes of law and regulation that prove to be necessary.

Finally, while the Peninsula seems a long way, and even somewhat alien to many in the Canaries, new ICT and the new world economy make not just Spain but much of the world immediate and close. In these circumstances the Canaries – government, society and universities – might make a more deliberate attempt to engage directly with regions and prospects for business in the widest sense. This may be in other parts of Europe, of which Spain is part, with Latin America where ties of history and language make partnership easier, but also with less familiar parts of the world including neighbouring Africa as well as North America, and the Asian region as well as similar scale island communities as in the Caribbean and the Pacific. The OECD project of which this Review Report is part provides one good opportunity for such exploration and exchange.

7. CONCLUSIONS AND RECOMMENDATIONS

In this concluding chapter we summarise our overall impressions and understanding of the situation in the Canaries with respect to the role of the two universities, along with UNED, in contributing to regional development.

We then draw together a number of specific recommendations that appear scattered through the text of earlier chapters in the context of the discussion and analysis where the rationale is set out. The summary of recommendations is brought together here for the convenience of different relevant parties and levels, but the full text and context are needed to understand their rationale. We order our recommendations starting with the universities themselves and moving to the crucial regional level, before adding a small number of recommendations to the level of the national government of Spain. For the Spanish government it would be helpful to consider this report in conjunction with the parallel report on the Valencia region.

7.1. General conclusions

This is a critical time for the Canaries. The increasing autonomy of Spanish regions gives both opportunity and responsibility to provide leadership and direction, and to turn aspirations into hard reality. The renewal of special status as an ultra-peripheral region within the European Community provides an opportunity for European level support and a distinctive identity, while the Bologna agreement provides necessity and leverage for change in higher education that can be used to advantage.

In many ways the Canaries is doing very well on the back of a long boom in tourism and the related construction industry. It has made a great recovery from the mid-twentieth century period of stagnation and population loss, as a result of new tourism based on rising mainly European affluence and lower fares. On the other hand there is consensus that the present heavy reliance on tourism and related construction in its current form cannot long continue. Construction is already reined in for reasons of sustainability: further indiscriminate building will destroy the asset and infrastructure that is the basis of current prosperity, and tourism itself may be at risk from rising fuel costs and new cheaper competition. It is necessary to vary and alter the market position of the tourist industry, but also at the same time to diversify the economic and employment base.

Higher education has an essential role to play in this. This means that the different providers must work much more effectively, both separately and together as a system. ULL in particular but also each element must orient its identity, mission, priorities and allocation of resources to support regional development, social and environmental as well as specifically economic. This implies clear strong institutional leadership, and the development of expertise as well as robust IT systems for managing in an entrepreneurial way in a new environment.

Changes of attitude and academic culture are required. It is the task of the universities' leadership to enable this cultural and organisational change, to ensure that academic autonomy is protected but not used as an excuse to be unresponsive to society, and to lead colleagues to see that international stature can be enhanced rather than threatened by serving the needs of the region.

These things are only likely to take place if there is a firm lead and direction from the regional government in establishing a higher education plan and system, and in creating and requiring funding mechanisms and reward systems (institutional and individual) that align with these purposes and needs. On the one hand the Canaries government must press and require the universities (more particularly ULL) to adapt in this way. On the other it, together with other regional administrations, must lobby and persuade the national government to make the required changes to law and regulation that will allow resources to be used flexibly to meet the needs of different regions.

No less challenging is the almost proverbial insularity of the region. There is a three-way challenge: upwards with the central government; locally with the universities; and throughout this island region in terms of its capacity to pull together in a highly competitive global economy. Ultra-peripheral status as an autonomous region has been used negatively to stress a disadvantage and impoverishment that is not in the main borne out by the economic data. The attitude to and even the use of the term “the peninsula” betrays a sense of deprivation that could be a bar to confident development. It is exacerbated by the typical “small island” insularity which pits the seven islands, and their two provinces and capitals, against each other in wasteful and jealously inward-facing ways.

The same marginal status can be seen quite differently in terms of being an Atlantic axis or hub: not only between Spain – and beyond that Europe – and the Americas, South, Central and even North, but also now as a strategic base and *entrepôt* with West Africa. Over the coming decades that region will gain in significance. The Canaries provides a natural location for public and private sector bodies to do business in Africa – including the business of intergovernmental agencies such as the UN family of organisations, and the World Bank.

The long-term thinking well expressed by the Canaries President includes this redefining vision about geography connected to the creation of an inter-islands communications highway to connect up to common advantage. The natural assets of climate and beauty together with the new ICT that enables much global business to be done freely almost anywhere offers another kind of opportunity freed of “the tyranny of distance”.

The onus sits with the regional government and its agencies to work together, taking some necessary political risks and bringing the private sector as well as the different arms of government into more effective collaboration. In this setting the universities have an essential role as knowledge makers. They must also become highly skilled partners and knowledge users: not only in research and R&D but in terms of equipping the people of the Canaries to gain the knowledge and skills that the older refurbished sectors of tourism and construction, and prospective new economic sectors and activities, offer. They should also be active parties – institutionally and through individual experts – in ongoing regional forum-type brainstorming, think-tanking and project development facilitated by government.

If the regional government is clear in its message and stern in its purpose, requirements and accountabilities, the region and its universities can turn the Canaries’ distinctive and sometimes unique features to advantage, with world status in some niches of special advantage alongside the present success with astronomy, and a capacity to go on developing and learning as an attractive sustainable region. There is a great deal of devil in the detail of what has to follow, such as working with many small and very small businesses across the service sector, and co-investing wisely in well chosen high profile initiatives. The other OECD regions involved in this project provide practical examples of how such problems can be tackled, once the political will is there.

7.2. Recommendations to the universities

The Peer Review Team recommends

- That the Canary universities take advantage of the world of new possibilities, behave proactively and become agents for such change. (ch.3)
- That the universities link their current and planned research capabilities to the strategic priorities of the region. (ch.3)
- That efforts are made to increase the applied character of research in the Canary universities. Institutional and legal facilities for developing this should be considered seriously. (ch.3)
- That policies promoting innovation, and regulating and protecting intellectual property at institutional level are developed and implemented. (ch.3)
- That collaboration between universities and tourism, the most important economic sector of the region, is strengthened. (ch.3)
- That, with regard to teaching and learning serving regional development, a thorough and disciplined analysis is carried out, using criteria such as those derived from Boyer, for the Canary region and its universities. (ch.4)
- That each university reviews the functioning and performance of its Foundation, including its relations with university administration and the Social Council, with a view to strengthening the capacity to initiate and to deliver projects. (ch.6)
- That the Social Councils are developed as important and effective means for the engagement of the universities with their communities, and the national government make adjustments necessary to enable this. This requires:
 - Disciplined analyses that will provide the kinds of information required.
 - Other forms of linkage with the various stakeholders so that communications and mutual confidence building is achieved.
 - Devices such as joint task forces to address directly analysis of the economy, its labour requirements, and the ways in which the university can offer education and training that advances this agenda. (ch.4)
- That ULL confronts its own choice of futures and the extent and ways to which it puts regional development at the heart of its mission. (ch.6)
- That the partnerships with UNED and between the two universities seek a more resource-effective model than the autonomous one that now characterises the region. (ch.4)
- That a simple, sharply focused census is taken of recent and current experiences of university partnerships for development, whether with public, private or third sector bodies, in the

Canaries. (ch.6) (This recommendation is addressed to the region but the universities might with advantage take the initiative.)

- That a criteria-based programme of student recruitment is launched. Students should be prepared for employment within their programmes of studies. There should be electives or concentrations in areas such as entrepreneurship, languages and hospitality; these may even form a requirement in programmes of study. (ch.4)
- That a business approach is considered in designing study programmes to best serve regional development, and that the universities engage the business and other communities to define the attributes and skills that the graduates must have. (ch.4)
- That the universities give consideration to the establishment of a centre of excellence in entrepreneurial studies and development. (ch.4)
- That the universities explore the possible opportunity and benefit to be realised by recruiting students from the peninsula and from Latin America, and that more inter-institutional agreements be struck with universities in targeted regions, both to supply students for the region and to enrich the educational experience of students from the Canary Islands (ch.4)
- That the universities give consideration to partnerships with institutions from non-Spanish-speaking countries, creating joint venture programmes to serve this purpose. (ch.4)
- The universities review and strengthen arrangements whereby continuing education can serve both as a site for experimentation and innovation and as a mainstream influence in the universities' wider development. (ch.4)
- That the role of OTRIs and foundations are redefined, improving the transparency of their results, and improving coordination between the different bodies in charge of transferring university knowledge. (ch.3)
- That the universities examine the case "Knowledge House" and other similar examples, and create a similar joint brokerage service. (ch.6)
- That ULL develops reliable modern IT-based financial and management information systems to enable it to operate openly, confidently and professionally. (ch.6)
- That in terms of modern information-based management systems, joint initiatives are taken in which the two universities "share and compare". (ch.6)
- That the universities consider developing a joint higher education institutional research unit. (ch.6)
- That in future the Rector in the Canary Islands universities be appointed, and not elected. (see also 7.4 below) (ch.6)

7.3. Recommendations to the region

The region is the centrepiece and focus of the whole OECD project. For development to proceed purposefully in the Canary Islands Autonomous Region, the regional government needs to take a strong and confident lead, despite the historic and still live divisions and the political risks that taking a firm lead

in a divisive context entails. The region has far to go in developing focus and defining a strategy. On the other hand it shares with several other regions difficulties both of internal competition within the region and of a national legal and political framework and context that require change by the central government.

7.3.1. The region and central government

The Peer Review Team recommends:

- That the regional administration and the universities develop a common understanding of their future needs, and that both parties sustain dialogue with the Spanish government and the several ministries involved, as well as with the broader higher education policy community, to secure the changes of law and regulation that prove to be necessary. (ch.6)
- That the Government of the Canaries should press the central government to change the way that universities are governed in relation to the appointment of the rector, and in other respects raised in this Report. (ch.6)
- That the autonomous regional administration, together with its universities, press ahead with blueprints for development, and where these are barred by national law or regulation, bring this clearly to the attention of the national government. (ch.6)

7.3.2. Regional capacity building and the role of the universities

The Peer Review Team recommends:

- That the region treats capacity building as an urgent requirement, that the two universities are treated as active partners in the development of this capacity, and that consideration is given to adding the university rectors to the CES. (ch.6)
- That the universities and the business sector develop strong links for mutual benefit and for the benefit of the whole region, working together to diversify the economy especially in those technological areas where the Canaries have a comparative advantage.(ch.3)
- That the universities and the business sector, with the help of the government, establish a forum for developing, first a mutual understanding, and secondly, strong relationships between universities and the business sector. (ch.3)
- That in order to foster collaboration for interdisciplinary and inter-institutional research and teaching with a regional dimension the government of the Canaries develops an incentive system to foster collaboration between institutions and individuals at regional level. (ch.3)
- That the opportunity of this OECD review is seized to develop a strong consensus and a working agenda for action in and for the region. This might be done by creating a time-limited Task Force led by a strong, effective and well respected senior member of the community and serviced by an appropriate secretariat and executive arm. The Task Force could take the region's Self-Evaluation Report and this Peer Review Report, as a starting point, initially holding an open seminar to consider the recommendations. It could be time-limited in the first instance, but developed into a permanent public standing forum or commission if it proved successful at building capacity with greater transparency and commitment to action than now exist. (ch.6)

- That both universities are represented, and required to contribute actively to present and new autonomous region policy forums wherein the future of the regions is debated, planned and carried out. (ch.6)
- That this new policy and a new funding model is developed and implemented in agreement with universities and research centres. The policy should be a tool for developing research related to regional development. Apart from using more efficient tools for promoting research, more private and public financial effort in research and innovation is also necessary as part of a long-term strategy for regional development.(ch.3)
- That a scientific and innovation regional policy is designed for the long term, involving all the relevant actors and that better coordination is exercised among related state government agencies in the areas of education, science, technology, and innovation in order to avoid perceived duplications in their scope, activities and use of resources. (ch.3)
- That new science and technology parks are established. (ch.3)
- That the President of the Canaries initiates a review of the working of the Social Councils, looking at the experience of other Spanish universities but also at models of university governance elsewhere, with a view to giving the Councils the status and authority required for effective partnership in governance. (ch.3)

7.3.3. A higher education system

The Peer Review Team recommends:

- That the government of the autonomous region clearly commits to creating and supporting a higher education system for the Canaries, developing this system to a realistic but also ambitious timetable that involves the leadership of both ULL and ULPGC in the dialogue and decision making at all points (ch.6) and, further, that the region establishes a process for the careful consideration of this issue, and seeks a model that optimises the resources required for the effective delivery of research, teaching and service to the Canaries. (ch.4)
- That the Canaries government develops a transparent system for funding and rewarding the universities that will enable and require them to work for regional development priorities. The recently created and still evolving New Zealand model, which is funding universities according to negotiated and agreed institutional profiles of work, might be considered as a possible model. (ch.6)
- That the President of the Canaries, consulting with the rectors of the two universities and representatives of the major economic, cultural and social organisations of the region, establishes a formal initiative to address rigorously the pros and cons, and the ways and means, for establishing a regional system of higher education. (ch.4)
- That current, individual incentives for research are used in a more efficient way to improve basic research, and especially regional development activities. (ch.3)
- That this review includes directly the Universidad Nacional de Educacion a Distancia (UNED), currently seen as a competitor but potentially a valuable ally, particularly in the delivery of instruction to physically remote regions and to persons engaged in busy lifestyles

that limit options such as full-time attendance or even physical attendance at a campus or centre. (ch.4)

- That a plan is developed for disseminating what the Canary universities do, to strengthen relationships with the society. (ch.3)

7.3.4. Region-led institutional development

The Peer Review Team recommends:

- That the President of the Canary initiates a review of the working of the Social Councils, looking at the experience of other Spanish universities but also at models of university governance elsewhere, with a view to giving the Councils the status and authority required for effective partnership in governance. (ch.6)
- That in future the Rector in the Canary universities is appointed, and not elected. Probably only the President of the Canary can take such an initiative. (ch.6)
- That a disciplined and discipline-based review of the programme and course offerings of the universities and UNED is initiated. (ch.4) This review should look at:
 - The suitability of programmes and offerings for the requirements of tertiary education in the global context, in terms of quality and appropriateness.
 - The primary needs of the region for highly educated people.
 - The disciplinary and interdisciplinary programmes required for best serving the regional development of the Canary.
 - Redundancies and gaps in the offering of the institutions vis-à-vis demand.
 - The forms or means by which such instruction should be delivered.
 - The effectiveness in terms of access provided to segments of the Canary population, including those located remotely from the two main campuses and those outside the ages of the traditional university student cohort existing faculty resident in the universities, and the gaps and redundancies inherent therein. (ch.4)
- That a simple, sharply focused census of recent and current experiences of university partnerships for development is carried out (whether with public, private or third sector bodies) in the Canary. (ch.6)
- That the region engages in forum-style consideration of key issues that matter globally as well as locally, with a view to firmly pursuing two or three such ventures that locate universities' capacities at the heart of the prospect. (ch.6)

7.3.5. OECD review follow-up

The Peer Review Team recommends:

- That those involved with this review undertake joint efforts with those involved in the parallel study in Valencia, in further disseminating the results and using the two projects as a basis for discussions at a national level. (ch.1)
- That regional dissemination of the results of the review is pursued within the Canary autonomous region. (ch.1)

7.4. Recommendations to the central government

The Peer Review Team recommends:

- That the Spanish government considers what changes in law and regulation are required centrally in order to allow a more flexible, innovative and developmental approach to a regional higher education system, such as is proposed in this Report, to proceed effectively. (ch.4)
- That the Spanish government considers whether some change of regulation affecting CES would be helpful. (ch.6)

The following recommendations addressed to the region are also directly relevant to the national Government of Spain. The Peer Review Team recommends

- That those involved with this review should undertake joint efforts with those involved in the parallel study in Valencia, in further disseminating the results of this project, and using the two projects as a basis for discussions at a national level. (ch.1)
- That the regional administration and the universities of the Canary develop a common understanding of their future needs and sustain a dialogue with the Spanish government and the several ministries involved, as well as with the broader higher education policy community, to secure the changes of law and regulation that prove to be necessary. (ch.6)
- That the autonomous regional administration, together with the universities, should press ahead with blueprints for development, and where these are barred by national law or regulation, bring this clearly to the attention of the national government. (ch 6)

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APPENDIX 1. THE OECD PEER REVIEW TEAM

Lead Evaluator

Chris Duke is Director, Higher Education, for NIACE and Honorary Professor of Lifelong Learning at Leicester and Stirling in the United Kingdom, and Professor of Regional Partnerships and Learning at RMIT in Australia. He has worked at the Universities of Greenwich and Leeds, as founding Director of Continuing Education at the Australian National University, Foundation Professor Continuing Education and, Pro-Vice-Chancellor at the University of Warwick, President of the University of Western Sydney Nepean, Professor of Lifelong Learning, University of Auckland, and Director of Community and Regional Partnership at RMIT. He has worked for many years with the OECD and other international organisations, and published widely on higher education, organisation behaviour and change, the role of education in development, recurrent education and lifelong learning, equity and poverty reduction issues, and sustainable development. He is Executive Officer of the Pascal International Observatory on Learning City Regions.

International Expert

Walter Uegama is consultant in a variety of international organisations and higher education institutions. He has held different academic and administrative posts in higher education institutions in Canada, including Associate Vice President of Continuing Studies at the University of British Columbia, Dean of Adult Education at University of Windsor in Ontario and Director of University Degree Programs and Adult Basic Education Programmes at the Open Learning Institute in British Columbia. Recently he has served as Senior Consultant to the Commonwealth of Learning (COL) for the development of their Commonwealth Executive Master of Business/Public Administration (CEMBA/CEMPA) which initially was offered in four countries in south Asia and later introduced to several African countries. He also has been consultant with the University of the South Pacific (USP) in the Fiji Islands, the Consortium for North American Higher Education Collaboration (CONAHEC) and the Autonomous University of San Luis Potosí in Mexico. He has a wide experience and interest in distance education and organisation and management of higher education institutions. He studied a doctoral degree in educational administration at University of Oregon, an MBA from University of California, Berkeley and the Bachelor of Commerce from University of British Columbia.

National Expert

Jose Ginés Mora-Ruiz is Director of the Centre for Higher Education Management (CEGES) at the Technical University of Valencia (UPV). He has a degree in Physics and a doctorate in Economics. Currently he serves as President of the EAIR (the European Higher education Society), and Deputy-Chair of the Governing Board of the Institutional Higher Education Programme (IMHE) of the OECD, and is a former member of the Steering Committee of the European Network for Quality Assurance (ENQA). He is associate editor of Tertiary Education and Management and member of the Editorial Boards of Higher Education Policy and Higher Education Management and Policy, and former Joint Editor of the European Journal of Education. His research is focused on Labour Market, Higher Education Management and Policies and Quality Assurance. He is author of more than two hundred publications on these subjects and he has delivered speeches in more than two hundred and eighty

institutions in thirty two countries. He has worked as adviser for higher education matters for many governments and international agencies. Currently, he is the responsible of the Commission for Quality Assessment and Accreditation in the Regional Government of Valencia and adviser of the European Commission for developing the Lisbon Strategy in Higher Education.

Team Coordinator

Francisco Marmolejo-Cervantes has served as executive director of the Consortium for North American Higher Education Collaboration (CONAHEC) at the University of Arizona since 1995. He holds an M.B.A. from UASLP and has conducted doctoral studies at UNAM. Previously an American Council on Education fellow at the University of Massachusetts-Amherst, he was vice president for administration and finance and vice president for academic affairs at the Universidad de las Américas in Mexico City. Marmolejo consults for Mexican and South American universities and has consulted for the Mexican Ministry of Education (SEP) on issues related to administration and international initiatives. He serves on the external advisory board of the Universidad Autónoma de Nuevo León (UANL), the Universidad Autónoma de San Luis Potosí (UASLP) and the Mexican Association for International Education. During the academic year 2005-2006, while on sabbatical leave, he has collaborated as an international consultant at the Organisation for Economic and Co-operation Development (OECD), Programme on Institutional Management in Higher Education (IMHE), based in Paris.

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APPENDIX 3. PROGRAMME OF THE REVIEW VISIT

OECD Review Visit to the Canary Islands Region, 16-21 April 2006

Sunday 16 April

18:30-21:00 Review Team private meeting
Santa Cruz de Tenerife

Monday 17 April – Activities in Santa Cruz de Tenerife

08:00-09:00 *Nestor V. Torres-Darias*, Director, ACECAU, and Regional Coordinator for the OECD Project

09:00-10:30 Leadership of the University of La Laguna (ULL)
Ángel Gutiérrez-Navarro, Rector
Francisco Calero-García, Director of Administration
Carmen Évora, Vice Rector for Research and Technological Development
María Rosario Alonso, Vice Rector for Planning and University Infrastructure
Adriana Martín-Cáceres, Vice Rector for Academic Staff Affairs
Roberto Rodríguez, Vice Rector for Student Affairs

10:30-12:00 Regional Coordination Team (members of the Regional Advisory Committee and authors of the Self-Evaluation Report)
Julio Brito-Santana, Director, Regional Office of Science, Technology and Innovation (OCTI)
Jesús Burgos-Martín, Gerente, Instituto de Astrofísica de Canarias (IAC)
José Antonio Álvarez, Professor, Univ La Laguna (ULL)
José Luis Rivero-Ceballos, President, Canary Islands' Social and Economic Council (CES)
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Elisa I. de León-Alonso, Researcher, IPNA-CSIC
Inmaculada García-Rodríguez, Technician, Canarian Womens Institute (ICM)
Alma Cruz-Díez, Business Innovation Department Head, ITC

12:30-14:00 Representatives from research institutions
Teresa González de la Fe, Director, Political and Social Sciences Institute, ULL
Victor S. Martín, Director IUBO, ULL
Ricardo Trujillo, Director and General Manager, University-Business Foundation

- 16:00-17:30 Academic staff of the Universidad de La Laguna
This meeting was cancelled due to the fact that nobody showed up
- 17:30-19:00 ULL's Social Council and ULL's University-Business Foundation
María Yolanda Bethencourt-Cejas, Secretary, Social Council
Miguel Pérez-Gavera, Member, Social Council
Mariano Vega-Luque, Member, Social Council
Josefa García-Moreno, Member, Social Council
Airam García-Pérez, Member, Social Council
Ricardo Trujillo, Director, Director and General Manager, University-Business Foundation, ULL
- 21:00 Welcoming Dinner

Tuesday 18 April – Activities in Santa Cruz de Tenerife

- 09:00-10:30 Representatives from the business sector
Vicente Dorta-Antequera, Director, Santa Cruz de Tenerife Chamber of Commerce
Juan Ignacio Pérez-Nievas Hernández, Member, Training and Development Commission, Santa Cruz de Tenerife Chamber of Commerce
- 11:00-12:00 Director's General for Universities and Research (DGUI), Canaries Regional Government
Gonzalo Marrero, Director, DGUI
Inmaculada González-Pérez, Coordination Service, DGUI
Carmen Aurora Rodríguez-Silvera, Research Support, DGUI
- 12:00-13:00 Regional Office for Science, Technology and Innovation (OCTI), Canaries Regional Government
José A. Marrero-Marrero, Technician, OCTI
Jorge Ramos-Marrero, Technician, OCTI
- 13:00- 14:00 Representatives from CCOO Trade Union and UGT Trade Union
Juan Jesús Arteaga-Lorenzo, Member, Executive Commission, CCOO
- 17:00 Private meeting: Peer Review Team

Wednesday 19 April – Activities in Santa Cruz de Tenerife

- 09:00-11:00 Leadership of the Canarias Association of Hotel and Tourism Industry (ASHOTEL)
Esther V. Medina-Rodríguez, Vice President, ASHOTEL
Ricardo Fernandez de la Puente-Armas, Manager, ASHOTEL
José Fernando Cabrera, President, ASHOTEL
Luis Pérez-Balboa, Treasurer, ASHOTEL
- 11:00-12:30 President of the Canarias Government
Adan Martín-Menis, President, Government of Canarias
Pilar Parejo-Bello, Deputy Secretary of Tourism, Government of Canarias
Nestor Vicente Torres-Darias, Director, ACECAU

13:00-14:00 Secretary of Industry, Commerce and New Technologies
María Luisa Tejedor-Salguero, Secretary of Industry, Commerce and New Technologies, Government of Canarias
Nestor Vicente Torres-Darias, Director, ACECAU

17:00 Private meeting: Peer Review Team

Thursday 20 April – Activities in Las Palmas de Gran Canaria

09:00-10:30 Leadership of Universidad de Las Palmas de Gran Canaria (ULPGC)
Manuel Lobo-Cabrera, Rector, ULPGC
Francisco Quintana-Navarro, Director of Administration, ULPGC
Antonio Fernández-Rodríguez, Vice Rector for Research, ULPGC
Olga Bolívar-Toledo, Vice Rector for Academic Affairs, ULPGC
Lourdes Farrerons-Noguera, Chief of Staff, Office of the Rector, ULPGC
Alejandra Sanjuán Hernán-Pérez, Vice Rector for Cultura and Sports, ULPGC
Pablo Martel-Escobar, Vice Rector for International Relations, ULPGC
Santiago Melián-González, Vice Rector for Institutional Development and Information Systems, ULPGC
José Juan Castro-Sánchez, Vice Rector for Planning and Quality, ULPGC
Dolores Cabrera-Suárez, Vice Rector for Student Affairs, ULPGC
Nancy Dávila-Cárdenes, Director of Quality Programs, ULPGC

10:30-12:00 ULPGC's Social Council and ULPGC's University-Business Foundation
Jesús León-Lima, Vice President, ULPGC Social Council
Miguel Ángel Acosta-Rodríguez, Secretary, ULPGC Social Council
Fabián Palmés-Prieto, Manager, Continuing Education Center, ULPGC University-Business Foundation
Eduardo Manrique de Lara, Manager, University Services, ULPGC University-Business Foundation

12:00-13:30 Academic staff of Universidad de Las Palmas de Gran Canaria
Santiago Candela-Sosa, Department Head, ULPGC
Judit Sánchez-García, Director, Academic Arrangements, ULPGC
José Javier Lorenzo-Navarro, Director, Academic Staff Affairs, ULPGC
M^a Carmen Muñoz-Ojeda, Director, Academic Programs, ULPGC
Anselmo Gracia-Molina, Professor, ULPGC
Pablo S. Hernández-Bolaños, Deputy Manager, Human Resources, ULPGC
Alicia Girón-García, Administrative Officer, Library, ULPGC
José Luis Jiménez-Saavedra, Architect, ULPGC
Marisol Izquierdo-López, Director, Research Policy, ULPGC
Pedro Almeida-Benítez, Director, Institutional Program, ULPGC
Luis Álvarez-Álvarez, Director, ETSII, ULPGC
Leonardo Romero-Quintero, Director, Environmental Policy, ULPGC
Josefina Domínguez-Mújica, Dean, Geography and History, ULPGC
Guillermo Martínez-García, President, Business Committee, ULPGC
Antonio M. Vieira-Hernández, Deputy Director, Research Services, ULPGC
José Andrés Dorta-Velázquez, Director, Electronic Control, ULPGC
Olga Alonso-Salvador, Manager, Humanities Building, ULPGC
Orlando Socorro-Lorenzo, Manager, Information Systems Building, ULPGC

Antonio Babío-Larios, Information Systems Support, ULPGC

Antonio Núñez-Ordóñez, Lecturer, ULPGC

Roberto Sarmiento-Rodríguez, Lecturer, ULPGC

14:00-16:00 Working lunch. Members of the Economic and Social Council of Canarias (CES)

Manuel González-Izquierdo, Representative from CCOO Trade Union.

Adela Rodríguez-Jiménez, Representative from CCOO Trade Union.

Fernando Redondo-Rodríguez, Expert designated by the Government.

Miguel Pérez-García, Representative from UGT Trade Union.

Cecilio Urgoiti-González, Representative from UGT Trade Union.

José Miguel Suárez-Gil, Representative from Chamber of Commerce.

José Miguel González-Hernández, Representative from CCOO Trade Union.

Filomena Rodríguez-Pastrana González, Representative from Associations of Consumers and Users of Services.

José Cristóbal García-García, Representative from the Canarias Confederation of Business Owners.

José Luis Rivero-Ceballos, President of Economic and Social Council of Canarias

16:00-17:30 Representatives from the business sector

José Cristóbal García-García, Secretary General, Canarias Confederation of Business Owners

Guillermo Romero de la Nuez, Economist, Canarias Confederation of Business Owners

17:30-18:30 National Distance Education University (UNED)

M^a Pino Marrero-Henning, Directora, Las Palmas de Gran Canaria's Center, UNED

Friday 21 April – Activities in Santa Cruz de Tenerife

09:30- 15:30 Private meeting. Peer Review Team

16:00- 17:30 Wrap-up session. Advisory Committee, Regional Coordinator and authors of the Self-Evaluation Report

Nestor Vicente Torres-Darias, Director, ACECAU, and Regional Coordinator for the OECD Project

Julio Brito-Santana, Director, Regional Office of Science, Technology and Innovation (OCTI)

Carlos Martínez-Roger, Deputy Director, Instituto de Astrofísica de Canarias (IAC)

José Antonio Álvarez, Professor, Univ La Laguna (ULL)

José Luis Rivero-Ceballos, President, Canary Islands' Social and Economic Council (CES)

Juan Manuel Cabrera-Sánchez, Professor, University of La Laguna (ULL)

Carlos Legna-Verna, Professor, University of La Laguna (ULL)

Elisa I. de León-Alonso, Researcher, IPNA-CSIC

17:30- 18:30 Final meeting with Regional Coordinator

Nestor Vicente Torres Darias, Director, ACECAU, and Regional Coordinator for the OECD Project