



**Aristos
Campus
Mundus
2015**

 **Deusto**
Universidad de Deusto
Deustuko Unibertsitatea

UNIVERSIDAD PONTIFICIA
ICA ICADE
COMILLAS
M A D R I D

**Universitat
Ramon
Llull**
Barcelona

***Area B.* FOCUS AREAS,
SCIENTIFIC IMPROVEMENT AND
RESEARCH RESULTS TRANSFER**





AREA B. FOCUS AREAS, SCIENTIFIC IMPROVEMENT AND RESEARCH RESULTS TRANSFER

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AREA B. FOCUS AREAS, SCIENTIFIC IMPROVEMENT AND RESEARCH RESULTS TRANSFER

(This Area corresponds to Sections 2.2 and 2.4 as suggested in the User's Guide)

INTRODUCTION

Aristós Campus Mundus 2015 (ACM 2015) is an aggregated project between three universities, designed as a joint scientific improvement and transferal initiative based on specific thematic areas of specialisation. This field of action encompasses evaluation Sections 2.2 and 2.4 as suggested in the User's Guide. It is a joint project in the R&D+I field where this a thematic specialisation is precisely concentrated.

The following section details the criteria used to define the different areas of specialisation. In large brushstrokes, it is worth noting that we have opted to focus on these specialisations based on social challenges, combining the demonstrated ability of the three universities' research groups (existence of said capacity), together with a demonstrated social demand according to independent studies. As such, several areas of specialisation have been defined which we call *focus areas*. As they refer to important social challenges, we also elaborate on the sub-areas each of these *focus areas* encompasses.

Further below, the document describes the joint collaborative project and how the three individual universities' strategic plans are linked to this objective. These four components make up an integral action plan which, generally, aims to:

- a) Coordinate the three universities' research groups around the *focus areas*, efficiently achieving this by creating what we call *Distributed Research Centres* (DRCs), entities responsible for every single focus area.
- b) Expand collaboration in terms of R&D+I to prestigious international universities, beginning with Georgetown University, Boston College and Fordham University with whom we have already signed specific collaborative agreements.
- c) Coordinate our current research results transfer systems for research results to be able to assume more and greater transferal processes and projects. For this we foresee creating new mechanisms based on a joint transferal catalogue and the single window concept.
- d) Define and build an online science and technology, business and innovation park (E-Park) to help coordinate, view and make use of the different R&D+I elements amongst all participants and any other institutions which wish to take part.

This project thus implies an integral vision and focus on R&D+I, orientated towards overcoming challenges as its method of specialisation, addressing the different R&D+I facets. The aim is to take advantage of the power afforded by aggregating the three participating universities and forming alliances with prestigious international universities. Mechanisms to monitor and control this Plan are also established.

I. FOCUS AREA

Motivation

Aristós Campus Mundus 2015 focalises the three participating universities' collaborative efforts, in particular, in terms of R&D+I, around what we have called *focus areas*. A focus area is not a given scientific discipline. Rather, it refers more to a thematic area of specialisation in which different disciplines take part to resolve a concrete social challenge. Specialising and focusing our actions on R&D+I will enable us to orientate and address a problem currently faced by our society from different knowledge areas, that is, apply a multidisciplinary action strategy.

However, for ACM 2015, this focalisation implies much more than uniting diverse disciplines. It implies aggregating efforts and potential, recognising opportunities and defining the drivers behind our research activity. Prioritising our activity by different areas of action will allow us to have a clearer impact on society and create internal synergies while strengthening external alliances at the same time.

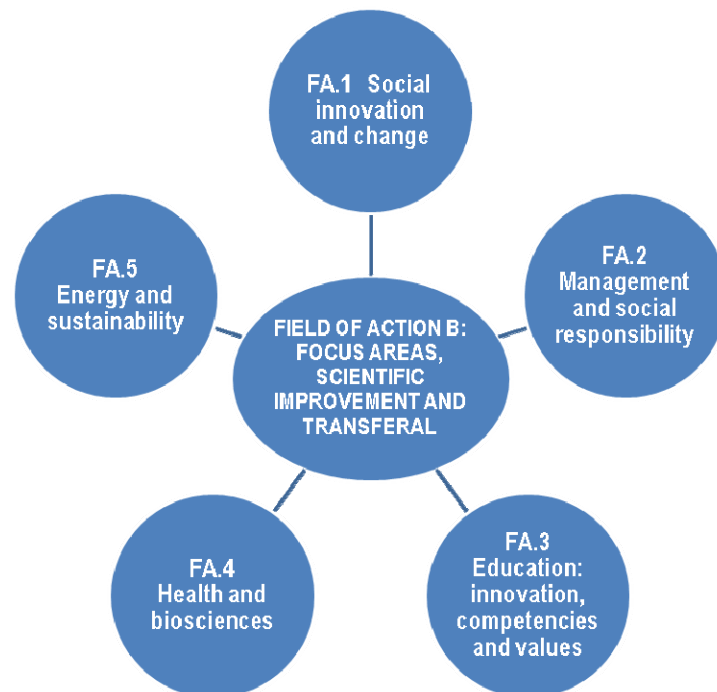
This approach is not, in fact, new. It corresponds directly to the focus our universities have given R&D+I from the outset, an approach which fits perfectly with our policy of interacting with the non-university social environ. It represents a focus which sees R&D+I as a public service, one which, in addition to encouraging the general progress of knowledge, maximises the social return from that progress. We see R&D+I as one of the major drivers for our society's development. The *focus areas* are thus the result of having listened to society's needs as gathered by diverse independent studies and identifying the areas of knowledge in which our universities carry out excellent research.

As described further below, we have chosen to coordinate the research groups' activities regarding these *focus areas* by creating Distributive Research Centres (DRCs) which provide a multidisciplinary approach to manage this model orientated towards solving challenges.

Focus area description

In this section we describe the five *focus areas* chosen. The selection process for these areas of specialisation was based on both satisfying the corresponding social demand as well as detecting our areas of excellence. As regards our capacity for action, we have selected areas where experience demonstrates that we are capable of carrying out excellent research. In each of the five areas, the three participating universities possess dedicated and consolidated research groups, recognised for their R&D+I activities.

Below we detail the 5 *focus areas* chosen. In addition to listing each area's name, we also explain what we aim to accomplish.



FA.1: SOCIAL INNOVATION AND SOCIAL CHANGE

The British *The Young Foundation* defines social innovation as “innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organisations whose primary purposes are social” [Young Foundation (2006). *Social Innovation: What is it, why it matters. How it can be accelerated*. London: Basingtoke Press]. In simpler and more direct terms: new ideas that work socially.

Social innovation is the central pillar of a model which aims to balance sustainability and competitiveness. Innovation without bearing in mind society produces undesired results which we see on a daily basis: a lack of synchronicity between what's local and what's global, the destruction of the environment, social disintegration, demographic contradictions, immigration, the economic crisis, precarious jobs and unemployment, global non-governance, ethnic-religious conflicts, problems with personal identity, a loss of personal autonomy, etc.

Social innovation is linked to improving the capacity of individuals, organisations and institutions to resolve existing problems and prepare to address future ones.

The wager on R&D+I in the area of social innovation represents an attempt to understand social changes, anticipate future scenarios and develop projects which favour a more intelligent, more intelligible and more humane world order.

This focus area is dedicated to researching and developing social proposals for the problems (ecological, demographic, economic, political, cultural, etc.) that have accompanied the scientific and technical innovations developed over the last decades.

Concretely, we could say that social innovation encompasses all those ideas and initiatives aimed mainly at addressing cultural and social challenges: sustainability, mobility, territory and housing, migration, humanitarian aid and cooperation, social services, social exclusion, infancy, handicaps, family, aging, youth and sexual equality, health, the economy, management and competitiveness; employment, learning; education and learning; politics, governance and participation; inter-culturalism; and culture, entertainment, tourism and sports.

To provide value to the topics included in this focus area, our universities have specific research groups whose work aims to: analyse social reality, diagnose existing needs, observe social trends, identify good practices, propose alternative concepts and models to the problems considered and integrate social innovation and the scientific-technological paradigm.

This aggregation will allow us to create interactive learning spaces in which to resolve the problems mentioned in an on-going process of research, application, exchange, search, and generation of knowledge. It is a project to share, exchange and transfer knowledge and best practices between the aggregated universities' research groups and between the latter and the social agents involved in the social change.

FA.2 MANAGEMENT AND SOCIAL RESPONSIBILITY

The business community has undoubtedly changed significantly over the last few decades. When attempting to define this transformation, the concept generally used is that of *business innovation*. The latter implies innovating in terms of management, adopting a clear market orientation and improving productive processes, strategic plans and the situation of those working for the organisation.

In our country and in Europe, in general, the focus is on innovating and developing new business models which contribute to improve the organisations and their relationship with the societies in which they operate. This implies educating leaders who transform organisations into true motors for economic and social development, with a clear commitment to sustainability and establishing management models which encourage transparency and good governance.

Our task in this context, as executive education centres, is to offer knowledge about the most advanced management and administration theories and practices and instil a clear vocation to innovation, social commitment and sustainability.

The new business model bases its growth on innovation and research. We have to provide new ideas to strengthen our position in the international context. For this we need to wager on, provide incentives to and motivate entrepreneurs, promote the transformation of more classic models, integrate international collaboration as one more pillar in the system and improve governance, socio-economic and political mechanisms.

In this second *focus area* (FA.2) we are committed to working in areas such as promoting and strengthening an international business network (regulating the legal norms for collaboration between companies and their internationalisation), establishing ethical standards for this new business model, providing resources to launch new firms and encourage an entrepreneurial spirit, and promoting policies to ensure the full integration of minorities.

FA.3 EDUCATION: INNOVATION, COMPETENCIES AND VALUES

The educational system has historically been one of society's fundamental pillars, preparing citizens for the future and being a part of their lives for an extended period of time. Schools, universities, secondary schools and similar institutions are, without doubt, the greatest path to progress and, at the same time, the best channel to spread knowledge. The greatest challenge faced by the educational system is adapting to changes in society.

Currently, we are traversing a period of change in which the educational system has transformed itself in accordance with the new social model. Governments and the educational institutions themselves are working to redefine the educational system, with a new networked understanding of co-responsibility amongst formal, non-formal and informal educational subsystems, both inter-professional and inter-industry, and with an unlimited focus on learning both in time (Life-Long Learning) and space (Ubiquitous Learning Environments). Our role as universities and R&D+I centres is to participate and provide value to this critical and in-depth redefinition of education and the associated new systems, resources and organisational models.

We could highlight the following fields of action for this third focus area (FA.3) as examples: adapting the educational system to the real needs of today's society, defining new roles for the system's active agents, with the student as the primary and central agent in the educational process, converting the classic scenario in which the professor teaches students to a model in which the student learns, supporting the new model with new technological as well as pedagogical tools which encourage learning and promote a socio-collaborative setting in this area.

Our three universities are actively taking part in this renewal, with recognised research groups centred on educational innovation and leadership. The groups providing value to this field focus their activities on, for example, facilitating and promoting education in multicultural and complex settings, incorporating new information and communications technology into the new educational settings, implementing new transformational leadership models in education via networks of socio-educational co-responsibility, developing smart self-learning and tutoring systems to encourage learning and defining organisational models in which care is given to the role of ethics in education.

FA.4 HEALTH AND BIOSCIENCES

One of the greatest concerns found in governments today is being able to ensure maximum well-being for their citizens. Of all the factors which help achieve this wellbeing, without doubt, health and the healthcare system are the most important. Citizens demand a system which provides top-level service in which both healthcare professionals and organisations stand out for their excellence.

Science and medicine have evolved exponentially in the last few decades, discovering new drugs and treatments for ailments which had previously been considered untreatable. Genetics and the study of the human genome have allowed for data to be gathered to help us to understand and diagnose complex and, potentially, even fatal diseases. In addition to this dizzying advance and success, we need professionals with different profiles and multidisciplinary teams. This need has been understood by our universities. Proof of this is the priority we have given to R&D+I in this field, our fourth focus area (FA.4).

Research in the health field has primarily focused on developing solutions to be able to prevent and better cure more diseases. This has been based on advances in medicine but also in biology, biochemistry, engineering and psychology.

Our research groups explore these fields, and the diversity of the actions carried out makes manifest the fact that we are faced by one of the most heterogeneous and multidisciplinary fields. In effect, the wealth of applications is broad, and we are working towards the early detection of ailments, the use of new technologies as support for health professionals' decision-making processes and clinical data management, telemedicine, and customised assistance for patients with reduced mobility, the development of drugs to improve the treatment of illnesses, psychological treatment for behavioural problems, and providing support to individuals suffering from problems of social integration.

FA.5 ENERGY AND SUSTAINABILITY

This last focus area (FA.5) encompasses all those actions aimed at resolving one of the greatest challenges faced by our society: the exponential increase in energy consumption.

The growing population and industrial development have led modern societies to what is known as the energy crisis. Excessive consumption has accelerated the deterioration of our planet with a severe impact on the environment and the weather. All industrialised countries have enacted policies and reached agreements to improve energy savings, draft action plans which encourage research, for example, on renewable energy sources, and motivate consumers to reduce their demand.

In line with trends amongst global leaders, there are diverse research groups at our three universities which focus their R&D+I endeavours on developing technology or market models to achieve energy solutions at the economic, environmental and socially sustainable levels. Projects are all underway at UD, UPCO and URL to provide solutions to problems associated to mass energy consumption.

The primary objective of our groups working in this field is to provide solutions to define and develop an energy system capable of meeting society's needs while respecting the environment and biodiversity. Our research activity in this sense provides alternatives to the classic energy system (renewable energy systems) as well as systems to manage electrical demand (smart management systems which optimise consumption in both homes and the workplace).



Amongst the different research lines undertaken, worth noting are environmental protection, the development, implementation and improvement of new energy sources, mechanisms to manage and plan the use of resources, an orientation towards self-sustaining and sustainable industry and construction, and preventing and treating the impact of climate change.

Motives: demand and capacity

In this section we describe how we have chosen these thematic areas of specialisation, remembering that these *focus areas* have been selected in terms of their application and the social challenges they represent.

As discussed above, the choice of *focus areas* was carried out after analysing two realities: social demand and ACM 2015's research capacity.

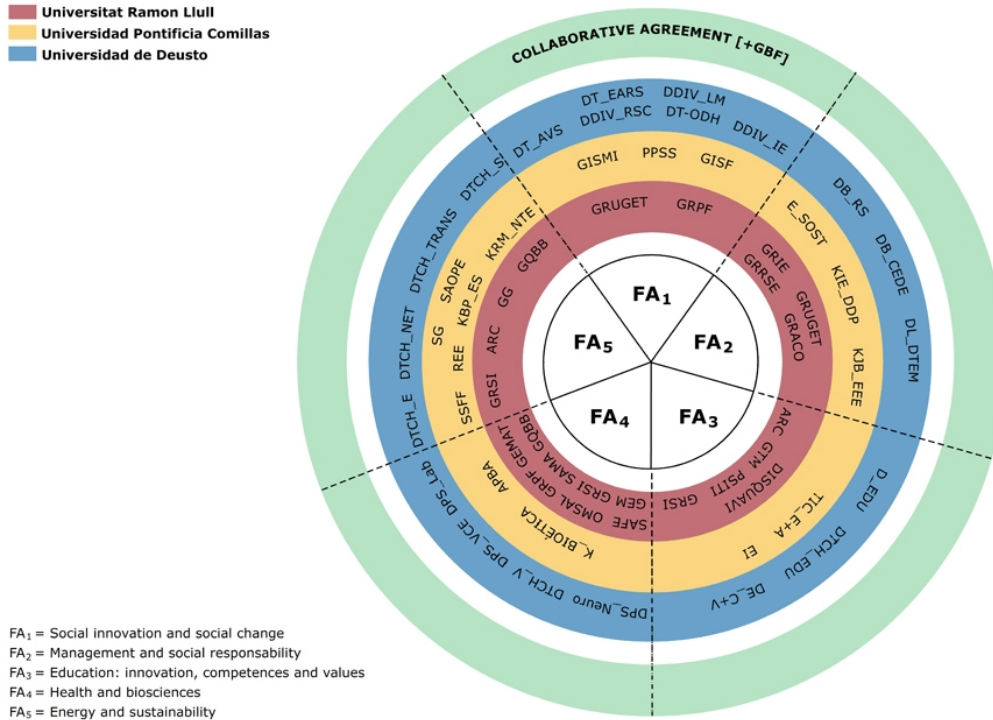
To be able to understand the existing social demand, we have analysed diverse independent national and international studies dedicated to documenting the current needs and deficiencies of contemporary society. Included amongst the sources consulted are the 2008-2011 National Plan on Scientific Research, Development and Technological Innovation (MICINN), the framework programme to obtain financing from the European Commission (FP7) and recent studies by the OECD. This analysis has enabled us to prioritise social areas requiring innovation and to which provide value. Aristós Campus Mundus 2015 responds to demonstrated social demands, focusing and giving priority to our R&D+I in said fields or *focus areas*.

Second, we have also taken into consideration the prior experience of our research groups with accredited excellence at all three universities. We have also considered their area of scientific endeavour and, especially, their experience in applying solutions to resolve problems. This analysis has enabled us to detect those *focus areas* in which we have a greater capacity to provide value in terms of R&D+I.

The five *focus areas* selected were determined by comparing the research groups' experience with the social demand detected. These *focus areas* are, in fact, fields of application for our research. Worth noting is that each focus area represents a challenge that encompasses other challenges, and, as such, each focus area includes different fields of action. In the tables below we detail the consolidated research groups at the three universities with an impact on the five *focus areas*, briefly describing each group's experience in the respective area.

The following figure represents each university's research groups and the *focus areas* in which they participate the most. It serves as a map in which the research groups can be in one or more focus area according to their experience. Concretely, a different coloured ring is used for each of the aggregated universities. Their corresponding research groups are listed by acronym in each relevant Focus Area (FA).

■ Universitat Ramon Llull
■ Universidad Pontificia Comillas
■ Universidad de Deusto



Map indicating the consolidated research groups based on the FA on which they will have an impact

In the previous figure, we also include a representative illustration of the research activity to be carried out as a result of the agreement with US universities (Georgetown, Boston College and Fordham). The actions stemming from this agreement [GBF+] will address each of the five *focus areas* with greater or lesser intensity.

Below we present a table specifically detailing the research groups for each related focus area along with a brief description of each group's relevant experience in that focus area. We also detail the primary fields of action for each focus area.



Focus area: Social Innovation and Social Change

	University	Research Group	Group's Experience in this Focus Area
New types of communities, social networks and social laboratories	URL	GRACO , Research Group for Organisational Learning and Knowledge	One of this group's areas of research is inter-organisational relationships and social networks.
	UD	DT-AVS , DEUSTO TRENDS - Analysis of Social Values	Experience in the field of social transformations based on changes in values.
Multiculturalism and minority identities	UD	DDIV-RSC , DEUSTO DIVERSITAS - Social and Cultural Challenges in a Changing World	Some of its lines of research are cultural transformation, identities and our society's borders.
Immigration and social cohesion	UPCO	GISMI , Migration Studies Institute - Research Group on Migrations	This group's curriculum spans nearly 20 years of research on migrations in Spain and their economic, social and legal aspects, with an abundance of competitive and contracted research projects.
	UD	DDIV-RSC , DEUSTO DIVERSITAS - Social and Cultural Challenges in a Changing World	This group works in the field of social challenges faced currently by society.
Innovation in emergent sectors: entertainment, culture and trade	UD	DT-ODH , DEUSTO TRENDS - Entertainment and Human Development	Research on entertainment experiences and lifestyles of both individuals and groups; the concept, nature and size of the entertainment phenomenon; entertainment areas: culture, tourism, sports and recreation.
	URL	GRUJET , Research Group in Tourism Management	This group studies how to encourage the exchange between participating agents with a vocation for innovation and internationalisation. It carries out studies on social marketing, innovation and quality management.
	URL	GRIES , Research Group in Sports and Society Innovation	Group centred on the field of physical activity and sports in the social context, it analyses less observed and more novel sporting phenomena in Spain and Western Europe. It aims to understand the sporting phenomenon, its past, its current and future impact.
	URL	GLICP , Research Group in Leadership and Innovation in Public Management	This group has experience in researching institutional development processes and the interconnection between the public sector, the for-profit private sector and the third sector.
	UPCO	PPSS , Social Problems and Social Policies	Group specialising in social exclusion, poverty and the social policies designed to respond to these.
International and diplomatic relations	UD	DDIV-RSC , DEUSTO DIVERSITAS - Social and Cultural Challenges in a Changing World	This group's field of action is research on migrations, human rights, humanitarian action, peace and conflicts, cultural transformations, identities and borders.
Volunteers in and humanitarian actions	UD	DDIV-RSC , DEUSTO DIVERSITAS - Social and Cultural Challenges in a Changing World	Experience in humanitarian aid projects and areas in conflict.
Migration and human rights	UD	DDIV-RSC , DEUSTO DIVERSITAS - Social and Cultural Challenges in a Changing World	Two of its fields of action are research on migrations and human rights.
European integration	UD	DDIV-IE , DEUSTO DIVERSITAS - European Integration	Studies the process of European construction from the political, economic, social and cultural points of view
Social values and ethics	UD	DT-AVS , DEUSTO TRENDS - Analysis of Social Values	This group focuses its research activity on values in terms of: work, family, politics, religion, post-materialism, identities and tolerance.
	UD	DT-EARS , DEUSTO TRENDS - Ethics Applied to Social Reality	This group has experience in research related to ethics as applied to social reality, politics and organisations.
Languages	UD	DDIV-LM , DEUSTO DIVERSITAS LinguaMedia	A multidisciplinary team focused on the study of languages: experimental phonetics, multilingual linguistic bodies, digital preservation of linguistic data and linguistic variety and contact
Family: psychological, educational and social concerns	URL	GRPF , Research Group in Couples and the Family	This group is organised into different lines of research such as couples' relationships, the impact of divorce, violence in the home, migration and addictions. It is associated to RedIF, the Family Institute European Network.
	UPCO	GISF , Family Institute - Family Research Group	For more than 25 years this group has been dedicated to studying family realities and the changes occurring, all from psychological, educational, legal and social points of view and with an abundance of competitive and contracted research projects.



Focus area : Management and Social Responsibility

	University	Research Group	Group's Experience in this Focus Area
New proposals to improve governance, socio-economic and political systems	URL	GRUGET , Research Group in Tourism Management	The objective of this group is to generate knowledge in the field of sustainable business and tourism business management and to encourage the exchange between all the agents that participate, adopting a strong, innovative and internationalist focus.
	UD	DB-RS , DEUSTO BUSINESS Social Responsibility	Team centred on analysing and studying social responsibility in the development of business and organisational activities
	URL	GRRSE , Research Group in Corporate Social Responsibility	This group carries out studies on corporate social responsibility leadership.
	URL	GRIES , Research Group in Sports and Society Innovation	This group carries out studies on public organisation management, governance models for policy implementation and the provision of public services.
	UPCO	E-SOST , Companies, Economy and Sustainability	The group's experience is based on: sustainable management of the value chain, the analysis of business plans and policies orientated towards guaranteeing sustainability, market incentives for sustainability (consumption and investment) and incentives beyond the market (public policies and regulations)
	UPCO	KIE-DDP , Chair in Business Internationalisation, Diversity and Professional Development	This Chair focuses on studying all that related to transnational business culture and location, mobility and human development within firms.
Regulation of ethics, the economy and communications in the new societal model	UPCO	KJB-EEE , Javier Benjumea Chair in Economic and Business Ethics	Studies topics related to Business Ethics, Corporate Social Responsibility (CSR) and Business Citizenship, all within the context of the global economy
	UD	DB-RS , DEUSTO BUSINESS - Social Responsibility	Team centred on analysing and studying social responsibility in the development of business and organisational activities
New means of innovation and knowledge management	URL	GRACO , Research Group for Organisational Learning and Knowledge	This group analyses how knowledge is created in organisations and how innovation processes and organisational change occur.
	UD	DB-CEDE , DEUSTO BUSINESS - Business Competitiveness and Economic Development	Centres its activity on analysing the structural factors which condition competitiveness, and the behaviours and policies which support the latter (innovation, entrepreneurial capacity, and business clusters, networks and groups).
Promoting the culture of cooperation and global competitiveness	UPCO	KIE-DDP , Chair in Business Internationalisation, Diversity and Professional Development	This Chair focuses on studying all that related to transnational business culture and location, mobility and human development within firms.
	UD	DB-CEDE , DEUSTO BUSINESS - Business Competitiveness and Economic Development	Centres its activity on analysing the structural factors which condition competitiveness, and the behaviours and policies which support the latter (innovation, entrepreneurial capacity, and business clusters, networks and groups)
Promoting the launch of new firms and instilling an entrepreneurial spirit	URL	GRIE , Research Group in Entrepreneurship	Aims to promote the creation of sustainable and innovative firms over the long term; investigates entrepreneurialism and creativity within the firm as well as its growth, internationalisation, strategic alliances and financing
	UD	DB-CEDE , DEUSTO BUSINESS - Business Competitiveness and Economic Development	Centres its activity on analysing the structural factors such as innovation, entrepreneurial capacity, and business clusters, networks and groups.
Business competitiveness and economic development	UD	DB-CEDE , DEUSTO BUSINESS - Business Competitiveness and Economic Development	Analysis of the structural factors that condition competitiveness, behaviours and the policies that support them
Social Responsibility	UD	DB-RS , DEUSTO BUSINESS - Social Responsibility	Team centred on analysing and studying social responsibility in the development of business and organisational activities
Transnational, business and market law	UD	DL-DTEM , DEUSTO LEX - Transnational, Business and Market Law	This group carries out research on the relation between market internationalisation and Business Law in international and transnational settings.



Focus area: Education: Innovation, Competencies and Values

	University	Research Group	Group's Experience in this Focus Area
Education in multicultural and complex settings	URL	ARC, Computer Architecture and Representation	Participates in R&D projects to design and develop environments for collaborative learning
Development of new learning systems	UD	D-EDU, DEUSTO - EDU INNOVA.	Group with experience in managing educational centres, managing and evaluating organisations and services, and improving teaching and learning in educational processes
Incorporation of ICTs in education: from distance learning to ICTs in the classroom	UD	DTCH-EDU, DEUSTOTECH - Educat	Group that develops projects such as its <i>Aula TIC</i> ("ICTs Classroom") and activities such as remote labs and cognitive experiments
	UPCO	TIC-E+A. Application of Information and Communications Technologies (ICTs) to teaching-learning processes	Group which researches the use of ICTs in education, bearing in mind the possible contributions from the education field to improve teaching in an increasingly technological and multicultural society
	URL	GTM, Media Technologies Group	This group develops accessible and highly usable human-machinery interfaces aimed at facilitating long-distance learning.
	URL	ARC, Computer Architecture and Representation	Participates in R&D projects to design and develop environments for collaborative learning
	URL	PSITIC, Social Pedagogy and ICTs Group	Researches the new educational challenges in the 21st century, known internationally as the "Life-Long Learning" and "Ubiquitous Learning Society" paradigms.
Smart self-learning and tutoring systems	URL	GRSI, Research Group in Intelligent Systems	Experience in smart tutoring systems to support and continuously track learning processes
Adapting educational programmes to EHEA standards	UD	D-EDU, DEUSTO - EDU INNOVA	This group has experience in managing educational centres and in teaching excellence.
	URL	GRSI, Research Group in Intelligent Systems	Application of Artificial Intelligence techniques to classify and identify skills
	UPCO	DADE_EEES, Teaching Group for the Business Administration and Management Group in Light of the EHEA	This multidisciplinary group studies how competencies for this degree are planned, developed and evaluated; the problems of transitioning from secondary to higher education in terms of skill development as well as the quality of new teaching methodology implementation.
Support tools for intellectual handicaps	URL	DISQUAVI, Research Group in Handicaps and Quality of Life: Educational Aspects	This group works to promote the quality of life of people with intellectual disabilities and their families.
New challenges in 21st century education - redefinition and conceptualisation of the educational system: focusing on group learning	UD	DTCH-EDU, DEUSTOTECH - Educat	Group with experience in designing games to teach and socialise with respect to technological knowledge
	URL	PSITIC, Pedagogy and ICTs	Researches the new educational challenges in the 21st century, known internationally as the "Life-Long Learning" and "Ubiquitous Learning Society" paradigms
	UPCO	EI, Internationalist Education	Globalisation and education, comparative and international education systems, and educational process quality from an international perspective
Teaching and learning competencies and values	UD	DE-C+V, DEUSTO EDU Competencies+Values	This group carries out research on the teaching-learning model in terms of competencies and values, adopting a multidisciplinary approach to values.
Innovation and evaluations in higher education	UD	D-EDU, DEUSTO - EDU INNOVA	Educational centre management



Focus area: Health and Biosciences

	University	Research Group	Group's Experience in this Focus Area
Ailment prevention, diagnosis and treatment; pharmacology	URL	GEM , Molecular Engineering Group	This group carries out projects within fields such as biomedicine, medical chemistry and photobiology and it has experience in developing drugs for photodynamic cancer therapies.
	URL	GRSI , Research Group in Smart Systems	Experience in the use of clinical data, especially in breast cancer and melanoma fields
	URL	GEMAT , Materials Engineering Group	Worth noting is its experience in developing functional polymers for drug delivery, obtaining bio-functional surfaces, superficial modification of particles and obtaining hybrid materials for cellular growth and differentiation, combining both superficial modification as well as the development of polymer materials.
	URL	GQBB , Biochemistry and Biotechnology Group	This group stands out for its experience in the identification and molecular analysis of proteins and enzymes for therapeutic targeting.
ICTs and health: telemedicine, tele-assistance and technology for the neediest and/or handicapped individuals	UD	DTCH-V , DEUSTOTECH - Life	Special experience in developing software to support diagnosis, tele-assistance, computer games for health, E-inclusion of people with disabilities and independent living
	URL	GTM , Media Technologies Group	Experience in technological areas related to speech, vision by computer and digital processing to develop human-machine interfaces to help people with different hearing and/or visual deficiencies
Food safety and the study of food quality	URL	SAMA , Food and Environmental Safety Group	This group is dedicated to studying organic contaminants in food and environmental matrices of interest. It primarily analyses the presence of these contaminants in the environment and in food, as well as their evolution and possible elimination.
Promoting healthy habits	URL	SAFE , Health, Physical Activity and Sports	This group has experience in studying physical exercise and health. It examines the effect of sports on people of all ages with active and inactive illnesses and with or without disabilities. It strives to find ways to promote healthy habits by playing sports to avoid pathologies and improve current ailments.
Psychology: mental health prevention and promotion	UD	DPS-VCE , DEUSTOPSICO - Cognitive Vulnerability and Stress	This group studies the moderating role cognitive styles have on the symptoms of stress and psychological maladjustment (anxiety, depression, violent behaviour, etc.).
	UD	DPS-Lab , DEUSTOPSICO Labpsico	Group specialising in studying mechanisms through which people discover causal relationships in their environments
	UD	DPS-Neuro , DEUSTOPSICO Neurocognition in Psychosis and Schizophrenia	Group focused on researching the diagnosis and treatment of psychosis and schizophrenia
	UPCO	APBA , Advances in Basic and Applied Psychology	Group with ample experience and a long research tradition in the area of preventing addictions, interventions and mental health
	URL	COMSAL , Communications and Health Group	This group's area of expertise is mental health. It is concretely interested in promoting health, professional identity and carrying out healthy professional activities.
	URL	GRPF , Research Group in Couples and the Family	This group is organised into different lines of research such as couples' relationships, the impact of divorce, violence in the home, migration and addictions. It is associated to RedIF, the Family Institute European Network.
Bioethics	UPCO	K-Bioética , Chair in Bioethics	Studies and tracks ethics in the biosciences and biotechnology fields
	URL	IBB-Bioética , Borja Institute of Bioethics - Bioethics Group	This group carries out its activity in a multidisciplinary environment, between life sciences and humanities, reflecting on and carrying out ethical analyses of subjects derived from biomedicine and biosciences and their repercussions on society.



Focus area : Energy and Sustainability

	University	Research Group	Group's Experience in this Focus Area
Economic, environmental, and socially sustainable energy solutions	UD	DTCH-E, DEUSTOTECH Energy	Experience in advance maintenance of electrical grids, designing smart electrical grids, waste energy analyses and energy and automobiles
	UPCO	SSFF, Railway Systems	Fields of action: energy efficiency, economic driving, traffic and infrastructure optimisation
Renewable resource management and planning	UD	DTCH-E, DEUSTOTECH - Energy	Smart electrical grid management.
	UPCO	REE, Energy Regulations and Economics	Experience in regulating infrastructures, designing markets and defining rates.
	UPCO	KBP-ES, BP Chair in Energy and Sustainability, C-E.	Evaluation and design of sustainable energy policies and development of sustainable energy indicators.
	UPCO	KRM-NTE, Rafael Marifo de Nuevas Chair in Energy Technologies.	This Chair contributes to the technological development of the energy industry through its research and serving as a meeting point between industry companies, universities and social institutions.
Demand management, market models, energy regulation and economics	UD	DTCH-E, DEUSTOTECH - Energy	Experience in managing and planning energy consumption.
	UPCO	SG, Smart Grids	Its research activity is based on the area of distributed energy generation, the integration of renewable energy sources and the design and implementation of electrical vehicles.
	UPCO	SAOPE, Energy Operations and Planning Support Systems	A group dedicated to researching market models, supply strategies and facilities diagnosis and maintenance.
	UPCO	REE, Energy Regulations and Economics	Experience in regulating infrastructures, designing markets and defining rates.
	URL	GRSI, Smart Systems Group	Experience in active demand management.
Orientation to industry and construction adapted to new social and environmental needs	URL	ARC, Computer Architecture and Representation	This group's activity centres on building information modelling, modular construction and industrialisation, and product modelling.
Prevent and treat climate change and its impact	URL	GG, Ebre Observatory - Geophysics Group	This is a pioneering research centre in the entire country, recognised internationally in some geophysics disciplines dedicated to understanding the internal structures of volcanoes and the ionosphere. The group focuses on studying the Earth and global climate change.
Environmental intelligence	UD	DTCH-NET, DEUSTOTECH Internet.	It researches environment-assisted life, service infrastructures for the future internet, context-sensitive services, middleware for smart environments, the internet of things and smart monitoring.
Transportation and mobility	UD	DTCH-TRANS, DEUSTOTECH - Transport	This group's primary lines of actions are: wireless connectivity in vehicles, smart transport services, traceability and merchandise distribution.
Production optimisation	UD	DTCH-S, DEUSTOTECH - Security	Fields of experience: Data security, production optimisation , applied computational intelligence.
	URL	GQBB, Biochemistry and Biotechnology Group	Group with experience in designing and applying enzymes in biocatalysis and biotechnology with microorganisms (protein production and metabolic engineering)

As evident in the previous map of research groups, the collaborative agreement with Georgetown, Boston College and Fordham universities will enable us to strengthen the R&D+I activity carried out through ACM 2015 in the *focus areas* identified. This agreement will allow the six participating universities to share their experiences, knowledge and strategic objectives. In essence, the agreement will allow us to exploit the power of aggregation of the three Spanish universities in the international context.



As a result of this aggregation, the primary goals are to:

- Strengthen the presence of the three aggregated Spanish universities via ACM 2015 on the international stage.
- Encourage the mobility of our researchers and favour the creation of multidisciplinary and heterogeneous teams.
- Apply ACM 2015 research activities to a more global context in which social challenges may be more complex and diverse.
- Develop a greater critical mass to add value to the excellence of our R&D+I in the *focus areas*, improve scientifically and optimise the impact of initiatives to transfer our results.

Concretely, we have identified several sub-fields or research topics in the map of five *focus areas* in which collaboration between ACM 2015 and the three North American universities could be more intense. For example, possible collaborative efforts could be carried out in Education and Psychology or in Social Responsibility and Sustainability. Each research topic is included under the umbrella of one of the five *focus areas* on which the integral R&D+I plan proposed in ACM 2015 pivots.

Thus far, after signing the agreement, we have begun to define the content of this collaboration and provide a description for each topic. The specific actions will be defined over the next few months.

II. JOINT COLLABORATION PLAN

Summary

The Joint Collaboration Plan corresponding to the Focus Areas, Scientific Improvement and Transferal encompasses three broad objectives consisting of 6 projects and a total of 22 actions.

It is important to point out that all the objectives proposed for this area, their development based on projects and the specific actions for the latter have to all be seen from the point of view of the thematic specialisation described in the previous section.

The three objectives defined here span the majority of the R&D+I chain. They aim to have an impact on the research and transferal processes through joint projects to develop our research efforts better and further, improve transferal mechanisms based on collaboration, and ensure that the three universities' science and technology, business and innovation parks are on line. In fact, amongst the different projects we would highlight the following:

- ▶ Creation of Distributed Research Centres (DRCs) to coordinate the three universities' diverse teams of excellence and to serve as managerial entities for the various *focus areas*.
- ▶ Definition of strategic alliances with other prestigious universities to develop joint research projects.
- ▶ Coordination of the different universities' transferal processes, their link to the *focus areas* and the development of a joint transferal catalogue and transferal systems based on the single window concept.
- ▶ Creation of an online science and technology, business and innovation E-Park to serve as the virtual headquarters for the Distributed Research Centres, the place from which to implement transferal processes based on the single window concept and the platform that will support the different universities' park services.

The aim of all these projects is to improve the three universities' scientific potential, capitalising on the benefits of aggregation and contributing to both scientific development as well as social capitalisation based on transferal, all from the perspective of thematic specialisation which, in our case, pivots around the focus area concept.



Objective B.1: Coordinate research through Distributed Research Centres (DRCs) to develop the strategic focus areas

The Aristós Campus Mundus 2015's first objective in the area of scientific improvement and knowledge transferal implies coordinating the research activities of the three participating universities, the final goal being to develop our research activity indicators in terms of both quality and quantity. By the same token, it aims to provide international projection for the power of this aggregation to improve the impact on talent recruitment processes. This obviously includes collateral objectives derived from improving scientific activity as a whole.

Included amongst the possible coordination mechanisms for this activity, as mentioned above, we have decided to enable this collaboration around the focus area concept in such a way that one of the most suited mechanisms for this is the Distributed Research Centres (DRCs). Each DRC will coordinate the activity of the different research groups participating in individual focus areas. The DRCs will be headquartered in the online E-Park which is described in greater detail in Objective 3 below. The DRCs will bring together the different research groups from each of the three universities in this joint project and will be empowered to address the corresponding challenge/problem/application. The aim is to increase our critical mass to be more competitive internationally. The research groups which will initially make up the DRCs are those accredited by an external organisation or agency to the university when applicable. In fact, in Catalonia and in the Basque Country these processes are carried out by the respective autonomous community governments. In terms of UPCO, it has undertaken an internal review and selection of its research groups to find those that have similar characteristics to those of the accredited groups at URL and UD. This

preliminary assignation of groups to *focus areas* and, as such, to DRCs, has been done openly, allowing the possibility of incorporating new groups depending on needs and possibilities as these arise. This coincides with the approach used in developing the *focus areas* themselves (the existence of capacity / the existence of demand).

The DRCs will benefit from international alliances created by this aggregate effort, to such an extent that each will strengthen their collaboration with international universities of reference with which they have already signed agreements and with which they might do so in the future.

Lastly, we also have to measure and evaluate our research groups' activities within the DRCs in the same way that we have to measure and evaluate if the multi-year action plans respond to the initial considerations and objectives set.

The impact and benefits expected for this objective essentially stem from the coordination of the three universities' research activities seen from the point of view of research orientated towards overcoming challenges. These can be summarised as follows:

- ▶ Creation of multidisciplinary DRCs headquartered in the online E-Park.
- ▶ Increase in the research groups' critical mass.
- ▶ Increase in the number of international research-based strategic alliances.
- ▶ Increase the possibility of improving both in terms of research *inputs* (projects, contracts, etc.) as well as *outputs* (publications, patents, etc.).
- ▶ Carry out research activity to transfer.

This objective will consist of the following projects:

Project B.1.1. ACM 2015 DISTRIBUTED RESEARCH CENTRES (DRCs)

This project encompasses all the activities required to define and launch the DRCs to support the strategically chosen *focus areas*. As mentioned above, the DRCs will be headquartered in an online E-Park and will coordinate the different research groups assigned to their corresponding *focus areas*.

The project consists of four specific actions. First, a map will be created of the different research groups for each of the *focus areas*. This will be based on the preliminary work carried out in preparing this current Plan. Second, the different DRCs and their structures will be defined based on the initial idea to define a DRC by focus area. Next, the multi-year action plans will be prepared for each DRC. Last, we will periodically evaluate the possibility of creating interuniversity research groups based on smaller sized groups within the participating universities and their incorporation into one of the DRCs already created.

This project's actions are complemented with those defined in the ACM 2015 A.2.1 project [+GBF] for Field of Action A.

Project B.1.2. ACM 2015 INTERNATIONAL RESEARCH ALLIANCES

This project encompasses actions aimed at strengthening current international alliances with prestigious universities abroad and at exploring the possibilities of broadening them, whether with other universities or with more themes or new universities joining this project during the preparatory phase.

As mentioned in the section describing the specific *focus areas*, several strategic alliances have already been established with diverse prestigious international universities (Georgetown University, Boston College and Fordham University) during the preparatory phase to cooperate on R&D+I. In fact, we have already identified sub-fields (or *research topics*) in the *focus areas* in which this collaboration could be intensified. Based on this initial point, the project aims to define other international alliances. The first actions would imply intense activity at the Plan's outset, moderating towards the end. The project also includes a second phase which encompasses work aimed at strengthening the alliances which are established.

This project's actions are complemented with those defined in the ACM 2015 A.2.1. project [+GBF] for Field of Action A.

Project B.1.3. ACM 2015 SCIENTIFIC EVALUATION

This project encompasses actions aimed at creating a system to evaluate the activity carried out as part of the previous projects. It also contemplates actions aimed at developing environments and processes to share good practices identified at each of the universities.

This project consists of two specific actions. First, we have to identify the evaluation mechanisms for the scientific collaboration in the DRCs and through the international alliances. Second, we will periodically identify good practices to be able to share them through manuals and/or periodic meetings (workshops) between the three universities' different research groups.

Key Indicators for Objective B.1

As discussed previously, the objectives considered in the Joint Collaboration Plan and, as a result, in the corresponding projects, are aimed at essentially building a platform for collaboration between the different participating universities. For this reason, in addition to the classic indicators which serve to measure activities in each area, we have to prepare other *ad hoc* indicators designed to evaluate if the Plan's objectives are successfully achieved. It is clear that the combined actions included in the Joint Collaboration Plan and those in the projects/actions linked to each area in the universities' individual strategic projects will have an effect on the aggregate activity which can be measured by general indicators. A selection of the latter is provided at the end of this document.

The *ad hoc* indicators proposed to monitor this objective within the Joint Collaboration Plan are as follows:

Indicator Code	Description	Initial Value	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
Ind B.1.1	Number of DRCs structured with multi-annual action plans	0	0	3	5	5	5
Ind B.1.2	Number of joint projects between the 3 universities	0	0	2	5	8	10
Ind B.1.3	Number of joint projects with international universities (advanced aggregation)	0	1	4	6	10	12
Ind B.1.4	Number of researchers in research groups linked to the <i>focus areas</i>	830	863	898	934	971	1020
Ind B.1.5	Number of interuniversity research teams	0	0	4	4	8	8
Ind B.1.6	Existence of evaluation mechanisms for joint scientific initiatives	No	No	Yes	Yes	Yes	Yes
Ind B.1.7	Percentage of increase in research results from <i>focus area</i> research groups	upon B.1.6 criteria		+5%	+10%	+15%	+25%

Objective B.2: Consolidate current transferal systems, taking advantage of the power of aggregation

The second objective of the Aristós Campus Mundus 2015 project in the area of scientific improvement and knowledge transferal contemplates the consolidation of the three universities' current transferal systems by taking advantage of the power of aggregation. No one doubts today the need to integrate the transferal of results within the different university missions. In fact, this concern has been the general tonic for the three participating universities since their outset, concretely serving to orientate a good part of their R&D policies. We understand transferal in the broadest sense, far-removed from the traditional interpretation in which universities only transfer technology. We feel that the transferal could and should occur for all the universities' scientific endeavours and in consonance with what society needs. This represents a broad vision which aims to integrate the classic *pull & push* focus though adapting it to the different sectors. For example, what the bio-pharma industry requires of universities is not the same as what the social work and education or law fields need. Universities have to incorporate the transferal needs demanded by society into their functions and adapt these to their scientific capacities. Bearing in mind the research groups' different levels of involvement and coordinating the various actors' roles and responsibilities are crucial. We believe that the three participating universities apply these principles of orientation to their activities, and, up to the present, they have done so in terms of their individual capacities, giving priority to their respective local societies. Coordinating the three universities' transferal policies and activities will allow us to better and more broadly address the needs of society, concretely, the socio-economic areas of Madrid, Catalonia and the Basque Country and their broad areas of influence. Coordinating transferal activities, preparing a joint catalogue and implementing single window processes will imply an important advance, allowing us to assume better and more transferal projects whether at the local or international levels (with special attention to the EU Framework Programme for Research in the last respect). To achieve this objective, we believe the online E-Park will prove to be a useful tool.

The impact and benefits we expect from this objective essentially stem from coordinating the three universities' transferal activities. All three have very similar objectives which can be summarised as follows:

- ▶ Develop a transferal catalogue and single window process.
- ▶ Foment the possibility of assuming larger and higher quality projects with greater social impact.
- ▶ Maximise the impact of transferal processes while bearing in mind *pull & push* initiatives.
- ▶ Address transferal processes in areas of knowledge with little activity traditionally.
- ▶ Address activity internationalisation processes, especially at the European level by participating in the EU's Framework Programme for research.

This objective consists of a single project which is described below.

Project B.2.1. ACM TRANSFERAL

This project encompasses the series of actions defined to successfully coordinate the three universities' transferal activities to thus be able to address better and more transferal processes.

Four actions will be carried out for this project. First, a joint transferal catalogue shall be prepared detailing each university's scientific and organizational capacities and at the aggregate level between the three. While this action must be carried out throughout the entire project, it will be especially intense the first year. Based on the above, multi-annual transferal plans will be prepared at the aggregate level. We shall also define and implement the evaluation mechanisms to be used. It is especially important to be able to measure this transferal activity in order to be able to evaluate the increase in quality and quantity before and after the aggregation. The second and last action foresees implementing single window mechanisms through the E-Park which is described in the section dedicated to this last objective below.

Key Indicators for Objective B.2

The *ad hoc* indicators proposed to monitor this objective within the Joint Collaboration Plan are as follows:

Indicator Code	Description	Initial Value	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
Ind B.2.1	Existence of a single window for research results transfer (in the e-Park)	No	No	Yes	Yes	Yes	Yes
Ind B.2.2	Existence of a joint research results catalogue (in the e-Park)	No	No	Yes	Yes	Yes	Yes
Ind B.2.3	Number of research transfer actions enacted through the single window	0	0	20	30	45	60
Ind B.2.4	Existence of evaluation mechanisms for research results transfer activities stemming from the Aggregation	No	No	No	Yes	Yes	Yes

Objective B.3: Foment new transferal structures based on science and technology, business and innovation parks

The third objective of the Aristós Campus Mundus 2015 project in the thematic area of scientific improvement and transferal is to foment transferal structures through science and technology, business and innovation parks. Over the last few years, these parks have assumed an important role in transferring research results as they represent a natural meeting point for the different R&D+I agents. Amongst other possible options, ACM 2015 takes advantage of the participating universities' prior experience, especially URL's in terms of business and innovation parks with a clear connection to university research groups. It is important to consider the need to link parks to transferal processes, implying university groups, university Research and Technology Transfer Offices, companies, and public and private innovation agents. Universities are an excellent meeting point for all, and parks are the ideal scenario.

In reality, this objective informally includes two sub-objectives developed by two corresponding projects. First, we aim to create a network of the three universities' parks. Initially, this aggregated network will consist of La Salle's Tecnova and ESADE Creapolis (both belonging to URL), while adding the experience of DeustoKabi (UD). It would be open to any new initiatives proposed by UD and UPCO. The park network would coordinate the current parks' services and broaden their offering to provide coverage to all three participating university communities and to other agents, especially those associated to this aggregation project. In fact, the aim is to offer network services to a networked community. This makes advancing on telecommunications tools fundamental and an issue which is addressed through the second project, the E-Park. Second, we shall develop the online E-Park with three distinct objectives: (1) serve as the natural space housing the DRCs, (2) the platform tool supporting the transferal website or single window described above, and (3) the space where the park network will centralise and coordinate its activity. The E-Park is essentially a software tool pertaining to the second Internet generation, but here it will function as a full science and technology, business and innovation park though on line. It broadens the park models developed thus far at the three universities and provides a new concept in parks by means of the online platform.

The impacts and benefits expected from this objective have been essentially described above and can be summarised as follows:

- ▶ Share experiences amongst the current parks, broaden their offering and create a much larger community consisting primarily of the participating universities and associated participants.
- ▶ Encompass the different park facets, from the classic science and technology park to business and innovation parks. Our park will thus be a science and technology, business and innovation park.
- ▶ Link transferal processes to the parks, the natural meeting point between the different R&D+I agents.
- ▶ Implement a new concept in online parks based on current physical park models and which develops different tools to support the majority of objectives in this area.
- ▶ Address transferal and innovation with greater guarantees for success in a competitive international environment thanks to aggregation.

This objective will be developed based on the following projects:

Project B.3.1. ACM PARK NETWORK

As described above, this project will coordinate the current parks' service portfolio, broadening and offering it to the entire community in this aggregation.

This project consists of three distinct actions. First, we shall draft a map of the current parks and the services they provide. Second, the joint offering of services will be coordinated. And, third, the coordinated joint service portfolio will be communicated to all interested agents and especially to those in the aggregation. The first action will be carried out exclusively during 2010, while the second two will be performed throughout the Plan's entire lifespan.

Project B.3.2. ACM E-PARK

This project aims to develop the E-Park concept as defined in the objective description above. The E-Park will be the online tool which will enable us to coordinate, cooperate and inform about the majority of activities carried out in this area.

The project consists of seven distinct actions. An initial group of two actions foresees defining and developing the software tool required. It is important to note that, in addition to its implementation, action ACM B.3.2.b includes maintaining and updating the tool throughout the entire Plan. A second group of actions affects three fundamental aspects of the E-Park: (1) DRCs and, as such, the research groups associated to the different focus groups; (2) the transferal catalogue and, as such, the single window process; and (3) the current services that the physical parks carry out. The last group also includes two actions: the first is aimed at informing about results based on a multilingual publication to communicate them and have an impact on society; the second action serves to communicate with and involve the different agents in the E-Park's development.

Key Indicators for Objective B.3

The *ad hoc* indicators proposed to monitor this objective within the Joint Collaboration Plan are as follows:

Indicator Code	Description	Initial Value	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
Ind B.3.1	Existence of the science-technology, business and innovation e-Park	No	No	Yes	Yes	Yes	Yes
Ind B.3.2	Number of DRCs incorporated within the e-Park	0	0	3	5	5	5
Ind B.3.3	Percentage of park network services incorporated in the e-Park	0	0	5%	15%	30%	50%
Ind B.3.4	On-line entrepreneurship services	No	No	Yes	Yes	Yes	Yes
Ind B.3.5	Number of scientific publication collections, available in several languages	0	0	0	1	2	3

III. LINK BETWEEN THE INDIVIDUAL STRATEGIC PLANS AND THE JOINT COLLABORATION PROJECT

UNIVERSITAT RAMON LLULL (URL)

1. Summary

In this section we analyse the link between URL's (Ramon Llull Campus Mundus - RCM) revised Individual Strategic Plan and Field of Action B in the Joint Collaboration Project (Aristós Campus Mundus – ACM 2015) from two different perspectives: (1) the link at the focus area level and (2) the link in terms of the projects/actions designed for scientific improvement and transferal.

Focus areas

In terms of the *focus areas*, we should remember that ACM 2015 defines them from the social challenge and application points of view. URL's Individual Strategic Plan, however, defines them in terms of broad areas of knowledge. The RCM project's strategic *focus areas* were prepared after analysing the scientific capacities of the research groups and the areas in which Universitat Ramon Llull offers university degrees of reference whether locally or internationally. From this analysis, the following strategic *focus areas* were defined:

- a) **Technology:** in the biosciences, engineering and ICT areas;
- b) **Management:** with special emphasis on business internationalisation and innovation, entrepreneurship, corporate social responsibility and technological management; and
- c) **Social Sciences and Humanities:** especially in areas that analyse the agents, structures and processes linked to people and society (psychology, pedagogy, social work and education, law, philosophy, communications, the media and advertising).

An initial group consisting of two of the three strategic *focus areas* (Technology and Management) has registered the greatest activity and growth. This first group also concentrates 72% of all research projects, 99% of financing from European funds, 85% of transferal billing amounts and 70% of ISI-indexed publications. The second group (Social Sciences and Humanities) has also grown though at a slower pace. Historical motives and opportunities have modelled URL's "two-speed" R&D+I activity.

This approach is perfectly suited to the *focus areas* considered by ACM 2015 which is based on *focus areas*. In fact, it should be seen as the intersection between a social challenge vision and a broad area of knowledge. Coordinating RCM and ACM 2015, Universitat Ramon Llull will give special attention to research groups and projects which are suited to its strategic *focus areas* and those that participate in the ACM 2015's Distributed Research Centres (DRCs) and their *focus areas*. It is evident that, without prejudice to the URL's research areas, greater support will be given to those groups belonging to one of the three strategic *focus areas* (especially the first two) and

those taking part at the same time in one of the DRCs managing and coordinating the different *focus areas*.

Link between projects and actions

In terms of the link between actions included in the revised RCM to projects of the new ACM 2015, we shall analyse the primary contributions to each of the objectives included in the ACM 2015. As a general norm, we have used broad criteria for this, incorporating everything which contributes to the ACM 2015's projects. As commented in the General Introduction to this project, the joint project's strength consists of the different parts of the three Individual Strategic Plans which contribute to achieving the Joint Plan's objectives.

Objective B.1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic focus areas

RCM actions linked to this ACM 2015 objective are concentrated in the first two projects (Distributed Research Centres and International Alliances). We have identified the RCM actions that will contribute to build the DRCs as they give priority to the research groups whose activities are aligned with the RCM's strategic *focus areas* and the ACM 2015's *focus areas*. Similarly, priority is given to research groups with a growing critical mass and international projection. Worth noting are RCM actions orientated to increasing both the number of URL staff dedicated to research as well as their dedication to the same. Lastly, RCM actions orientated towards increasing scientific production and participation in research projects with an international component also play an important role.

Objective B.2: Consolidate the current transferal systems, taking advantage of the power of aggregation

RCM actions linked to this ACM 2015 objective are numerous given that the URL's federated structure is similar, one way or another, to the aggregation project and coordinating transferal activities of the three universities. Worth noting amongst these are all that related to coordinating the transferal offering, the actions regarding more and better transferals and the professionalization and specialisation of the different offices to transfer the research results currently produced at URL.

Objective B.3: Foment new transferal structures based on science and technology, business and innovation parks

RCM actions linked to this ACM 2015 objective are much fewer than for the previous objective in that this goal not only encompasses coordinating the different parks but also the creation of an E-Park, a project with an independent identity. We link only one action to the first ACM 2015 project (ACM Park Network) and which consists of coordinating the actions of URL's current parks and those aimed at broadening the offer of current services.

2. Universitat Ramon Llull actions linked to the Joint Collaboration Project

In the following table we detail Universitat Ramon Llull's CIE Project actions which are directly linked to the Aristós Campus Mundus Project.

ARISTÓS CAMPUS MUNDUS		RAMON LLULL CAMPUS MUNDUS	
Objective B1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic focus areas		Objective B1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic focus areas	
Project Code	Name and/or Description	Action Code	Name and/or Description
B.1.1 ACM DISTRIBUTED RESEARCH CENTRES (DRCs)	Define and launch the DRCs and respond to the strategic focus areas chosen	B.1.1 RCM	Develop aggregation policies and concentrate research activity in groups of increasing critical mass
		B.2.1 RCM	Promote active policies to hire profiles with scientific experience
		B.2.2 RCM	Increase funds dedicated to intensify academic and research staff's scientific activity
		B.3.1 RCM	Provide incentives to academic and research staff's scientific production, assigning own resources to academic merit and bonuses for productivity. Grant research funds to young professors based on their potential.
B.1.2 ACM INTERNATIONAL RESEARCH ALLIANCES	Strengthen current international alliances with universities of reference and explore the possibilities of expanding these alliances	B.1.2 RCM	Prioritise initiatives with an international component and which include participation in international projects, mobility and carrying out PhDs at foreign universities
		B.5.2 RCM	Foment participation in international initiatives especially the EU's 7th Framework Programme
Objective B2: Consolidate the current transferal systems, taking advantage of the power of aggregation		Objective B2: Consolidate the current transferal systems, taking advantage of the power of aggregation	
Project Code	Name and/or Description	Action Code	Name and/or Description
B.2.1 ACM TRANSFERAL	Coordinate transferal actions amongst the 3 universities to be able to address more and better transferal processes	B.5.1 RCM	Consolidate and broaden the professionalization model and the specialisation of the R&D+I management offices
		B.6.1 RCM	Coordinate the "service portfolio" of the different specialised units and prepare a catalogue of the offering available
		B.6.2 RCM	Promote transferal in sectors with little activity in this area
		B.7.1 RCM	Carry out studies to identify URL's scientific-technological capacities and adapt them to demand
		B.7.2 RCM	Foment participation in greater and longer-lasting projects, with special attention to those co-financed with public funds (CENIT, EU's Framework Programme, etc.)
		B.8.1 RCM	Consolidate the distributed model for transferal structures and evaluation
Objective B3: Foment new transferal structures based on scientific-technological, business and innovation parks		Objective B3: Foment new transferal structures based on scientific-technological, business and innovation parks	
Project Code	Name and/or Description	Action Code	Name and/or Description
B.3.1 ACM PARK NETWORK	Coordinate the current parks' service portfolio, broaden it and offer it to the entire aggregation community	B.8.2 RCM	Consolidate the current coordination model for URL's parks and those of its associated units and broaden the services offered to all URL disciplines



3. Brief description of the actions linked to the Joint Collaboration Project

For greater brevity and the clarity of this document, here we describe the linked actions by group of actions, following the same structure, in fact, as that used in URL's Individual Strategic Plan presented in the previous CIE call for proposals.

Linked objective	<p>B.1 RCM Consolidate the organisational structure of research based on research groups, concentrating efforts, increasing international visibility and prioritising actions in the selected strategic areas</p>
Linked actions	<p>B.1.1 RCM Develop aggregation and concentration policies for research in groups of growing critical mass and aligned with strategic focus areas</p>
	<p>B.1.2 RCM Prioritise initiatives with an international component and which include participation in international projects, mobility and carrying out PhDs at universities abroad</p>
<p>Over the last few years, URL has implemented an active policy to promote its research activity under the research group organisational concept. This is in keeping with guidelines regarding when a group of researchers has sufficient critical mass, financing and results to be considered a research group as such. One of the challenges presented consists of reinforcing efforts with respect to the strategic areas in order to successfully increase their focus, strengthen their activity and boost their international visibility. We also aim to promote the fusion of similar groups to create aggregations with greater reach and potential.</p> <p>Similarly, URL is undergoing growth with respect to the volume of R&D projects in the international context. The aim is to progressively consolidate the model enacted and extend these good practices to URL as a whole. Our goal is to have an impact on 3 highly interrelated sub-objectives: encourage the mobility of our academic and research staff (as a means to initiate and establish collaborative scientific relationships), foment participation in international projects (especially in the EU's Framework Programmes) and attract international talent. In fact, we see attracting talent as the result of carrying out multiple actions over time, creating a good reputation for the university by means of its scientific output and the surrounding conditions which facilitate R&D+I. The private legal nature of URL and its federated structure permit agile hiring mechanisms for faculty and the possibility of accessing the international job market in search of talent.</p>	

Linked objective	B.2 RCM Increase the number of professors involved in research groups and increase the percentage of time dedicated to research
Linked actions	B.2.1 RCM Promote an active policy of hiring profiles with scientific experience
	B.2.2 RCM Increase the funds dedicated to intensify the academic and research staff's scientific activity
<p>Two factors help contextualise URL's starting point in this area. Firstly, it's worth noting that, up until adapting to EHEA standards, more than half of the URL's federated educational centres only taught first-cycle courses in which the research tradition is not as strong as in other areas. Similarly, the limited availability of funds to finance research in the Spanish context is significant, in particular for a private non-profit university. In this respect, we need to continue to progressively increase the number of active faculty dedicated to research. We aim for this intensification of research activity to clearly contribute to greater scientific productivity. Similarly, we should strive for greater internationalisation of university community members dedicated to R&D+I.</p>	

Linked objective	B.3 RCM Increase the quantity and quality of research inputs (projects, contracts, etc.) and outputs (publications, citations, etc.)
Linked actions	B.3.1 RCM Create incentives for the academic and research staff's scientific production, linking the allotment of our own resources to academic merit and by means of bonuses for productivity. Own funds should be aligned with the external resources obtained.
<p>With respect to research inputs (projects, contracts, etc.), URL is clearly experiencing growth across all indicators. Over the last few years, we have enacted an active policy to structure research based on the project concept and then request funds (internal and external) to develop said projects. This policy has had a positive impact, increasing both the public competitive projects won as well as the number of contracts with private firms. Worth noting are the projects in the international context, especially those developed under the European Framework Programme. In terms of outputs (publications, citations, etc.), URL has also seen a growing trend in terms of quantity and quality. Though figures can be improved in absolute numbers, there has been a clear improvement.</p> <p>In this context, we aim to accent the positive trend registered over the last few years by increasing both the research inputs as well as the quality and quantity of the outputs (publications, citations, etc.) and, especially, their international recognition.</p>	

Linked objective	B.5 RCM Consolidate and professionalise the R&D+I distributed management model, with special attention to European Union's Framework Programme dynamic facilitators
Linked actions	B.5.1 RCM Consolidate and broaden the professionalization and specialisation of R&D+I management offices
	B.5.2 RCM Foment participation in international initiatives especially the EU's 7th Framework Programme
<p>As a result of the URL's federated model and the important role R&D+I management structures have, a distributed management office model has been developed over the last few years which is increasingly professionalised. Based on the pre-existing human resources at the different federated institutions, a central unit has been created to coordinate this area, both in terms of managing research programmes as well as developing the functions of the Research and Technology Transfer Offices and coordinating more complex evaluation structures such as the science and technology parks (Technova La Salle and ESADE Creapolis) and the business springboards.</p> <p>We aim to consolidate this distributed management model for R&D+I offices, increasing their professionalization and specialisation. We aim to contribute to enhance researchers' focus on their areas of specialisation, transferring the weight of managing R&D+I to units specifically dedicated to these tasks. In so doing we expect to maximise the research inputs achieved as well as facilitate an increase in scientific outputs.</p>	

Linked objective	B.6 RCM Have a structured offering available of transferal results
Linked actions	B.6.1 RCM Coordinate the "service portfolio" offered by the different specialised units and create a catalogue of services offered
	B.6.2 RCM Promote transferal in sectors with little activity in this respect
<p>Currently, URL only has a partial and non-structured offering of transferal services available. The set of actions considered for this objective aim to align URL's scientific-technological capacities with current and potential demands from society and the business community. For this, constantly searching for initiatives which can potentially be transferred and updating the offering of transferrable results available are key.</p>	

Linked objective	B.7 RCM Improve the quantity and quality of transferal actions
Linked actions	B.7.1 RCM C
	B.7.2 RCM Foment participation in larger and longer projects, especially to those co-financed via public funds (CENIT, the EU's Framework Programme, etc.)
<p>Transferal actions in the BIO and ICT area pivot around the URL's 5 TECNIO groups which have been accredited by the Government of Catalonia for the volume and quality of their activity in terms of transferal. In Social Sciences and Management, the three university missions are profoundly intertwined, and the quality of their transferal activities are reflected by the prestige these actions have attained in society and the business community. Given the business community around us, heavily based on SMEs, there is a tendency to carry out smaller and medium-sized projects with shorter lifespans. While not ignoring this activity, we aim to encourage participation in larger and longer-lasting projects with greater geographical reach. We foresee additional effort in extending good transferal practices to university and business sectors with less activity in this respect.</p>	

Linked objective	B.8 RCM Consolidate new transferal structures: technological springboards and science and technology parks
Linked actions	B.8.1 RCM Consolidate the distributed model for transferal structures and evaluation
	B.8.2 RCM Consolidate the current model to coordinate the URL's parks and associated units and broaden the offering of services to all URL disciplines as a whole
<p>Currently, the URL's two science and technology parks are an innovative means for research groups, technology centres, business R&D+I departments and companies to meet in a setting which maximises possible synergies. The two parks are completely integrated in the surrounding territory with a clear international projection and providing maximum levels of quality and excellence. Both offer a business springboard and space for business incubators. Both parks' springboards are members of the Network of Technological Springboards promoted by the Government of Catalonia – ACC1Ó.</p> <p>Given our accumulated experience, we aim to bolster our activity, broadening the services offered and the structures available for these ends. For this, we will give priority to expanding the surface area and the infrastructures available to the technological springboards and the science and technology parks.</p>	

UNIVERSIDAD DE DEUSTO (UD)

1. Summary

On the following pages we examine how the UD's (Deusto Campus Mundus 2015 – DCM) Individual Strategic Plan is linked to Field of Action B in the Joint Collaboration Project (Aristós Campus Mundus 2015 - ACM). On the one hand, we comment on the connections with the priority *focus areas* set out by this Project and, on the other, we refer to the projects and actions defined for scientific improvement and transferal.

Focus Areas

The *focus areas* established in the ACM have been defined from the perspectives of social innovation, applicability and social transferal. The priority and strategic lines and teams in the UD's Individual Strategic Plan as summarised in its DCM project identify the knowledge areas where the university's teams have achieved an incipient level of recognition and scientific production. These areas are grouped around the Deusto Advanced Research Centre (DARC). The latter is charged with coordinating and fomenting scientific research of excellence in the areas of social innovation with the aim of promoting justice and human development. The areas of knowledge chosen include recognised teams consisting of PhDs and Master's (who have all received honourable mentions) along with research institutes and/or units with different levels of development:

- d) Deusto Tech: Information and Communications Technology applied to people, social organisations and local and global settings: internet, security, energy, life and transport.
- e) Deusto Business: business competitiveness and economic development linked to innovation and organisational management in the knowledge society, as well as social responsibility and ethics in economic-business activities, finance and banking.
- f) Deusto Lex: transnational law with respect to the market and businesses; law and the human genome; the European construction process through cultural diversity, political governance and normative power.
- g) Deusto Psico: experimental psychology, clinical psychology and health, and psychological-educational intervention in social contexts.
- h) Deusto Edu: educational organisations and models based on teaching-learning by competencies and values.
- i) Deusto Diversitas: social and cultural challenges in a changing world (migrations, minorities, humanitarian action, intercultural and interreligious dialogue, Christian religious dimension in the cultural encounter, etc.).
- j) Deusto Trends: the new scenarios for social action: values, politics, intervention and communication, ethics applied to social reality, social values, entertainment, culture and tourism, and cultural transformations in the Basque context.

Behind the seven research development units are 21 priority lines of research and 16 teams recognised by the Basque Government as excellent or consolidated in addition to the emergent teams which will be progressively added to the previous ones.

In a coordinated fashion between DCM and ACM 2015, Universidad de Deusto will especially foment already recognised research teams along with the most promising emergent ones, all in accordance with the priorities established within the framework of DARC's research development units and linked to the Distributed Research Centres (DRCs) within the context of the ACM's *focus areas*.

Link between projects and actions

Here we analyse the link between the revised DCM's actions and the new ACM's projects. We have used broad criteria when determining this link, incorporating everything which one way or another contributes to the ACM 2015's projects.

Objective B.1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic focus areas

A total of fourteen DCM actions are linked to this ACM objective. These actions range from implicit normative renovation and adapting priority and strategic lines to aggregating research development units within the framework of the new Deusto Advanced Research Centre (DARC) and consolidating the recognized teams and their projection towards competitive projects. In this way, Deusto will provide added value to the knowledge aggregation processes within the DRCs.

The creation of the Deusto International Research School (DIRS) represents another contribution to the ACM by consolidating the teams through educational processes pursuing excellence in all research and transferal activities. The aim of all this is to selectively increase, adequately inventory and improve the university's scientific production and its position within the different rankings.

Objective B.2: Consolidate the current transferal systems, taking advantage of the power of aggregation

The seven DCM actions linked to this second objective aim to consolidate the transferal structures and processes of both the DEIKER Agency and the Deusto Foundation. At the same time, the challenge for DARC, as a whole and for each research development unit (Deusto Tech, Deusto Diversitas, etc.), and DIRS is to design transferal plans.



**Aristos Campus
Mundus 2015**



PROJECT DESCRIPTION

AREA B. FOCUS AREAS, SCIENTIFIC IMPROVEMENT AND RESEARCH RESULTS TRANSFER

Objective B.3: Foment new transferal structures based on science and technology, business and innovation parks

The two DCM actions linked to this third ACM objective aim to increase and strengthen the university's science, technology and business parks, all within the framework of developing the ACM Park Network and the creation of an E-Park.

2. Universidad de Deusto actions linked to the Joint Collaboration Project

In the following table we detail the Universidad de Deusto's CIE Project actions which are directly linked to the Aristós Campus Mundus Project.

ARISTÓS CAMPUS MUNDUS		DEUSTO CAMPUS MUNDUS	
Objective B1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic focus areas		Objective B1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic	
Project Code	Name and/or Description	Action Code	Name and/or Description
B.1.1 ACM DISTRIBUTED RESEARCH CENTRES (DRCs)	Define and launch the DRCs and respond to the strategic focus areas chosen	B.1.1 DCM	Application and development of own framework to regulate research
B.1.2 ACM INTERNATIONAL RESEARCH ALLIANCES	Strengthen current international alliances with universities of reference and explore the possibilities of expanding these alliances	B.2.1 DCM	Redefinition of priority lines and strategies
B.1.3 ACM SCIENTIFIC EVALUATION	Develop an evaluation system for the actions carried out for the two previous projects	B.2.2 DCM	Design development plans for the research teams: emergent, consolidated and high performance
		B.3.1 DCM	Participate in competitive projects: Framework Programme, National R&D+I Plan and calls for Basque Government projects
		B.7.1 DCM	Design and launch the Deusto Advanced Research Centre (DARC): team, facilities and resources
		B.7.2 DCM	Aggregation process and design of research units: TECH, BUSINESS, LEX, PSICO, EDU, TRENDS and DIVERSITAS
		B.6.1 DCM	Launch the Deusto International Research School (DIRS): team, facilities and resources
		B.4.1 DCM	Improve research activity and scientific production results: books and book chapters
		B.4.2 DCM	Publish articles in national and international scientific, ISI-indexed and high impact journals
		B.4.3 DCM	Foment patent registrations and licenses
		B.4.4 DCM	Provide presentations and other communications
		B.5.2 DCM	Organise awards and provide incentives for research
		B.12.1 DCM	Prepare an annual report on research results and impact
		B.12.2 DCM	Position in university rankings at the global, European and national levels
Objective B2: Consolidate the current transferal systems, taking advantage of the power of aggregation		Objective B2: Consolidate the current transferal systems, taking advantage of the power of aggregation	
Project Code	Name and/or Description	Action Code	Name and/or Description
B.2.1 ACM TRANSFERAL	Coordinate transferal actions amongst the 3 universities to be able to address more and better transferal processes	B.5.1 DCM	Organise scientific forums, conferences and seminars
		B.5.3 DCM	Support research management processes (DEIKER) and transferal processes (Fundación Deusto)
		B.8.1 DCM	Draft an Annual Research Report
		B.8.2 DCM	Prepare an Annual Catalogue of Scientific Offering
		B.10.1 DCM	Educational activities for R&D+I managers and knowledge transferal with DBS
		B.11.1 DCM	Design and launch the Knowledge Transferal Plan in the research units within the Deusto Advanced Research Centre (DARC)
		B.11.2 DCM	Design and launch the Knowledge Transferal Plan in the research units within the Deusto International Tuning Academy (DITA)
Objective B2: Consolidate the current transferal systems, taking advantage of the power of aggregation		Objective B2: Consolidate the current transferal systems, taking advantage of the power of aggregation	
Project Code	Name and/or Description	Action Code	Name and/or Description
B.3.1 ACM PARK NETWORK	Coordinate the current parks' service portfolio, broaden it and offer it to the entire aggregation community	B.9.1	Foment business parks, incubators and greenhouses in Bilbao and Donostia-San Sebastián (DEUSTO KABI)
B.3.2 ACM e-PARK	Define and implement the online tool to coordinate the activities in this area, cooperate and inform about the activities	B.5.4	Enable the Universitas XXI Researcher Portal

3. Brief description of the actions linked to the Joint Collaboration Project

For greater brevity and document clarity, here we describe the linked actions by groups of actions, adapting the structure used in the UD's Individual Strategic Plan (Deusto Campus Mundus) presented in the previous CIE call for proposals

Linked objective	B.1 DCM Apply our own framework to regulate and promote research activity
Linked action	B.1.1 DCM Apply and develop our own regulatory framework to organise research
<p>The challenge of achieving excellence, in general, and in terms of research and transferal, in particular, requires adapting our structures and processes. Included amongst elements which must be updated on a permanent basis to respond to new demands with diligence, flexibility and rigour is our own regulatory framework. The aim is to begin promoting, developing, evaluating and recognising research using our own regulatory framework which establishes the rules of the game.</p>	

Linked objective	B.2 DCM Adapt research lines and teams to the new context
Linked actions	B.2.1 DCM Redefine priority and strategic lines
	B.2.1 DCM Design development plans for the research teams: emergent, consolidated and high performance
<p>Excellence in academic research requires calibrating our own capacities and examining our own potential. Not all of us can research everything. We have to establish priorities in consonance with our own identity and university mission, committed to promoting justice and human development. We must strategically opt for lines of research which represent a current social need and demand within the local and global contexts. As such, research team development must strive to produce research in areas previously defined as priorities and strategic. Plans will be drafted detailing the different levels of demand in terms of volume and level of scientific recognition. These levels are established as emergent, consolidated and high performance.</p>	



Linked objective	B.3 DCM Foment participation in competitive and concerted projects
Linked action	B.3.1 DCM Participate in competitive projects: EU's Framework Programme, the National R&D+I Plan, and calls for project proposals from the Basque Government
<p>One of the elements which defines the path towards excellence is participation in competitive calls for proposals. As such, one of the linked objectives and actions is fomenting participation in projects such as the European Union's Framework Programme, the National R&D+I Plan and calls for project proposals organised by the Basque Government.</p>	

Linked objective	B.4 DCM Increase scientific output and research results
Linked actions	B.4.1 DCM Improve research results and scientific output: books and book chapters
	B.4.2 DCM Publish articles in international and national scientific, ISI-indexed and high
	B.4.3 DCM Foment patent registration and licences
	B.4.4 DCM Offer presentations and other communications
<p>Another fundamental challenge in this search for excellence within the research field is increasing scientific output both in terms of publications in book format or book chapters or publishing articles, especially in ISI-indexed and high impact journals in specialised areas. At the same time, increasing the number of presentations and other communications whether at international or national congresses is also a goal for this group of actions. Lastly, we also aim to increase the generation and registration of patents and licences despite the difficult context and limitations in this respect found within the Social Sciences, Humanities, Legal and Economic fields.</p>	

Linked objective	B.5 DCM Improve the structures and processes to support and disseminate research
Linked actions	B.5.1 DCM Organise scientific forums, conferences and seminars
	B.5.2 DCM Organise awards and provide incentives for research
	B.5.3 DCM Support research management processes (DEIKER) and transferral processes (Fundación Deusto)
	B.5.4 DCM Foment the Universitas XXI Researcher Portal
<p>A complementary set of activities to research, though no less important, is bolstering the structures and processes to support and disseminate research and its results. The measures to improve the support provided by the DEIKER technical unit and the Fundación Deusto to management and transferal processes are key to facilitate the teams' and individual researchers' work. Similarly, the Universitas XXI Researcher Portal represents an extraordinary mechanism to register, inventory and later communicate the scientific outputs generated. These communicative activities have to include organising forums, conferences and seminars which allow welcoming and hearing the best researchers in the priority and strategic areas as well as allowing us to present our own research. By the same token, it is important to recognise our own talent and capture new talent by organising awards for research.</p>	

Linked objective	B.6 DCM Design a strategy to train researchers in excellence
Linked actions	B.6.1 DCM Launch the Deusto International Research School (DIRS): team, facilities and resources
	B.6.2 DCM Design the educational plan at the pre-doctoral, postdoctoral and senior levels
<p>In the process of consolidating excellent scientific work, a priority element is training junior, pre and postdoctoral and senior researchers. For this, along with designing specific educational plans for the different levels, we aim to launch the Deusto International Research School (DIRS). Along with the Doctoral School programmes, DIRS will organise courses, seminars, and educational stays for researchers at different levels.</p>	



Linked objective	B.7 DCM Create a centre of R&D+I excellence: Deusto Advanced Research Centre (DARC)
Linked actions	B.7.1 DCM Design and launch the Deusto Advanced Research Centre (DARC): team facilities and resources
	B.7.2 DCM Aggregation and design of research units: TECH, BUSINESS, LEX, PSICO, EDU, TRENDS and DIVERSITAS
<p>One of the most important elements within the framework to promote research, development and innovation by the Universidad de Deusto is to design and launch the Deusto Advanced Research Centre (DARC). This represents the central tool to organise and foment research of excellence. The Centre's launch implies aggregating, in some cases, and launching research units centred on the university's priority and strategic areas: information and communications technology (TECH); economics, business and management (BUSINESS); business and public law (LEX); clinical psychology and health (PSICO); educational innovation, competencies and values (EDU); social trends and innovation (TRENDS); and internationalisation and globalisation challenges (DIVERSITAS).</p>	

Linked objective	B.8 DCM Prepare documentation which includes a structured offering of scientific-technological capacities, research results and the quality of scientific output
Linked actions	B.8.1 DCM Draft the Annual Research Report
	B.8.2 DCM Prepare the Annual Catalogue of Scientific Offering
<p>This set of actions aims to structure and present the university's scientific-technological capacities along with its scientific output in an orderly fashion. The Annual Research Report will detail the research activity carried out throughout the year. The Annual Catalogue of Scientific Offering provides a structured view of the capacities found within Deusto's centres, teams and researchers.</p>	



Linked objective	B.9 DCM Develop business parks, incubators and springboards with a scientific, technological and social base
Linked actions	B.9.1 DCM Foment business parks, incubators and springboards in Bilbao and Donostia-San Sebastián (DEUSTO KABI)
<p>R&D+I activity is completed with a dedication to knowledge transferal. One of the best spaces in which to complete this circle is in the business and science and technology parks. These spaces bring the world of basic and fundamental research to their practical application in companies and organisations of a distinctly different nature. Similarly, transferal becomes social transferal the moment it has an impact on society, creating business incubators and project springboards. Universidad de Deusto's project reflects the need to continue this effort, broadening the current reality of the DEUSTO KABI business incubators.</p>	

Linked objective	B.10 DCM Train experts in R&D+I management and knowledge transferal in collaboration with the DBS Deusto Business School
Linked actions	B.10.1 DCM Educational activities for R&D+I managers and knowledge transferal with the DBS
<p>R&D+I and knowledge transferal support and management tasks require having administrative staff and specialised services available. That is, within the needs contemplated, we have to pay careful attention to training those in charge of R&D+I management and transferal. Support from the DBS Deusto Business School is fundamental in this area due to its knowledge and experience in management education.</p>	

Linked objective	B.11 DCM Develop Knowledge Transferal Plans for the Deusto Advanced Research Centre (DARC) and Deusto International Tuning Academy (DITA) research groups
Linked actions	B.11.1 DCM Design and launch Knowledge Transferal Plans for the Deusto Advanced Research Centre (DARC) research groups
	B.11.2 DCM Design and launch Knowledge Transferal Plans for the Deusto International Tuning Academy (DITA) research groups
<p>Actions related to knowledge transferal are completed with the design and launch of specific knowledge transferal plans for the Deusto Advanced Research Centre (DARC) and Deusto International Tuning Academy (DITA) research groups. In both cases, an initial diagnosis is carried out followed by the preparation of a planned proposal with a set timeline.</p>	

Linked objective	B.12 DCM Evaluate research activity results and impact
Linked actions	B.12.1 DCM Prepare an annual study on research results and impact
	B.12.2 DCM Position in university rankings at the global, European and national levels
<p>The R&D+I and transferal circle is closed with an evaluation of the entire process. First, this is achieved with the annual study of the different centres, teams and researchers and their research results as well as the impact generated, and, second, by means of positioning strategies in rankings for the university as a whole and for its areas of specialisation. Consequently, we propose actions aimed at evaluating that done and ensuring that our achievements are correctly reflected in the differing rankings.</p>	

UNIVERSIDAD PONTIFICIA COMILLAS (UPCO)

1. Summary

In this section we examine the correlation between the Comillas Campus Mundus Project (CCM) and Field of Action B in the Joint Collaboration Project (Aristós Campus Mundus – ACM 2015) from a double perspective: (1) the correlation in terms of the designated areas of specialisation and (2) the correlation between the specific actions detailed in the Comillas CIE Project and the projects in field B of the Joint Collaboration Project.

Focus areas

The Comillas Campus Mundus Project includes three areas of specialisation within its fifth strategic axis related to teaching, research and social projection activities: Energy and Sustainability, Law and Companies, and Family and Integral Human Development.

The selection of these areas can be traced back to Comillas' original commitment to a more just society in economic, environmental and social terms. This call for justice, representing a sign of identity for Jesuit universities around the world, is what underpins the concept of sustainability: to adequately distribute society's and the planet's resources so as to guarantee increasing citizens' wellbeing in every respect and across all generations. Consistent with its mission, Universidad Pontificia Comillas thus associates justice to sustainability, and, when choosing its areas of specialisation, it has opted for an area in each of the primary dimensions of justice and sustainability: economic and business resources; energy and environmental resources; and human and social capital. This selection is based on its educational and research excellence in these fields and its capacity to contribute to the sustainable development of the society of which it is a part.

Engineering, Law and Economics and Business Science, Human and Social Sciences are all combined flexibly and in a multidisciplinary fashion at Comillas to achieve the most of each for their full development. Without doubt, these preferential areas do not represent all the work carried out at Comillas but they do represent its preferential focus for the CIE as they offer the greatest real possibilities of achieving international excellence.

Comillas has a long tradition dedicated to these three areas, serving as a reference and allowing us to confidently believe that we can improve on what we have already achieved. We can and should pretend advancing in terms of research and knowledge transferal, campus improvement and interaction with the social environment in accordance with the new teaching parameters established by EHEA standards.

This approach is perfectly adapted to the *focus areas* presented in ACM 2015. Coordinating the CCM and ACM 2015, Universidad Pontificia Comillas will give special impetus to both the research groups and projects which fit in terms of their strategic *focus areas* as well as those which participate in the Distributed Research Centres (DRCs) organised by *focus areas*. As would be expected, greater support will be reserved for those groups and projects which simultaneously belong to one of the three

strategic *focus areas* and participate in one of the DRCs managing and coordinating the different *focus areas*.

Link between projects and actions

With respect to the link between CCM actions and the ACM 2015 objectives and projects, we provide the following summary which is further developed below.

Objective B.1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic focus areas.

In this area, Comillas proposes strengthening and refocusing its research groups through its own financing, while presenting proposals to competitive calls, and providing incentives to research groups linked to the areas of specialisation.

At the same time, the Comillas Campus Mundus project aims to increase the exchange of researchers in this field, providing incentives for its faculty's international mobility, reinforcing collaborative efforts with foreign researchers, increasing support for participation in international research projects and consortia and fomenting participation in international networks and expert committees.

Lastly, we also foresee intensifying scientific evaluation tasks by means of personal triennial plans for research staff.

Objective B.2: Consolidate the current transferal systems, taking advantage of the power of aggregation.

With respect to this second objective, Comillas proposes various actions to bolster the habitual global transferal strategies and internationalise research results and, in addition, implement broader transferal actions which will enable the university's activities to reach sectors not generally addressed.

Additionally, Comillas aims to increase the campus' impact on the development of least-favoured sectors for their integration in society, concentrating a part of its efforts in especially weak areas with a view to encouraging the transferal of human and social capital and reinforcing the university community's participation in providing services to society.

Objective B.3: Foment new transferal structures based on science and technology, business and innovation parks.

The CCM project's link to this area of the Joint ACM 2015 project is smaller, though the Campus Comillas 2.0 Project will enable it to contribute to develop the necessary software for the E-Park project.

2. Universidad Pontificia Comillas actions linked to the Joint Collaboration Project

The following table illustrates the actions in Universidad Pontificia Comillas' CIE Project which are directly linked to the Aristós Campus Mundus Project.

ARISTÓS CAMPUS MUNDUS		COMILLAS CAMPUS MUNDUS	
Objective B1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic focus areas		Objective B1: Coordinate research activity through the joint Distributed Research Centres (DRCs) to develop the strategic	
Project Code	Name and/or Description	Action Code	Name and/or Description
B.1.1 ACM DISTRIBUTED RESEARCH CENTRES (DRCs)	Define and launch the DRCs and respond to the strategic focus areas chosen	B.2.2 CCM	Empower and reorganise the research groups
B.1.2 ACM INTERNATIONAL RESEARCH ALLIANCES	Strengthen current international alliances with universities of reference and explore the possibilities of expanding these alliances	B.2.1 CCM	Increase the faculty's international mobility
B.1.3 ACM SCIENTIFIC EVALUATION	Develop an evaluation system for the actions carried out for the two previous projects	B.2.3 CCM	Internationalise research
		B.3.4 CCM	Improve the welcome given visiting faculty, infrastructures, quality of stay and loyalty
		B.1.4 C.C.M	Intensify, plan and evaluate Faculty's research dedication and quality
Objective B2: Consolidate the current transferal systems, taking advantage of the power of aggregation		Objective B2: Consolidate the current transferal systems, taking advantage of the power of aggregation	
Project Code	Name and/or Description	Project Code	Name and/or Description
B.2.1 ACM TRANSFERAL	Coordinate transferal actions amongst the 3 universities to be able to address more and better transferal processes	B.2.4 CCM	Foment global transferal strategies throughout the different modalities
		B.2.5 CCM	Internationalise research communications
		C.1.1 CCM	Develop outreach activities
		C.2.1 CCM	Increase the campus' impact on the development of the most disfavoured sectors for their incorporation into society
		C.2.2 CCM	Services for the community



3. Brief description of the actions linked to the Joint Collaboration Project

For greater brevity and the clarity of this document, here we describe the linked actions by group of actions, following the same structure, in fact, as that used in UPCO's Individual Strategic Plan presented in the first phase of this year's CIE call for proposals.

Linked objective	B.1. CCM An integral professor: educator, researcher and manager
Linked action	B.1.4. CCM Intensify, programme and evaluate the faculty's research dedication and quality
<p>In its CIE project Comillas proposes increasing scientific evaluation tasks. This will be done through the framework of personal and triennial research plans within which is included an internal recognition procedure every six years and requests for external recognition. These personal plans will enable cyclical evaluations and planning processes to be undertaken.</p>	

Linked objective	B.2. CCM Internationalise and strengthen research quality
Linked actions	B.2.1. CCM Increase faculty's international mobility
	B.2.2. CCM Strengthen and reorient research groups
	B.2.3. CCM Internationalise research
	B.2.4. CCM Strengthen global transferal strategies via the different modalities
	B.2.5. CCM Internationalise research dissemination
<p>We have also proposed concrete actions aimed at reinforcing existing international research alliances in line with project B.1.2. For this reason, increasing the exchange of researchers is a priority measure. Comillas thus proposes increasing its faculty's mobility in three ways: by explicit recognition as merits for promotion, by increasing our own funds available for stays abroad, and by supporting professors requesting grants for this end from national and European institutions. As a complement to these exchanges, Comillas aims to increase its support for the groups to participate in international research projects and consortia (giving these preferential treatment in promotional processes and task objectives) and to encourage participation in international networks and expert committees.</p> <p>Similarly, and in complete consonance with the creation of the Distributed Research Centres for the proposed focus areas, Universidad Pontificia Comillas is certain that quality research in these areas, by nature multidisciplinary, can only be achieved through teamwork. It thus proposes strengthening and re-orientating its research groups.</p> <p>Lastly, and in line with in-depth and universal objectives, Comillas has considered actions to foment global transferal strategies through the different modalities and also internationalising the communication of its research results. In the first respect, it aims to extend successful transferal models (such as IIT and the catalogues of scientific offering) to other areas of the university. This will be achieved after a preliminary analysis and evaluation of the supply and demand for this transferal at both the global and local levels. We also aim to bolster spin-offs for the chosen focus areas. In the second respect, Comillas aims to specifically support the publication of its research results via international channels, internationalise its own journals and increase collaboration with international publishers.</p>	



Linked objective	B.3. CCM Comillas Doctoral Experience Project
Linked action	B.3.4. CCM Improve visiting faculty's welcome, the infrastructures, quality of their stay and loyalty
<p>We propose strengthening collaboration with foreign researchers, improving how they are welcomed, the infrastructures for this, ensuring the quality of their stay and building loyalty. The dedicated actions encompass drafting a specific reception policy, increasing grants, developing related protocols and creating administrative roles for this area.</p>	

Linked objective	C.1. CCM Consolidate alliances
Linked action	C.1.1. CCM Develop outreach initiatives
<p>in addition to the habitual transferal actions, Comillas also proposes broader measures through which it aims to extend communications about the university's activities to sectors not usually considered or at a broader level. In this sense, Comillas includes a specific area of actions within its CIE Project to develop outreach activities with which to spread ideas generated at the university and establish closer ties with the community. Worth noting amongst these are organising conferences, debates and seminars with local institutions, preparing visits, workshops and seminars aimed at secondary school students, extending scientific communication activities throughout the entire academic year, and fomenting online outreach actions by redesigning the university's website.</p>	



Linked objective	C.2. CCM Develop the social fabric
Linked actions	C.2.1. CCM Increase the campus' impact on the development of the least-favoured groups and their incorporation in society
	C.2.2. CCM Community services
<p>Comillas also aims to increase the campus' impact on the development of the least favoured groups in society for their integration. For this it will concentrate a part of its actions in some especially disfavoured areas to transfer human and social capital, create spin-offs to work in those areas and develop teaching and research practices to address these issues. With respect to this last point, we also aim to reinforce student participation in community services, establish agreements with town councils and other social agents for students to provide services and collaborate with the community in closely related areas to their specialisations. Similarly, and also by means of these agreements, Comillas aims to provide classes and educational activities on a regular and permanent basis for local society in its areas of specialisation. Lastly, with the aim of its activities having a broader repercussion on society, Comillas aims to reinforce its institutional participation in the key debates on the legal, technical, business and socio-political aspects of a sustainable development model. The aim will be to guarantee better and greater transmission of the different reflections suggested by the university's various work groups as well as increase the presence of its faculty and researchers in public debates with greater relevance, including those in the social communications media.</p>	

IV. GENERAL INDICATORS OF THE ACTIVITY

As argued above, R&D+I is one of the most important reasons of the aggregation. R&D+I in terms of *focus areas* and in which various disciplines cooperate to solve concrete social challenges. For this, we have defined five *focus areas*: Social innovation and change; Management and social responsibility; Education: innovation, competencies and values; Health and biosciences; and Energy and sustainability. The three aggregated universities already have research teams and experience based on excellence. Upon this solid base, the aggregation and the inclusion of Georgetown, Boston College and Fordham universities will add a new dimension to the R&D+I carried out. In this sense, the multi-year plans for research groups of excellence within the ACM 2015 have a single objective: make the aggregation's scientific production and R&D+I activity an international reference of excellence for R&D+I in the five *focus areas*.

In addition, this R&D+I combined with a vocation to transfer results, backed by the universities in the aggregation, will enable us to activate common transferal mechanisms and create a science and technology, business and innovation E-Park.

The projection for R&D+I and transferal activities from 2010 to 2015 (monitored by 18 ad hoc indicators for the three objectives in Field of Action B, as described above) is based on a general R&D+I framework amongst the three aggregated universities. The following table details the indicators applicable today and for 2015.

Indicator		Inicial Value	2013	2015
Ind. B.1	Number of indexed publications	124	167	215
Ind. B.2	Number of indexed publications in first quartile	27	45	70
Ind. B.3	Other research / knowledge transfer publications	1043	1085	1174
Ind. B.4	Number of publications edited by universities participating in the collaborative aggregation project	97	107	114
Ind. B.5	Number of recognised research groups	112	122	135
Ind. B.6	Number of researchers in recognised research groups	830	934	1020
Ind. B.7	Number of administrative and service staff providing support to research	80	90	96
Ind. B.8	Number of competitive projects	268	299	337
Ind. B.9	Number of research projects in collaboration with companies or institutions	401	435	492
Ind. B.10	Number of coordinated European projects	6	12	19
Ind. B.11	Number of European projects granted	37	52	66
Ind. B.12	Number of pre-doctoral interns	185	214	236
Ind. B.13	Percentage of own resources dedicated to R&D+I	9%	10%	11%
Ind. B.14	Number of company <i>spin-offs</i>	4	7	11
Ind. B.15	Number of scientific-technological service users	587	632	697
Ind. B.16	Number of transferal agreements	56	61	65
Ind. B.17	Number of registered patents	27	31	34
Ind. B.18	Number of staff trained for R&D+I support	38	43	50
Ind. B.19	Number of companies located on Campus	29	32	45



Ramon Llull, Deusto and Comillas universities are committed to making a special effort in terms of R&D+I, both as regards dedicated human resources (increasing the number of researchers in recognised research groups and support staff by 20%) and economic resources (increasing our own funds dedicated to R&D+I by over 20%). This effort will make it possible to increase values for the general indicators as detailed in the table, both those measuring inputs such as project financing via competitive calls ($\Delta 10\%$) and the number of scientific-technical service users ($\Delta 17\%$), as well as those measuring outputs: publications ($\Delta 13\%$), patents ($\Delta 26\%$) and transferal contracts ($\Delta 16\%$). This special effort also implies clearly giving priority to R&D+I in the five focus areas and the plans, projects and groups of excellence. This preferential option for the focus areas and groups of excellence will translate into significant increases well above the average for basic indicators of excellence such as indexed publications ($\Delta > 70\%$), a third of which should occur in the first quarter, the coordination of European and international projects (tripling current numbers) and the creation of spin-off companies, amongst others.

All this will serve to enable the ACM 2015 aggregation project and the participating universities to clearly position themselves internationally by 2015 as a reference for excellence in R&D+I in the *focus areas*.