FINAL REPORT 2015

Euskampus - Campus of International Excellence UPV/EHU





Universidad Euskal Herriko del País Vasco Unibertsitatea

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PROJECT DATA: UPV/EHU CAMPUS OF INTERNATIONAL EXCELLENCE

Project: EUSKAMPUS. Community of Knowledge Hubs¹

Type of CIE: Global

University Coordinator:

Universidad del País Vasco/Euskal Herriko Unibertsitatea - UPV/EHU (University of the Basque Country)

Other promoting entities of CIE:

Tecnalia Technological Corporation - Tecnalia Donostia International Physics Center - DIPC

Period: 2010 - 2015

Coordinators: UPV/EHU: Iñaki Goirizelaia (Rector) / Amaia Maseda (Vice-rector of Projection and Transfer) DIPC: Pedro Miguel Etxenike (President) Tecnalia: Joseba Jauregizar (General Director)

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Project website: <u>http://www.euskampus.eu</u>

¹ In previous reports, "Hubs" appeared as "Poles".

The CIE Euskampus Project, led by the University of the Basque Country/Euskal Herriko Unibertsitatea (UPV/EHU) in a strategic alliance with the Tecnalia Technological Corporation (Tecnalia) and the Donostia International Physics Center (DIPC), has developed over these five years into an **intelligent specialisation** program focused on three main areas:

- Innovative processes and new materials
- Sustainable eco-systems and environmental technologies
- Healthy ageing and quality of life

In each of these areas, **multidisciplinary capabilities have been activated via various methods of cooperation** deployed within the framework of the two initiatives that structure the CIE Euskampus Project:

- The Knowledge Hubs and
- The **Euro-regional Campus** with University of Bordeaux.

A deployment that has offered **answers to the challenges and needs of society** related to its specialisations, thereby providing an ecosystem for the exploration and exploitation of knowledge.

This commitment has taken place in the following major areas of activity established by the Spanish Ministry of Education:

- Enhanced teaching and consolidation within the EHEA,
- Scientific Improvement and
- Knowledge transfer and interaction with the business and regional surroundings.

In the field of **enhanced teaching**, the stand-out achievement is the creation of the **Masters and Doctorate School** which has raised excellence and international projection for UPV/EHU postgraduate studies in the specialisation areas of the CIE Euskampus Project. The main assets are:

- 104 Masters degrees offered, of which 19 are given fully or partially in English, and 2 are Erasmus Mundus
- 65 Doctoral Programs offered, of which 32 have the Mention towards Excellence, allowing UPV/EHU to lead Spanish quality and excellence rankings.
- 6 double postgraduate degrees offered jointly with University of Bordeaux.

In the field of **scientific improvement**, specialisation areas have been strengthened both by the development of top quality infrastructure and facility initiatives (construction of UPV/EHU Science Park) and by collaboration oriented towards challenges (Knowledge Hubs). As a result, since 2012 UPV/EHU figures in the **Shanghai** ranking, and it is one of the top ten Spanish universities. The main results in this section are:

• A 60% increase in scientific production within the Euskampus aggregation during the period 2009-2014, and an increase of almost 100% in papers published in first quartile

journals over the same period. In addition, the Euskampus aggregation signed 42% of papers with at least one international centre.

- CIE Euskampus is the number one Campus of International Excellence in Spain in terms of participation and leadership in European projects.
- Strengthening the attraction of talent by means of the aggregation entities' own programs, by means of the Basque Foundation for Science-Ikerbasque, and by means of the European ERC and Marie Curie programs.

In the field of **knowledge transfer and interaction with the business and social surroundings**, UPV/EHU has strengthened its leadership and connection with the region, most notably through the following actions:

- The Zabalduz industrial doctorates as a pioneering initiative to improve the employment prospects of doctors within the Basque Country. 45 work contracts signed for the development of doctoral theses with the participation of organisations belonging to the socioeconomic tissue of the Basque Country.
- During the period 2010-2015 the entities of CEI Euskampus have applied for 500 patents and have obtained licences for 212.
- The creation within the Euskampus aggregation of 80 spin-offs in the period 2010-2015. The UPV/EHU is in fifth place of all Spanish universities in terms of creation of spin-offs.
- The organisation of the "Passion for knowledge-Quantum 13" dissemination event. Almost 8,000 people attended this week-long event.
- Finally, the active participation of the Euskampus aggregation in the:
 - Preparation of the Basque Country's Smart Specialization Strategy (RIS3)
 - Preparation of the Science, Technology and Innovation Plan 2020 (PCTI 2020);
 - Preparation of the University Plan 2015-2018;
 - Preparation of the Euskadi-Aquitaine Strategic Plan 2014-2020.

This participatory work has allowed the best practices of the CIE Euskampus project to be transferred to the Basque Country's Science, Technology and Innovation System, and to ensure sustainability over time and CIE Euskampus' integration within the instruments of regional Science, Technology and Innovation policies.

The culmination of the CIE Euskampus Project has reaffirmed its strategic character as well as the desire of its patrons to renew its mission for the period 2015 - 2020 as follows:

- Continue working to deploy the Community of Knowledge Hubs as the main ingredient for invigorating and connecting the capabilities of all the aggregation entities, and with the other stakeholders in the quadruple helix of local authorities, universities, businesses and citizens.
- Take forward the construction of the Euskampus-Bordeaux Euro-regional Campus of International Excellence as one of the priority lines of joint internationalisation and as a major force in the construction of the Euskadi-Aquitaine Euro-region.
- Participate actively and in a coordinated way in the Knowledge Innovation Communities (KICs), as spaces to deploy Knowledge Hubs actions, the Euro-regional Campus collaborations, and as preferred arenas for international projection.

• Contribute to the development of the Basque System of Science, Technology and Innovation and reinforce the leadership of the Euskampus aggregation entities within this System.

In 2010 the University of the Basque Country/Euskal Herriko Unibertsitatea (UPV/EHU) signed a strategic alliance with Tecnalia Technological Corporation (Tecnalia) and Donostia International Physics Center (DIPC) to launch the CIE Euskampus project. **Three different entities**:

- a public university, UPV/EHU, that is already an aggregation, being a generalist university organized into three separate campuses;
- Tecnalia, a private technological corporation, created by merging eight Basque Country Technology Centres, and a strategic alliance with two others, with the mission to transform knowledge into GDP to improve social well-being while creating business opportunities,
- and the DIPC, a research centre of excellence in the field of materials science structured as a local and international community,

with three different, but complementary missions that come together in **a shared vision** to form a public-private aggregation with the aim to promote a **knowledge and innovation ecosystem** engaged with the Basque Country and open to the world, becoming:

- **Catalyst in the process of economic transformation** in the Basque Country, promoting a model in which research, innovation and creativity, internationalization and attracting talent play a paramount role in improving competitiveness in the productive fabric.
- o Educational, scientific and technological **benchmark** for the **Europe Atlantic Axis**.
- Benchmark model for regional development and for **searching for solutions to social**, **cultural and environmental challenges within** the Basque Country.

Based on this approach, CIE Euskampus has developed over the last five years into **an smart specialization program**, that is to say:

- focused on a limited collection of fields (*areas of specialization*): innovative processes and new materials; sustainable ecosystems and environmental technologies; healthy aging and quality of life; arts, culture and society;
- **activating** the aggregation capabilities by means of a **cooperative and multidisciplinary approach** to respond to the challenges and needs of society.

Likewise, excellence research, international connection, promotion of creativity, entrepreneurship and innovation culture in academic activity have been the engines of advance and improvement for the aggregation, and ultimately of the Basque Country Science, Technology and Innovation System.

INITIAL CONTEXT

UPV/EHU is a young university, which has been in existence for thirty-five years. It is the only public university in the Basque Country, and obtained its official status in 1980, following the tradition of the ancient University of Bilbao and inspired by the Basque University of 1936. At the time of UPV/EHU's creation, the Basque Country was in the middle of an industrial restructuring process and innovation policies were oriented towards industrial development.

Over the years, innovation policies were directed at building capabilities, industrial competitiveness and sector diversification promoted by strategic areas of research like biotechnology and micro- and nanotechnologies. One of the outcomes of these innovation policies was the launching and consolidation of technology centres, as key players aligned with Basque companies. Over time, the technology centres within the Basque Country merged into two large consortia, one of which became, in 2010, the Tecnalia Technological Corporation, following the fusion of 8 of these centres and the incorporation of two others.

In this process, UPV/EHU was fulfilling its mission to be the main agent for training people in the Basque Country, as well as to be the entity with greater scientific production. However, UPV/EHU had

not played the driving role in the Basque Science, Technology and Innovation System that would be expected given its mission and size, and had played second fiddle in the big Basque Country projects, establishing scattered collaborations with the technological centres and configuring itself as a provider of capabilities rather than as a strategic ally in a global cooperation framework.

This is the context in which the Euskampus project was proposed by UPV/EHU, as a commitment to become a major player in the evolution of the Basque Science, Technology and Innovation System, using strategic alliances to connect university to region and at the same time to lever the promotion of excellence and international projection.

In this way, the CIE Euskampus project was positioned as a transformation project that allowed it grow internationally as an institution for higher education and knowledge generation, as well as a key body in the region, assuming a co-leadership role.

DEVELOPMENT OF THE PROJECT

The original proposal for the CIE Euskampus project was defined around the three major areas for action proposed in the 2010 Call for Proposals of the Campus of International Excellence Program: Teaching Enhancement and Adaptation to the European Higher Education Area (EHEA); Scientific Improvement and Knowledge Transfer; Transformation of the Campus for Developing a Comprehensive Social Model and its Interaction with the Regional Environment. International Projection would be achieved through cross-cutting activities.

The creation of a legally-based governance structure, sponsored by aggregation entities and open to new sponsors, was considered essential due to the ambition and complexity of the project: Euskampus Fundazioa (see section of "Management and Governance of the project"). This new entity was created as the governing body of CIE Euskampus, as well as a means for doing operations management, responsible for communicating the project and to coordinate the carrying out of the various actions involving aggregation entities. Thus, initial effort was on the legal constitution of the governing body, appointing an executive director, establishing governing and management mechanisms, and defining and staffing the operations team for running the project.

In parallel with the constitution of Euskampus Fundazioa, some of the key actions of the CIE Euskampus project were set in motion. The first steps in the development of the Cross-border Campus were done with the *Pôle of Recherte et d'Enseignement Supérieur Université de Bordeaux* (PRES *University of Bordeaux*), which has evolved into what is now called the Euro-regional Campus of International Excellence of Euskampus-Bordeaux (see section "Work done").

The following major task of CIE Euskampus consisted in embedding the project within the aggregation entities. The success of a transformation project of this nature depends on the social appropriation to the project: the appropriation from teaching and research staff, who are the people who actually carry out teaching, research and innovation actions, as well as the administration and services staff who support the researchers and are responsible for the design and implementation of new processes that create this transformation. Apart from the communication and knowledge transfer activities, done by physical means and on-line, the embedding of CIE Euskampus has succeeded in three fundamental ways:

- By means of the deployment of the Euskampus Community of Knowledge Hubs (see section "Work done" and files 24 to 35).
- By means of the deployment of the Euro-regional Campus (see section "Work done" and files 18, 19, 20, 56, 77 and 87).
- By means of the formation of teams made up of staff from UPV/EHU, Tecnalia and DIPC who have carried out the actions in the files.

Finally, CIE Euskampus has worked hard with the Basque Government to add value in actions crucial for regional development. CIE Euskampus, conceived as a smart specialization project, has helped define the Basque Country's RIS3 Strategy and has had a remarkable influence in the design of the Basque

Country Science, Technology and Innovation Plan 2020, as well as the University Plan 2015-2018 (see file 57). Likewise, the Euskampus-Bordeaux Euro-regional Campus has been listed within the Aquitaine-Euskadi Strategic Plan 2014-2020 as one of the key elements in making it work. This work done with different public administrations has demonstrated responsibility and commitment by the Euskampus aggregation, and has allowed CIE Euskampus to adopt a future approach that will provide continuity to the initiatives set up and to expand the scope of the project (section "A look into the future").

Thus, if the University Strategy 2015 and the Spanish Education Ministry's Campus of International Excellence Program allowed to launch the CIE Euskampus project, the launching of the EU Regional Strategies of Smart Specialization, that claim a central role of universities for its development, offers an appropriate framework to sustain the longer-term strategic commitment to bringing together UPV/EHU with Tecnalia and DIPC into an aggregation.

Five years since the start of the project, CIE Euskampus has proved to be a vision that has become reality, with the project coherent and consistent with its original approach. CIE Euskampus, during these five years, has achieved that UPV/EHU, in aggregation with Tecnalia and DIPC, and with University of Bordeaux:

- o occupies a key role in the Basque Science, Technology and Innovation System;
- o strengthens the connection with the socio-economic fabric,
- establishes itself as a key player in the Aquitaine-Euskadi Euro-region, and, by extension, in the European Atlantic Axis,
- o multiplies and strengthens participation in European programs,
- o launches unique public-private collaboration initiatives with various agents,
- o gains an entry in the international ranking of universities.

In conclusion, thanks to CIE Euskampus, not only have the UPV/EHU and its strategic partners changed and evolved, but also the context in which the university itself is developed has been transformed. On the one hand, it is recognized the central role that the University is called to play in the future; on the other hand, CIE Euskampus has contributed to bring about a change in Basque Country's scientific and innovation policies that put collaboration at the forefront in the main programs and performance metrics for the Basque Country Science, Technology and Innovation System. For these reasons, five years on, one can say that all three key points of the original Project vision have been fulfilled.

WHO ARE THE PARTNERS OF THE EUSKAMPUS AGGREGATION:

The strategic Euskampus aggregation is based on the complementary nature of science, technology, innovation and their interaction with the socio-economic surroundings. This is why Euskampus can respond to the different dimensions of excellence (academic, technological, innovation) covering the entire knowledge chain and the generation of value, from ideas to social well-being and economic growth.

University of the Basque Country / Euskal Herriko Unibertsitatea (UPV/EHU)

- The UPV/EHU in its 35 years of existence has attained a position of leadership in research and education in the Basque Country, offering comprehensive training to students, focusing mainly on scientific and technological progress, displaying institutional values of solidarity, commitment and social responsibility.
- Distributed over three campuses (one for each of the historical territories of the Autonomous Community of the Basque Country: Biscay, Gipuzkoa and Alava), the UPV/EHU makes a decisive contribution to the reality of the Basque Country.
- Composed of about 55,000 people (86% degree and postgraduate students, 10% Educational Research Personnel; 4% Administration and Services Personnel), it has an annual budget of about 400 million euros.
- As the only public university in the Basque Country, the UPV/EHU offers 70 first degree courses, 104 Masters degrees and 65 doctoral programs, in all areas of knowledge demanded by society. Since its creation, it has produced 300,000 graduates in the most diverse areas of knowledge. It is without doubt the main training organization in the Basque Country.
- In the field of research, the UPV/EHU has increased its production of scientific papers by 64% since 2009 and at present is responsible for more than 60% of the research in the Basque Country. It is, therefore, the first entity of scientific production in the Basque Country.
- Internationally, it has consolidated its excellence dimension. In 2012 it got a place in the respected Shanghai rankings. In 2013, the UPV/EHU appeared between positions 401 and 500, which consolidated its position as one of the top ten universities in Spain. It has maintained this position in 2015.
- The contribution of the UPV/EHU in the social and economic modernization of its regional environment is another aspect to highlight. An impact study of UPV/EHU's activity (IVIE, 2012) found that its existence represented an additional output of almost 2,000 million euros (20% higher than in 2007), an additional income of 882 million euros (17.2% higher than in 2007) and an additional employment of almost 20,000 jobs (18.7% higher than in 2007), representing 1.31% of the GDP and 1.89% of the employment in the Basque Country. More than one fifth of the growth during the last two decades in the economy of the Basque Country is directly and indirectly caused by the contributions of the UPV/EHU.

Donostia International Physics Center - DIPC

- The Foundation (DIPC) is a centre whose main aim is to promote and be a catalyst for the highest quality basic research in Materials Science.
- From its creation, DIPC has been an open institution tied to the UPV/EHU, a platform for internationalization of basic research Materials Science in the Basque Country.
- DIPC research takes place in close collaboration with research groups belonging to the UPV/EHU Department of Material Physics, the joint CSIC-UPV/EHU Centre for Material Physics, and the Nanoscience and Nanotechnology Centre CIC Nanogune, all situated in the

San Sebastián Campus, forming a Material Physics knowledge hub. The Foundation acts as a catalyst for the many lines of research of this knowledge hub in materials. Additionally, it maintains a high degree of collaboration with the UPV/EHU Faculty of Science and Technology and with the UPV/EHU Bilbao School of Engineering.

- The scientific production of DIPC and the international impact is increasing year by year. The centre has published a total of 2,571 ISI papers. In scarcely fifteen years of existence, the DIPC almost has quadrupled its number of papers and has received more than 62,000 citations.
- Euskampus Fundazioa, through DIPC, is developing a strategy to attract research personnel of the highest international calibre for visits or stays that enable the development of collaborative work with research groups of the Basque Country. Between 2010 and 2014 there have been a total of 557 short stay visits (< 1 month) and 475 long stay visits (> 1 month).
- On the other hand, DIPC Foundation is creating an open environment for science and society through cultivating an intellectual climate and enthusiasm for knowledge. The Scientific Communication program establishes a fluent and permanent dialogue between science and society, and between scientists and citizens. The foundation organized 284 scientific seminars and 51 workshops between 2010 and 2015 with more than 4.000 participants. Also, in academic year 2014-15, the Foundation commissioned 3 DIPC Schools that combined Masters degree students, doctoral students and young researchers.

Tecnalia Corporation

- It's a private non-for-profit foundation, with a mission to transform knowledge into GDP to improve people's lives, by creating business opportunities in companies.
- It is the first Spanish research centre for applied research and technological development, and one of the most notable in the whole of Europe.
- It comprises a team of more than 1,400 experts of 29 nationalities, distributed around 22 sites around the world, visualizing, identifying and developing integrated technological solutions with creativity and imagination for more than 4,000 customers.
- In the Seventh Framework Program of the EU, TECNALIA:
 - was the first Spanish private organization to contract, participate and lead projects, according to the "Seventh Framework Program Monitoring Report 2013" published by the European Commission;
 - it occupies 23rd position in terms of participation of the more than 32,000 European organizations that participated in the Seventh Framework Program.
 - it is 11th in terms of Research Centres (with Fraunhofer, CEA and VTT) and second in Spain behind the CSIC, all of these being much larger than TECNALIA;
 - it obtained a total of 410 projects, and led 89 of these, with a funding of 139 million euros, representing almost 30% of the contracting obtained by the Basque Country and almost 4% of that obtained in the whole of Spain.
- In the first year of HORIZON 2020, TECNALIA has already obtained 62 Projects, leading 14 of them, with a funding of 31 million euros.
- Of all TECNALIA's achievements in 2014, its participation in the KIC Raw MatTERS in aggregation with the UPV/EHU and BordeauxUniversity stands out.
- Within its organization, TECNALIA includes the following:
 - Groups of International Excellence (GEI): teams of more than 15 people that focus their scientific-technical specialization, reaching levels of excellence in particular technologies that are both accredited and internationally recognized.
 - Technology clusters: teams that bring together the capability of TECNALIA in the designated KETs (Key Enabling Technologies).
 - TECNALIA Ventures, S.L., a company that exploits its own R&D and manages the lifecycle of innovative technological assets.

In the deployment of the internationalization strategy, the key initiative of the Euskampus project is the Alliance with the University of Bordeaux, and its partners in the IdEx Bordeaux excellence project, for the development of the Euro-regional Campus of International Excellence.

University de Bordeaux

- The University of Bordeaux was officially constituted on 1 January 2014, from the merger of three universities:
 - University of Bordeaux 1 Sciences and Technologies,
 - University of Bordeaux Segalen 2,
 - Montesquieu Université Bordeaux IV.
- It is the third largest university of France with 52,000 students (12% of them from other nations) and nearly 5,600 staff (3,000 teachers and researchers and 2,600 technical, admin and service staff).
- It has an annual budget of 560 million euros.
- Research is a driving force of the University. The excellence of its competences in all scientific fields (Science and Technology, Life and Health and Life Sciences, Social and Human) was recognised in July of 2011 when the university was awarded the "Excellence Initiative IdEx Bordeaux". This prize consists of an endowment of 700 million euros to support the growth and development of research.
- The IdEx Bordeaux, led by University of Bordeaux, includes the following entities:
 - Bordeaux 3 Montaigne University.
 - The Schools: Polytechnic Institute Bordeaux, Po Sciences Bordeaux and Bordeaux Agro Science.
 - CNRS.
 - INSERM.
- It is placed 223rd in the Shanghai rankings (in the top ten French Universities). Its areas of knowledge focus mainly on the following:
 - Engineering and Computer Sciences: 101-150
 - Life and Agricultural Sciences: 151-200
 - Medical Sciences: 151-200
- University of Bordeaux has one of the largest campuses in Europe (260 hectares). It comprises several locations close to the city that offer a wide range of services and utilities.

Euskampus Fundazioa: aggregation tool for the development of CIE Euskampus.

EUSKAMPUS Fundazioa

On 19 July 2011 Euskampus Fundazioa was created as an entity for the government and management of CIE Euskampus. The UPV/EHU, Tecnalia and DIPC are founder members. In 2012, the following entities joined Euskampus Fundazioa:

- Ormazabal-Velatia Group, a family business that designs, manufactures, and offers solutions for the transport, transformation and distribution of electricity from generation to consumption. It operates on all continents working with the main players and entities within the electrical power business.
- Compañía Auxiliar de Ferrocarriles S. A., CAF, a Basque company that is a world-wide leader in the provision of integrated global rail solutions that in addition to the supply of trains, does feasibility studies, civil work, electrification, signaling, maintenance and system operation in some cases.
- Kutxabank S.A., the leading Basque Country bank and one of the most important in Spain.
- IKERBASQUE Basque Science Foundation, whose mission is to contribute to the development of scientific research in the Basque Country by attracting researchers of excellence and talent recovery.

The Euskampus project also incorporates wide aims of social responsibility and university projection towards the region, having adhered to the project, the public administrations and the main entities of the Basque Network of Science, Technology and Innovation.

The following diagram shows the group of entities that make up CIE EUSKAMPUS in its various layers: founding Entities, Euskampus Fundazioa entities, and entities brought together at project initiation: research centres, and other stakeholders in the business and social fabric of the Basque Country.



This section presents, by means of a summary of the work done, the main focuses of project activity. They have all been an important part of the three main fields of activity set by the Ministry of Education (Enhanced teaching and consolidation within the EHEA, Scientific Improvement and Knowledge transfer and interaction with the business and regional surroundings). The following table summarizes the work done within each one of CIE Euskampus' emblemmatic focuses in the three main areas of activity.

Em	blematic Focuses of the CIE Euskampus Project	Enhanced teaching and consolidation within the EHEA	Scientific improvement	Knowledge transfer and interaction with the business and regional surroundings
1	Consolidation of the EHEA degree programs, quality and educational innovation			
2	Masters and Doctorate School			
З	Euro-regional Campus			
4	Knowledge Hubs			
5	Concentration of talent			
6	Internationalisation of R&D			
7	Science Park of UPV/EHU and new R&D facilities			
8	Commitment to the regional Science, Technology and Innovation System			
9	Transfer and innovation campus			
10	Zabulduz Industrial Doctorates			
11	Singular initiatives connected to the region and with international projection			
12	Promotion of scientific culture			

These emblematic focuses have developed through numerous actions that support these three important fields, in addition to a fourth field centred in the "Transformation of the campus for the

development of an integral social model". In the section entitled "Tables of Actions" the different actions done during 2010 - 2015 are shown using the file format proposed by the Ministry of Education. In this summary, reference is made at all times to the files which expand on the information with additional qualitative and quantitative details of the aims, development, role of the aggregation, specific results and international projection associated with each action. Qualitative and quantitative information is aditionally displayed in the Tables of Results and Tables of Indicators, in a sinoptic way.

The emblematic focuses define the identity of the CIE Euskampus Project, in that they create this proposal of unique added value, differentiated from anything else. These actions will continue beyond the horizon of the CIE Euskampus Project.

1. CONSOLIDATION OF THE EHEA DEGREE PROGRAMS, QUALITY AND EDUCATIONAL INNOVATION

CIE Euskampus addressed the aim to build high quality, open, innovative training for degree and postgraduate courses. In 2010, the UPV/EHU, as the only public university in the Basque Country, adapted all of its degree programs to the new EHEA. During the period 2010-2015, the UPV/EHU has focused on implementing and building up the degree syllabuses and the follow-up work for the degrees concluding in the preparation of the monitoring reports for evaluation by the University System Basque Quality Agency (UNIBASQ) (file 1). Currently, the UPV/EHU has a total of 70 degrees. From the international perspective, the adaptation of the entire degree list to the EHEA facilitates student and teacher mobility between member nations of the EHEA, as well as the establishment of double international degrees.

Since its creation, CIE Euskampus has worked intensely on continuous quality improvement to reach levels of excellence in education and learning. It remains the benchmark for higher education in the region and has an projection to international level (file 2). 100% of UPV/EHU Centres have obtained the AUDIT accreditation for the design of quality systems.

Finally, it has developed its own educational model, implemented in official degrees, based on dynamic and cooperative learning centred on students (IKD model) guided by criteria of employability, quality, competitiveness and excellence, to achieve a truly international degree offering (files 3 and 4):

- Introduction of innovative educational methodologies in degree curricula (learning based on problems, in projects and case method).
- Development of 157 educational innovation projects between 2010-15 with a participation of more than 1,000 teaching and research staff, with more than 200 communications and papers of the results obtained.
- Between 2010-15 more than 270 training actions have been developed directed at improving education and learning. Around 1,700 teaching and research staff have participated. In particular, it has concentrated on the training of the teaching and research staff for virtual teaching and the creation of digital content.

The UPV/EHU's IKD model is fully aligned with EHEA policies and Erasmus+; this allows UPV/EHU to position itself to win European projects and to form alliances with other universities to share the experience of the model.

2.- MASTERS AND DOCTORAL SCHOOL (MDe)

At the start of 2012 the MDe was opened as a UPV/EHU centre to coordinate and manage the doctoral programs and research training with an interdisciplinary character in all fields of knowledge developed by the UPV/EHU, as well as to coordinate and manage the official Masters degrees. It also aims to organize cross-cutting training in a multidisciplinary context, in order to adapt the skills acquired during the doctorate to the real needs of society (file 5).

The MDe is one of the pillars of the CIE Euskampus in the field of educational improvement and one of the main channels of connection with University of Bordeaux for the development of the Euro-regional Campus. The MDe has represented a push to greater internationalization of doctoral programs, to the number of international theses and to theses in co-tutelage. The MDe has also been a key agent in the development of international Masters degrees, including Erasmus Mundus and double degrees. Finally, the MDe plays a vital role in building the Latin American Network of Masters degrees and Doctorate programs comprising 16 universities in 12 countries (see file 17).

The spirit of the Euskampus aggregation is felt in this emblematic action. Tecnalia is part of the MDe Steering Committee and Tecnalia's General Director participates in the Permanent Council of the MDe. 73 Tecnalia professionals participate actively in the educational teams of 12 UPV/EHU Masters programs (see file 8). The MDe, together with Tecnalia, has organized the Cross-border Doctoriales since 2013, in collaboration with the Aquitaine universities.

These are the most outstanding results of the MDe:

- 104 Masters degrees available in academic year 2014-15, of which 19 are given whole or partially in English, 5 are organized jointly with other European universities, and 6 are organized jointly with Latin American universities.
- 65 Doctoral programs offered in academic year 2014-15. All the programs have been accredited by ANECA in accordance with Royal Decree 99/2011. This covers structured doctoral training programs, in line with European programs.
- 21% of the students of the MDe are international.
- An average of 350-400 doctoral theses defended every year, an increasing number of them in cotutelage and with international mentions (44% in 2014-2015 academic year). UPV/EHU currently has 95 agreements with international universities for the preparation of doctoral theses on the basis of co-tutelage, with a further 8 in the process of agreement. 22 of these are with University of Bordeaux.
- 32 UPV/EHU Doctoral programs obtained a Mention towards Excellence for the period 2011-2012, 2012-2013 and 2013-2014. The UPV/EHU is the leading Spanish institution within this ranking of doctoral quality and excellence (see file 6).

3. EUSKAMPUS-BORDEAUX EURO-REGIONAL CAMPUS

In 2010 the first letter of intention was signed to "show the mutual will of the University of Bordeaux, the UPV/EHU and Euskampus (the strategic aggregation formed by the UPV/EHU, DIPC and Tecnalia), to develop and consolidate bonds of cooperation in fields of excellence" for what, at that time, was called the "Cross-border Campus". Since then, cooperation has developed, and the pillars have been built to allow the signature, in November of 2014, by the rectors of University of Bordeaux and the UPV/EHU of a Framework Agreement, to which the partners of the campuses of excellence of both universities have attached. This has opened up a new stage marking the completion of a pilot project to embedding this alliance within the identity of both universities, in the development of the Euskampus-Bordeaux Euro-regional Campus of International Excellence. This Agreement is the result of a four year long process and is one of the most outstanding results in the dynamics of CIE Euskampus. The Framework Agreement provides stable institutional support for the construction of the Euro-regional Campus over the longer term.

The Euro-regional Campus comprises a complex web of specific shared actions carried out by the community of both universities and their strategic partners: double degrees, co-tutelage, European projects, associated research structures, entrepreneurship programs, work placements, etc. The Euro-regional Campus is the emergent global phenomenon within this network of relationships and collaborative actions.

The development of the Euro-regional Campus has been a cross-cutting focus of CIE Euskampus that has a significant qualitative and quantitative impact on all areas of the project (enhanced teaching, scientific improvement, knowledge transfer and integrated social model) as seen in files 18, 19 20, 56, 77 and 87. It also represents an important vector for growth and future development of CIE Euskampus. It is important to understand the size of a project of this nature as measured by the number of people involved in different ways:

- More than 110,000 students.
- More than 9,000 researchers.
- Nearly 5,000 administration and services staff.

Among others, CIE Euskampus Project has achieved the following results:

- 6 double joint postgraduate degrees between both universities (file 15).
- The commencement of 22 theses done in co-tutelage, 8 times more than the previous average up to 2010. In 2015, 10 more are going to be commenced(file 18).
- 14 international project proposals have been presented under various programs of H2020, Erasmus+ and EIT, 3 of which have been approved. A highlight is the joint participation in KIC Raw MatTERs (file 53).
- The first Euskampus-Bordeaux Euro-regional Symposium was held, involving more 300 people, in 14 scientific sessions and 6 administrative sessions (file 19); the second symposium will be held in Donostia-San Sebastián in November 2015.
- A Research Community has been set up, comprising predoctoral researchers in co-tutelage and their supervisors. A specific training routemap, recognized by the UPV/EHU and University of Bordeaux, has been established for researcher in co-tutelage (file 56).
- The Aquitaine-Euskadi Strategic Plan 2014-2020 has included the Euro-regional Campus as a crucial element. Under this Plan, a cooperation agreement was recently signed between Euskampus Fundazioa and the Euro-region EGTC for the development of the Euro-regional Campus, with a financial commitment by the Euro-region EGTC (file 77).
- An Instrument of Support, shared between Euskampus and IdEx Bordeaux, was established for the development of the Euro-regional Campus: Euskampus Bordeaux International Support - EBIS, that supports the Community with human and economic resources to encourage and manage collaboration (file 20).
- A digital identity for the Euro-regional campus has been defined and established (file 76).

4. COMMUNITY OF KNOWLEDGE HUBS

The CIE Euskampus project was conceived as a Community of Knowledge Hubs, deployed as an smart specialization program. The Knowledge Hubs are open spaces for inter-institutional and interdisciplinary collaboration in order to tackle social and global challenges using technological scientific capabilities of the Euskampus aggregation by means of the design and execution of collaborative actions in training, research and knowledge transfer to the society.

The successful deployment of the Hubs is implemented by connecting the existing research structures. The Hubs do not imply the creation of new structures within the entities, or super-structures between the aggregation entities. It is fair to say that the Hubs have boosted a cooperative and open innovation spirit between them. To do this the Hubs have used co-creation and *design thinking* methodologies with the researchers to release proposals in strategic frameworks and action agendas (see file 24). The Community of Knowledge Hubs is the centre of gravity of CIE Eusakmpus and the engine of the knowledge and innovation ecosystem (file 23).

The Euskampus Knowledge Hubs have been a pioneering initiative in the Basque Science, Technology and Innovation System. Its five unique features have been:

- Focusing on "pull" instead of "push"; The social and global challenges as "drivers" of collaboration and the scientific-technological capacities as "enablers".
- Focusing on "bottom-up" instead of "top-down"; The mobilization of the research and technology community of the aggregation to participate in knowledge hub definition and in the design and execution of the activities.
- Focusing on "ecosystem" instead of "ego system"; The logic of financing institutions within the innovation system is replaced by the logic of financing local answers to global challenges.
- Focusing on "connect" instead of "construct"; The knowledge hubs are not new structures; instead they are innovation hubs that allow existing structures to connect and interact.
- Focusing on "co-creation" instead of "counter". New calls for help have not been made (counter); instead the hubs have worked with researchers to design and execute their projects.

Euskampus Fundazioa has reserved a significant proportion of CIE Euskampus resources as an "investment fund". This fund is treated as seed capital, and as a source of secondary finance to attract competitive public funding, and to co-finance collaborations in postgraduate training, research and knowledge transfer, or promote emerging cross-disciplinary research lines (see section "Governance and Management").

11 Knowledge Hubs have been set up in the course of the CIE Euskampus project (files 24 to 35).

- The hubs have been a driving force for a total of 77 collaborative actions that have benefited from close to one million euros worth granted from the investment fund.
- The process of deployment of the Community of Knowledge Hubs has involved 29 institutions, 6 of which are international.
- The Knowledge Hubs are making a decisive contribution in positioning the Euskampus aggregation in the framework of European priorities and, particularly, in the *Knowledge Innovation Communities* (*KIC*).
- The Knowledge Hubs are similarly helping to align Euskampus' international presence with the priority aims within the Basque Country's Strategy of Smart Specialization (RIS3).
- The Knowledge Hubs have inspired the "Support program for developing integrated tractive collaboration projects", one of the categories of support tools for the convergence of capabilities and cooperative R&D, contained in the Basque Country Science, Technology and Innovation Plan 2020.
- In the same way, the knowledge hubs have inspired the action line "collaborative research oriented to societal challenges", contained within the *Basque Government University Plan 2015-2018*.
- The Knowledge Hubs are a key vector to establish dynamic collaborations in the context of the *Euro-regional Campus* with the partners of IdEx Bordeaux.

One of the features that have characterized the design and deployment of the Community of Knowledge Hubs is the interconnection of Euskampus aggregation entities through different types of *human links*. In particular, different modalities of this *human* connectivity have been launched between Tecnalia and UPV/EHU:

- UPV/EHU student internships in Tecnalia through a cooperative education program.
- "Tecnalia Classrooms". These are spaces for the development of, end of degree projects carried out by students under supervision of Tecnalia and UPV/EHU; they allow different types of collaborative projects that respond to the challenges stated in the strategic frameworks of the Knowledge Hubs (see file 10).
- Agreement with the Masters and Doctoral School, so that students can do their Masters theses with tutors from both UPV/EHU and Tecnalia (file 8).

- **Industrial doctoral theses.** It represents the incorporation within Tecnalia of PhD students who begin their professional career combining professional work in Tecnalia with the development of their doctoral thesis in the UPV/EHU. These agreements are to be developed through the Zabalduz Call (file 63).
- Doctoral theses done within the UPV/EHU by Tecnalia personnel. This is all about helping the development of doctoral theses by Tecnalia personnel, in areas relating to the strategic frameworks of the Knowledge Hubs.

Not only are projects developed in this way, but indirectly, it also builds bridges to create **trusting relationships.** As a side product, it paves the way so that in the medium-term there will be wider, more ambitious collaborations. Specifically, it binds relationships between Euskampus aggregation entities by means of formulas that strengthen connections through people who are developing their professional career in a context of collaboration.

These connection modes are also operating in the framework of the Euro-regional Campus with Bordeaux. Doctoral co-tutelles are a good example. For next year 2016, new modalities will be implemented such as undergraduate student internships, master thesis co-tutelages, and co-supervision of postdoctoral researchers.

5. CONCENTRATION OF TALENT

The concentration of talent is a key success factor in maximizing scientific productivity of excellence and international connectivity. Two complementary lines have been considered by CIE Euskampus. Firstly, actions directed at attracting postdoc researchers and to incorporate young researchers in the aggregation (file 49). Secondly, to attract and retain top class researchers with a recognized track record (file 50), and to promote research placements in the various aggregation centres. In the first case, the UPV/EHU and DIPC have had its own calls for applications. In both cases, CIE Euskampus has collaborated with the *Basque Country Science Foundation, Ikerbasque*, a patron of Euskampus Fundazioa, and has responded to the *Marie Curie* European call and to the *European Research Council (ERC)* calls.

Young researchers:

- The UPV/EHU makes annual calls to hire post-doctoral researchers and Ramón and Cajal researchers. This second Call is complementary to the Spanish Ramón and Cajal Call, which promotes the incorporation of national and foreign researchers with an outstanding track record, by means of five-year contracts.
- In 2012, the Ikerbasque Foundation created the **Ikerbasque Research Fellows** Call, which has similar features to Ramón and Cajal, offering 5 year contracts.
- Efforts have been made to substantially increase the number of international postdocs through the different Marie Curie programs. Through the efforts of Euskampus, resources for the PEOPLE Program during the seventh Framework Program and the MSC Actions in H2020 have been increased.
- Through the DIPC Foundation, Euskampus is developing a program of contracting researchers with solid postdoctoral training in world-class research groups in the field of Material Physics (Gipuzkoa Fellow Program). The program is funded by the Gipuzkoa Provincial Council.

Senior and visiting researchers:

- A remarkable effort has been made to increase the number of researchers funded by the different forms of ERC contracts, both from other countries and from within the Basque Country with a recognized excellence track record.
- The Ikerbasque Foundation holds two annual calls for the selection of senior researchers of any nationality, *Ikerbasque Research Professors*, and *Ikerbasque Visiting Professors* (the latter to encourage 12 month placements for visiting researchers).

 In addition, through the DIPC Foundation, Euskampus is developing a strategy of attracting topclass international researchers for visits to enable the development of collaborative work with Basque Country research groups through its **Visiting Researchers Program.** The program has meant that numerous first-rate researchers, including several Nobel Prize winners, have made short, medium and long-term visits to the DIPC, including sabbaticals.

6. INTERNATIONALIZATION OF R&D

One of the main aims and motivations in the creation of CIE Euskampus is to expand and build international collaborations and thus improve the international status of Euskampus aggregation entities. The big advantage that the aggregation work offers is the possibility of **generating a network of international networks** that allows the expansion of Euskampus networks to those of its partners, and in this way they open up their networks to strategic alliances.

Equally as important for the international projection of R&D, and one of the main challenges facing CIE Euskampus, is the participation in European projects through the Euskampus aggregation, including the Euro-regional Campus. Tecnalia's driving capacity in European programs is a key lever for internationalization, as it is the opportunity provided by the Euro-regional Campus as a cross-border resource with potential to be a results multiplier (file 56). Therefore, an internationalization team has been set up, comprising UPV/EHU – Tecnalia - Euskampus Fundazioa - University of Bordeaux in order to coordinate aggregation participation in H2020, KICs and Erasmus+ programs.

One of the outstanding achievements of CIE Euskampus is to be the **top CIE of Spain for the number of projects in the seventh Framework Program** (2007 - 2014), both in terms of participation and in terms of playing a coordinating role. Out of a total of 505 projects, it has coordinated 96 projects, with a total contract value of more than 170 million euros. Elsewhere, to 30 June 2015, the Euskampus aggregation partners had already won 81 H2020 projects, coordinating 20 of them, with a total contract value of 38 million euros.

One of the key pillars of CIE Euskampus internationalization is the **participation in the Knowledge and Innovation Communities (KIC)** promoted by the European Institute of Technology (file 53). In fact the Euskampus Knowledge Hubs and the KICs share a similar founding philosophy: both initiatives target major social and global challenges, although how they operate is different. The Euskampus aggregation has actively participated in the preparation of a KIC of Active Aging and Healthy Life as well as in a KIC of Raw materials, under the Call for KICs published by the EIT in 2014. In both initiatives, the Euskampus aggregation has had a key part together with Bordeaux University as partners of both KICs. Euskampus Fundazioa has played a key role in the development of both proposals, being the aggregation spokesperson and coordinating the participation and contributions of UPV/EHU and Tecnalia. The proposal for the KIC of Raw materials was successful. Tecnalia and University of Bordeaux participated as Core Partners, and the UPV/EHU participates as an Associate Partner. Currently, the Euskampus aggregation, together with the University of Bordeaux and helped by Euskampus Fundazioa, is participating actively in the configuration of a Basque Country node in KIC of Food and KIC of Advanced Manufacturing proposals, ready to respond to the next Call to be made by the EIT in 2016.

Finally, note the intense activity that the Euskampus aggregation partners has made to make international alliances that impact on scientific improvement, on educational improvement and in establishing connections with companies (file 54). Highlights are:

- Creation in 2008, and later expansion, of the Latin American Network of Masters and Doctorates (RLMD) to consolidate a competitive offer of Masters degrees and Doctoral Programs in Latin America.
- Enlargement of the UPV/EHU collaboration networks with Universities of the Mediterranean, thanks to the relationship of University of Bordeaux with universities in Morocco and Algeria.
- Presence of Euskampus, through Tecnalia, in international markets in order to connect knowledge, talent and technology, and to add value for customers. Tecnalia puts at Euskampus' disposal its 5 Foreign Delegations (in France, Colombia, Italy, Serbia and Mexico), its Associated Innovation

Centres (in Bulgaria, France and Egypt), as well as its commercial network and numerous alliances with China, Brazil and US, among others.

- International collaboration agreements, through the DIPC, with International Center for Materials Nanoarchitectonics (MANA) of the National Institute for Materials Science of Japan and Max Planck Institut für Quantenoptik of Germany (MPQ).
- Agreement between UPV/EHU and University of Columbia (New York, U.S.A.) and George Mason University (Washington, U.S.A.) for the development of the "International Lehendakari Agirre Program" (see file 66).

7. SCIENCE PARK OF THE UPV/EHU AND NEW R&D INFRASTRUCTURES

The development of the UPV/EHU Science Park, with a surface area of 188,000 square metres, comes under the framework of a plan to create and enlarge new infrastructures to generate knowledge. This plan helps innovation and its transfer to the productive Basque business fabric (file 43). This is a strategic development, not only for the UPV/EHU, but also for the socio-economic development of the Basque Country, and its international projection. Consequently, there is a strong involvment of public institutions (Biscay Provincial Council and Basque Government).

The mission of UPV/EHU Science Park is to become a scientific-technological international benchmark, creating an innovative, flexible and functional space where highly creative people, researchers and technicians, companies with innovative capability and leading-edge research groups can interact and work together.

The Park expects 4 types of use: headquarters building, technological platforms, research centres and facilities. The Biscay Technology Park has built the Headquarters Building of the Science Park.

The UPV/EHU has built 3 technological platforms:

- The María Goyri building (file 45) Centre for Animal Biotechnology, focused on the Euskampus specialization of Healthy Aging and Quality of Life.
- The Martina Casiano building (file 44) focused on the Euskampus specialization of New materials and Innovative Processes, and Sustainable Ecosystems and Environmental Technologies.
- The Biscay Biophysics Unit building (file 46) that provides working space for the joint CSIC-UPV/EHU research centre. The Unit is focused on the Euskampus specialization of Healthy Aging and Quality of Life.

At present the four buildings are completed and in acceptance testing in order to be able to proceed to the transfer in of research groups and UPV/EHU General Research Services among others. These three buildings constructed by UPV/EHU will open in 2015-2016 academic year.

The development of the UPV/EHU Science Park is a key piece in the internationalization of the aggregation and in the interaction with the business and regional surroundings:

- To host Research Centres of international excellence of the UPV/EHU (BERC Achucarro, Biophysics Unit, BERC BCMaterials, etc.)
- To consolidate the appeal and international competitiveness of the Euskampus aggregation in supplying new facilities and latest-generation equipment.
- To attract skilled international researchers.
- To boost the use of scientific and technological facilities of UPV/EHU General Research Services.
- This is an expansion of the university for the creation and attraction of new companies with a technological base, and for connection with the region.

8. A CAMPUS COMMITTED TO THE BASQUE SCIENCE, TECHNOLOGY AND INNOVATION SYSTEM

The CIE Euskampus represents a good example of performance intended to situate the UPV/EHU in the "fourth mission" that the RIS3 Strategy considers that universities should have: leadership in regional transformation and the strategy of smart specialization (file 57). From 2013, the year that the Basque Country's *RIS3 strategy* was designed, until the end of 2014, when the *University Plan 2015-2018*, the *Basque Country Science, Technology and Innovation Plan 2020 (PCTI 2020)*, and the *Aquitaine-Euskadi Strategic Plan 2014-2020* were all approved, CIE Euskampus has been a benchmark initiative for the Basque Government, and for the Aquitaine-Euskadi Euro-region. CIE Euskampus has played a notable role in the preparation of these plans. Once they are activated, and the work starts in 2015, Euskampus is expected to play a decisive role in their deployment, which ensures a future for CIE Euskampus (see section "A look into the future").

Within the *RIS3* framework, a report was produced with a firm proposal defining 5 priority areas for the Basque Country, drawing on the experience of the CIE Euskampus project: energy, advanced manufacturing, sustainable mobility, healthy lifestyle, and territory as a constructed and natural habitat. The four first were integrated within the 3 priority areas of the Basque Country, **advanced manufacturing** (which largely integrates with **sustainable mobility**), **energy and bio-sciences**. In addition, four *niches of opportunity* (**food, territory, smart cities, and entertainment and leisure**), collecting the other Euskampus proposals, were defined.

In the framework of *PCTI 2020*, Euskampus made contributions that allowed the incorporation of CIE Euskampus' experience and learning. In particular, from the strategic perspective, the *PCTI 2020* managers endorsed these contributions in defining the 4 strategic lines:

- Promote, from the perspective of Science, Technology and Innovation, the smart specialization strategy oriented to the societal challenges of the Basque Country;
- Strengthen industrial leadership by means of public-private collaboration;
- Enhance the excellence of the Basque System of Science, Technology and Innovation;
- Guarantee the development of human capital in science, technology and innovation.

As well as the two cross-cutting areas;

- Opening up and internationalization of the Science, Technology and Innovation System;
- An innovative and connected system.

From a more operative perspective, CIE Euskampus experience, from the point of view of chanlengeoriented research, is collected in the new ELKARTEK program, as well as in the action "Support program for developing integrated tractive collaboration projects."

In addition, the Basque Government has approved a new decree that regulates the different agents of the Basque Network of Science Technology and Innovation (RVCTI). This decree lists the connections and collaborations built up between stakeholders as a form of evaluation criteria for adherence to the RIS3 strategy. This measure underpins the future sustainability of the Knowledge Hubs, further opening up this initiative to the RVCTI stakeholders.

The *Basque Government's University Plan 2015-2018* lists a collaborative research action line oriented to societal challenges, with a total budget of 10 million euros, that will allow to continue the activities of the Knowledge Hubs.

Finally, the Aquitaine-Euskadi Strategic Plan 2014-2020 recognizes the Euro-regional Campus as the engine for the deployment of its Challenge of "Knowledge Economy, Innovation and Business Competitiveness". Euskampus Fundazioa has recently signed an agreement with the Aquitaine-Euskadi Euro-region that gives support to the Euro-regional Campus for this challenge.

9. TRANSFER AND INNOVATION CAMPUS

One of the strengths of the Euskampus aggregation is that it brings in an institution like Tecnalia, whose mission is to help generate GDP, working closely with companies and developing business opportunities through research. This unique feature allows the aggregation to improve and increase interaction between companies, the aggregation entities and the research centres that participate in the CIE Euskampus project. At the same time, it fosters the process of adding value to research results for knowledge transfer by means of company start-ups, patent licences and new business models. Tecnalia develops its strategy of knowledge valorization through *Tecnalia Ventures S.L.* with its mission to manage the full lifecycle of innovative technological assets, using patent rights, know-how and participating in technology companies (file 58).

On their side, the UPV/EHU is a university with a well-defined track record in the generation of spinoffs with a high probability of success, working closely with the Economic Development Departments of the three Provincial Councils and the Basque Government. In fact, even though it is a generalist university, **the UPV/EHU occupies fifth place of all Spanish universities in terms of creating spin-offs**. Zitek, one of the UPV/EHU business incubators, is the sixth best incubator for new companies in Spain out of 353, and the only one in the *top ten* that is university based. It is also ranked fourth by value for advanced business incubators (file 60).

In 2010-2015 period, CEI Euskampus has created a total of 80 spin-offs, has submitted 500 patent applications, and has licensed 212.

Given Tecnalia Venture's disruptive nature, the main work done under the CIE Euskampus framework has been the coordination and harmonization of UPV/EHU strategies, tools and programs of entrepreneurship, valorization and exploitation with Tecnalia Venture's own strategy and modus operandi. The aim is to build a strategy that is shared by Euskampus aggregation.

Among others, the activities related to the valorization and exploitation of knowledge within the framework of the Euskampus project, which contribute to find tune UPV/EHU and Tecnalia perspectives, include:

- Introduction of Knowledge hubs transfer actions in Tecnalia Ventures' "Omega 3" dynamic to be developed jointly between the UPV/EHU and Tecnalia and supported by a major external investor.
- Opening of the Tecnalia Ventures' Entrepreneurs Club to UPV/EHU students, teachers, and researchers with an entrepreneurial vocation, including them in the particular dynamics of the Club.
- Opening of the "Inspiring Business Forum-IBF" to companies within UPV/EHU business incubators. The IBF is the benchmark forum for corporate investment in the Basque Country, containing influential companies with the capability to innovate represented by its "Corporate Venture" divisions, in search of technology-based opportunities with high potential to invest, diversify and grow the businesses.
- Opening up the Tecnalia Ventures "Campus of Technological Transfer" to the UPV/EHU. In the medium term, UPV/EHU is expected to co-organize its MBAe3 Masters degree (file 11) with this campus.

Finally, major efforts are being made to strengthen the distinct international connections:

- Strengthen the links with the Medici Venturing Group.
- Consolidate the relationship with EBAN (European Business Angels Network).
- To work proactively in the framework of the European Technology Transfer Offices Circle. The next (2016) Annual Meeting of the Technology Transfer Offices Circle will be held in San Sebastian.

Not only does this work maintain institutional connections with these networks and entities, but it also helps :

- The recruitment of entrepreneurs who can develop business opportunities in the Basque Country.
- The enlargement of the customer portfolio to foreign centres and universities.

On their side, the Euro-regional Campus will connect the Euskampus strategy with the different strategies that are developing in Aquitaine and specifically in the IdEx Bordeaux framework, like the creation of the Society of Acceleration of Technology Transfer (SATT) Aquitaine Science Transfer (AST).

10. ZABALDUZ INDUSTRIAL DOCTORATES

ZabaldUz is a UPV/EHU labour contract program developed within CIE Euskampus for doing doctoral theses in Basque County companies or institutions that address one of their challenges (file 63). The purpose is to train doctors in the UPV/EHU doctoral programs in cooperation with the productive and social surroundings, by means of pre-doctoral formal contracts in any area of the scientific knowledge, under article 21 of the Science, Technology and Innovation Spanish Law - 14/2011 dated 1 Jun.

The objectives of the Program are:

- To consolidate and strengthen ties between the UPV/EHU and the social and production environment.
- To foster public-private collaborative research development.
- To help to generate highly-qualified jobs in the social and business tissue.
- Progressively increase the number of doctoral graduates for their incorporation into the socioeconomic surroundings, not only for the development of R&D projects, but also as key people to lead companies at a time when creativity is one of the keys to future success.
- To contribute to the development and innovation of the industrial and social fabric by means of the transfer of research talent to companies.
- To retain talent and foster business competitiveness.

The cooperation is based on companies or social entities proposing research projects which include the doctoral thesis projects by researchers selected by means of this Call. With regard to the organization type, this can include all sectors of activity, whatever the size, with corporate headquarters in the Basque Country.

The hiring entity is UPV/EHU and the contracts are for three years. The project is done in facilities of the company as well as those of the UPV/EHU, with the breakdown between the two determined according to the merits of each case.

The Zabalduz Program has received a grant from the **Innovation Fund** under the *Basque Government Science Technology and Innovation Plan 2015* that in 2012 assigned **3 million euros over a period of 3 years** in order to carry out this initiative. 45 contracts have been agreed: 21 with companies, 12 with business associations, and 12 with technology centres, covering all the areas of knowledge but mainly in Experimental Sciences and Engineering. The first theses will be defended in academic year 2016- 2017.

UPV/EHU and University of Bordeaux are analysing the feasibility of holding a Zabalduz Program for the Euro-regional Campus.

11. SINGULAR INITIATIVES CONNECTED WITH THE TERRITORY AND WITH INTERNATIONAL PROJECTION

One of the major aims of the CIE Euskampus is to increase the connection of aggregation entities, particularly the UPV/EHU, with the region, providing unique projects in terms of links with regional challenges or agents, and also in terms of international projection. Some of these initiatives have been channeled through Euskampus Fundazioa, considering its character of a flexible space open to an agile

form of collaboration with public-private entities, by means of the establishment of different agreements and programs. Other initiatives are defined through the university's own mechanisms.

Euskampus Fundazioa has created the concept of "**Autonomous Units**". This units are research, training, transfer and intervention structures, that, by the initiative of the Euskampus Fundazioa Board of Trustees, or by its agreement with public or private entities, can deploy a long-term strategic project of international excellence and work with full independence within Euskampus Fundazioa. The autonomous nature established that those units have a three-year strategic plan, an independent management plan, and are able to manage their own resources for the deployment of their strategic plan.

During CIE Euskampus life, two Autonomous Units have been set up in Euskampus Fundazioa (files 65 and 66):

- **Sinnergiak Social Innovation**, created in April 2012, for driving and developing an ambitious Program of Social Innovation boosting collaboration with heterogeneous agents, both from a social and a regional perspective. SINNERGIAK Social Innovation mainly focuses its activities in the international arena, creating networks and agreements with different international organizations in order to exchange ideas, experiences, organize congresses and participate in research projects in social innovation.
- Agirre Lehendakaria Center for Social and Political Studies ALC, created in March of 2013, for the impulse of the "International Program Agirre Lehendakaria" developed by UPV/EHU, Columbia University (New York, U.S.) and George Mason University (Washington, U.S.). Seton Hall University (New Jersey, U.S.) and Ulster University (Belfast, United Kingdom) have recently joined in this program. ALC also has the sponsorship of Kutxabank, a patron of Euskampus Fundazioa, the most important Basque Country bank, and one of the most important ones in Spain. ALC's mission aims to add value and share, internationally, the strategic decisions and projects that have enabled Basque society to be recognized as a successful model of socio-economic transformation. ALC is working in the following countries: Croatia, Ireland, South Africa, Mexico, Wales, Peru and Japan.

For its part, the UPV/EHU has created various "*Institutional Chairs*", university structures without legal status created in collaboration with Basque Country institutions (Basque Government or Provincial Councils), whose main function is research and knowledge transfer as key to the University-Society-Region connections (file 64). Of particular note are the UNESCO Chairs, part of the UNESCO UniTwin Network, which in addition to fostering university cooperation and knowledge transfer, constitutes an element of UPV/EHU internationalization.

Finally, UPV/EHU has created the **Centre of Aeronautical Advanced Manufacturing, CFAA**, inspired by the UK Catapult Centres (file 67). CFAA is a typical UPV/EHU centre, formed from an agreement signed in November 2014, in which UPV/EHU is the benchmark scientific-technical entity within which the Centre has been created. CFAA works with 11 industrial partners in the aeronautical and machine-tool fields that come together in the *Business Grouping for the Development of Advanced Aeronautical Manufacturing Techniques*, with institutional investment partners (Basque Government and Biscay Provincial Council) and with the Biscay Technology Park. Besides the Aeronautical and the Machine Tool clusters are benchmark CFAA collaborating entities. CFAA is a unique public-private initiative to undertake activities that allow a fast transfer of results to the productive tissue associated with aeronautics. This activity lies between Technology Readiness Level 5 and 7. It is in contact with equivalent centres in the United Kingdom, (The University of Sheffield Advanced Manufacturing Research Centre, AMRC), and in Denmark, (Danish Advanced Manufacturing – DAMR), in order to generate stable relationships and sign agreements for the development of international collaborative projects.

12. A CAMPUS COMMITTED TO SCIENTIFIC CULTURE

In its social dimension and of interaction with the region, the CIE Euskampus has a special commitment to foster scientific communication and scientific culture. Since its foundation, it has developed a rich program of actions to promote scientific culture in Basque society in order to increase understanding

of the social implications of scientific and technological development; and also to boost creativity and interest in science among the young and university students by offering them the opportunity to get in contact with 'star personalities' in the world of academia, research and innovation.

The Euskampus aggregation entities have a high degree of social responsibility in scientific culture and the dissemination of scientific/technical knowledge. UPV/EHU through its Chair of Scientific Culture, DIPC by means of its annual Scientific Communication Program, and Tecnalia through its annual Prize for Journalism about Research and Technological Innovation. Similarly, Euskampus Fundazioa has been accredited as a Scientific Culture and Innovation Unit by the Spanish Science and Technology Foundation (FECYT), in order to exert a coordination role for scientific culture and innovation activity within the aggregation (file 69).

Since its foundation, CIE Euskampus has improved and established scientific communication initiatives with major social and international impacts. The following stand out:

- Creation and maintenance of four blogs of scientific interest, a blog aggregator and a platform of current scientific news. The highlighs are the "mapping ignorance" blog, set up in 2012 with the aim to to share cutting edge scientific knowledge with experts in their areas of research under the international standard "Research Blogging", and the blog "Women in science" which shows the past and present achievements of women in science and technology (files 69 and 70).
- Organizing and holding the **TOP@DIPC** event every year since 2009: eleven meetings to date between fourth year secondary school and Baccalaureat students with top scientists, including 10 Nobel prize winners (file 72).
- The event "Passion for Knowledge Quantum 13", a many-faceted event that inspired an
 interest in people for research, discovery and knowledge generation. Almost 8,000 people attended
 the week-long event. In addition, there were about 28,000 visits to the event web page, that
 broadcast live streaming for most of the sessions. Subsequently, videos of the event have had in
 excess of 10,000 viewings (file 71).

SCIENTOMETRIC ANALYSIS

CIE Euskampus has focused on a key project approach of systematic measurement of scientific production as one of its main contributions to "Scientific Improvement". In 2012 *Euskampus Fundazioa* hired a scientometric analyst in order to monitor and do a scientometric analysis of the Euskampus project. This analyst works in coordination with teams that carry out scientometric analysis in UPV/EHU, DIPC, and Ikerbasque Science Foundation. *Euskampus Fundazioa* is introducing the CIE perspective in scientometric analysis, using it to drive cooperation, and to incorporate new analysis mechanisms that complement the existing ones.

It has been prepared a CIE Euskampus Scientometric Report for the period 2010 - 2015, that is added to this Final Report as an annex. The following conclusions are drawn:

- The CIE Euskampus aggregation has increased production by 60% since 2009.
- CIE Euskampus publishes 54% of its papers in first quartile journals. In 2014, CIE Euskampus and UPV/EHU doubled the number of papers published in first quartile journals over 2009. DIPC had an increase of 45% in the number of papers published in first quartile journals and Tecnalia an increase of 37%, in the same period.
- Strong CIE Euskampus specialization in *Experimental Sciences*, *Medicine and Pharmacology* and *Architecture*, *Engineering and Computer Sciences*.
- Increase of the volume of scientific production between 2009 and 2014 in the cross-cutting area
 of Science and Technology as much in CIE Euskampus as in the three entities that comprise it.
 There has been an increase of the volume of the scientific production in the area of Social
 Sciences and Humanities during the period 2009-2014.

- In the papers with greater international collaboration, CIE Euskampus signs 42% of papers with at least one foreign centre. UPV/EHU signs 58% with a foreign centre, DIPC for 100% of papers and Tecnalia for 35% of papers.
- CIE Euskampus, UPV/EHU and DIPC collaborate mainly with the Max Planck Gesellschaft, Russian Acad Sc, Tomsk VV Kuibyshev State Univ, Univ California, and Univ Bordeaux centres. For its part, Tecnalia tends to collaborate with IFREMER, CEFAS and Univ Tubingen.

GOVERNMENT AND MANAGEMENT OF CIE EUSKAMPUS

CIE Euskampus is a strategic transformation project that aims to establish an ecosystem of knowledge and innovation from the aggregation of UPV/EHU, Tecnalia and DIPC. It is therefore configured as a high complexity project because of its inter-institutional nature that combines entities which have different missions and cultures. Also, the vision and measures being considered require long lead times to assess their impact and for them to be internalized by these different entities.

Thus, it was considered crucially important to create a governance structure with a legal identity, given the public-private inter-institutional nature of the aggregation, and to keep the door open to further participation with new entities to strengthen and widen the scope of CIE Euskampus. Following an analysis of the different possibilities, it was decided to make this legal entity in the form of a foundation, because it best meets the following characteristic features:

- to facilitate work involving aggregation, cooperation and multidisciplinarity, managing the differences and the diversity, from an autonomous and neutral space;
- to provide the aggregation with the necessary agility for making decisions and developing project proposals and initiatives, mobilizing the social community of the aggregated entities;
- to assure coherence to the original aims of the project throughout its development while extending the time frame established in the Call of the Campus of International Excellence;
- to expand the perimeter of the CIE Euskampus facilitating the incorporation of new programs and initiatives of excellence and internationalization.

STRUCTURE AND OPERATION

Euskampus Fundazioa was constituted on 19 July 2011. UPV/EHU, Tecnalia and DIPC are the founder members of Euskampus Fundazioa. Three new private entities joined the Euskampus Board in 2012: Ormazabal-Velatia Group, CAF and Kutxabank. Also the Basque Foundation for Science - Ikerbasque became part of the entity. The incorporation of all these entities strengthened the commitment to deploy CIE Euskampus and the public-private nature of the project, by incorporating major players in the Basque Country's productive, economic and innovative fabric.

The organizational structure of the foundation is shown in the following figure:



The **Board of Trustees** is the highest level of Foundation governance, responsible for the deployment of the global strategy of the CIE Euskampus. It is chaired by the Rector of UPV/EHU and is made up of institutional representatives at the highest level from the entities mentioned above. The proportion of representatives is as follows: 4 from UPV/EHU, 2 from Tecnalia, 2 from DIPC, and one from each of the remaining entities. The Rector of Bordeaux University is Patron of Honour, thus reinforcing the commitment to the development of the Euskampus-Bordeaux Euro-regional Campus. The Board of the Euskampus Fundazioa normally meets twice a year, in June and December.

The **Executive Committee** is the governing body permanently delegated by the Board. It is made up of a minimum of 5 members of the Board of Trustees and a maximum of 8. It is chaired by the Rector of UPV/EHU and must include the Managing director of Tecnalia and the President of DIPC. The Executive Committee meets 4 times a year. It makes decisions on the overall Project initiatives and the allocation of resources, closely monitoring the development of CIE Euskampus. The Executive Committee has the authority to establish **Delegate Commissions** for the management of particular initiatives of major impact on CIE Euskampus.

The **general criteria** that guide the Executive Committee and the Delegate Commissions in the allocation of resources between activities are as follows:

- **Excellence:** Initiatives and activities, irrespective of where they stand in the knowledge exploration/exploitation process, are supported as long as the results are in line with excellence aims of the CIE Euskampus project, that is to say, the results put the Euskampus research community at the forefront of international knowledge exploration and exploitation;
- **Aggregation**: There is collaboration between UPV/EHU and CIE Euskampus entities or associates, and this collaboration results from a shared vision and strategic alliances. It reinforces existing collaborations and/or allows new opportunities for collaboration making use of lessons learnt;
- Leverage: Helps access resources or programs that endorse the excellence of the initiatives proposed, especially of the European programs.

In general, Euskampus Fundazioa funding always acts as a source of secondary finance that **can never replace existing competitive public finance, or entities' own funding** for their research community. Indeed, Euskampus promotes the use of primary finance, facilitating access to it, and helping the entities make an economic return by the shared leveraging of the proposed initiatives. The maximum **transparency** and **agility** are the values which guide decision-making.

The Foundation has an **Executive Director**, who acts as secretary of the Board of Trustees and the Executive Committee, and who manages the coordination of CIE Euskampus initiatives coming from the Foundation; the Executive Director leads the team of **Operational Managers** (operations team) that coordinates and boosts actions developed by the aggregation entities within the Euskampus project. Among other functions, the operations team:

- Promotes cooperative research between participating entities within CIE Euskampus in the priority specializations. And in particular:
 - Manages and invigorates the CIE Euskampus Community of Knowledge Hubs.
 - Stimulates and coordinates participation in various European programs and especially in the Knowledge and Innovation Communities (KICs).
- Designs, coordinates and promotes measures for the development and consolidation of the Euroregional Campus.
- Works with aggregation entities in establishing shared strategies for knowledge transfer and exploitation.
- Promotes multidisciplinary environments that link CIE Euskampus entities with UPV/EHU Masters and Doctoral School.

- Contributes to elaborate the value proposition of CIE Euskampus within the Science, Technology and Innovation System of the Basque Country.
- Designs and manages the channels of communication of the CIE Euskampus project, and defines and deploys the digital identity of CIE Euskampus.
- Coordinates and manages the documentation and analysis of data associated with the CIE Euskampus project and executes the scientometric analysis of the aggregation.

Including the executive director, 8 people comprise the operations team. However, in reality, it is larger than this, since the Euskampus Fundazioa team mobilizes a larger group of people within the aggregated entities, mainly belonging to UPV/EHU, making up more than 40 people with a variable level of dedication (not including all the teachers and researchers involved in the different initiatives).

GOVERNMENT AND MANAGEMENT OF THE COMMUNITY OF KNOWLEDGE HUBS

With the purpose to govern and manage the Community of Knowledge Hubs, the Executive Committee has constituted a Delegate Commission, comprising two vice-rectors of UPV/EHU, one corporate director of Tecnalia and the director of DIPC, for making decisions on the Investment fund for Knowledge Hubs (file 24). This Commission has established an investment strategy with criteria and specific values, in addition to the above-mentioned general criteria, as well as various types of intervention. These specific criteria largely relate to interlinking the proposed activity with the strategic framework of the Knowledge Hub, with the expected time of execution and with the type of intervention. The Delegate Commission meets once a month.

Once decisions are approved, the Euskampus Fundazioa Operations Team manages the portfolio of funded investments. With the endowment of this fund, Euskampus Fundazioa helps attract competitive public funding for carrying out projects, and designs *ad hoc* interventions not contemplated within the existing funding mechanisms.

MANAGEMENT AND GOVERNMENT OF THE EURO-REGIONAL CAMPUS

For the management and government of the Euro-regional Campus, two Committees have been established - a Steering Committee and an Operations Committee. The Steering Committee is made up of eight members, with representative parity, four from University of Bordeaux and four from UPV/EHU. It is co-chaired by the Rectors of the two universities. The vice-rectors with competences in research, internationalization and outreach are also part of the Steering Committee. Representatives form other Euskampus and IdEx Bordeaux aggregation entities also attend these meetings. This Steering Committee meets once a year.

The Operations Committee comprises two people from each of the Operations teams of Euskampus Fundazioa and of IdEx Bordeaux who work on a daily basis in the Euro-regional Campus, including the Director of Euskampus and the Director of IdEx Bordeaux. This Operations Committee manages "Euskampus Bordeaux International Support – EBIS" (file 20.)

In its 2015 meeting, the Steering Committee decided that Euskampus Fundazioa was the proper agent to manage the Euro-regional Campus initiatives, and to act on behalf of all the entities involved in Euskampus and IdEx Bordeaux. Therefore, Euskampus Fundazioa has expanded its perimeter of action and has also obtained the recognition of University of Bordeaux to act on its behalf.

AN OPEN COLLABORATION SPACE

Euskampus Fundazioa is the cornerstone of the relationships that the aggregation is establishing with various public and private entities for promoting excellence and internationalisation by means of the establishment of different programmes that directly impact on the business and regional environment. In this way, it expands the scope of CIE Euskampus beyond the programs and measures within the original proposal. The following forms are being considered:

• Member entities

Public or private entities that wish to contribute to the development of the Euskampus project or that wish to engage with the purpose of Euskampus Fundazioa, strengthening the University-Society-Region connection and increasing their own international projection through their links with UPV/EHU as a benchmark academic space in the Basque Country (file 23).

• Autonomous units

Research, training or transfer units which, due to the initiative of the Board or to the agreement of the Board with public or private entities, can deploy a strategic long-term project and operate with full independence within Euskampus Fundazioa, as shown in the diagram "Structure of Euskampus Fundazioa". The autonomous nature establishes that these units have a three year strategic plan, an independent management plan, and a leadership structure with powers and resources to carry out this strategic plan. Two autonomous units have been created within the foundation for research, training and intervention in social innovation and regional development with international impact: *Sinnergiak Social Innovation* (file 65) and *Agirre Lehendakaria Center for Social and Political Studies* (file 66).

Ultimately, Euskampus Fundazioa, far from being a mere instrumental entity, is becoming a key agent in the Basque System of Science, Technology and Research for the invigoration and internationalization of R&D with an open and collaborative approach and with a clear vocation for social responsibility and regional engagement.

A LOOK INTO THE FUTURE OF CIE EUSKAMPUS

The release of this report does not imply the end of the CIE Euskampus story; instead, the story goes on. The initial phase comes to an end, a phase that has served to lay down the foundations and take the first steps of a long-term strategic bet. At the meeting held on 10 June 2015 to support the preparation of this final report, the Euskampus Board of Trustees reviewed the development of the project CIE Euskampus from its creation in 2010, analysing the evolution of the major initiatives and the main results obtained. Looking forward to the evaluation by the International Committee designated by the Ministry of Education, the CIE Euskampus partners assess the project very positively. The commitment of the aggregation entities has been strengthened in the course of these five years so that "if Euskampus did not exist today, we would have to create it". This was the unanimous statement of principles of CIE Euskampus partners that sums up the experience, commitment and determination for the future of Euskampus.

On 26 and 27 November 2015 the second Euskampus - Bordeaux Euro-regional Symposium will be held in Donostia - San Sebastián, following the successful wake of the first Symposium, held on 19 and 20 November 2014 in Bordeaux. This forum will include the presentation of the most notable CIE Euskampus project results, and in particular, the advances in building the Euro-regional Campus of Excellence. Using material collected in this report, a detailed press kit will be edited in order to show the added value of the main CIE Euskampus initiatives and to clearly explain how Euskampus' promoters see its future position. This press kit, in Spanish, Basque, English and French, will be sent to all the media outlets. The press kit will also be available in the Euskampus website and in the webs of aggregation entities, and it will be announced and spread out through their social networks to reach as large a public as possible.

Since 2013 work has been done to translate the experience of CIE Euskampus to the Basque Country Science, Technology and Innovation System. As previously described ("Work done" and sheet 57) there has been active collaboration in the design of the RIS3 Strategy, within the Science, Technology and Innovation Plan 2020, and in the Basque Government University Plan 2015-2018. CIE Euskampus has served as an experience to inspire policies and programs and to generate a new context in which UPV/EHU is positioned as a key player in regional development, and in which collaboration and capabilities convergence are the driving forces for the future evolution of the Science, Technology and Innovation System. This is the context in which Euskampus is setting out on a new phase to deploy its mission to be a model for the entire System.

In the Board meeting of 10 June, described above, Euskampus **mission** was reaffirmed for the period 2015-2020:

- Foster **excellent research as a means to improve** the Basque Science, Technology and Innovation System, thus becoming a **driver for social wellbeing**.
- Create a collaboration framework between all the entities involved within Euskampus that is based on a cooperative and multidisciplinary approach that responds to the demands and needs of society.
- Increase industrial competitiveness and economic growth in the Basque Country.
- Boost **creativity and innovative spirit in academic** and business activity that is able to adapt to changing economic and social realities.

Consistently, the **value proposition** of Euskampus Fundazioa was re-stated:

"Be the **benchmark instrument** for UPV/EHU, in aggregation with DIPC, TECNALIA and University of Bordeaux, as well as for the Basque Country Science, Technology and Innovation System, in order to:

- be a catalyst for inter-institutional, cooperative and multidisciplinary activities,
- and promote ad-hoc participatory methodologies and actions
- for the design and promotion of training, research, knowledge transfer and dissemination

activities,

- with a driving effect on the region (Basque Country and the Aquitaine-Euskadi Euro-region),
- and with a continuous search for **excellence** and **international projection**."

They also established the primary focuses for Euskampus activity in the next stage that begins on 1 January 2016, in coherence with the initial stage done in the period 2010-2015:

- Further strengthening the Euskampus aggregation, establishing mechanisms that cement relationships and mutual trust and that allow synergies to grow, both in quantity and quality. The main objectives are as follows:
 - o increase joint participation in European and international programs,
 - encourage the participation of Tecnalia in UPV/EHU's postgraduate programs, as well as the co-supervision of doctoral theses, the enlargement of the scope of the 'Tecnalia Classrooms', etc.,
 - fine tune the knowledge transfer and exploitation strategies, increasing joint international work.
- Extending the work to deploy the Community of Knowledge Hubs as the main ingredient for invigorating and connecting the capacities of all the aggregation entities, and with the other stakeholders in the quadruple helix of local authorities, universities, businesses and citizens. In order to improve efficiency and effectiveness, the focus over the next years will be those Knowledge Hubs that have greatest outreach and alignment with the Basque Country's RIS3 strategy. To achieve this, the current number of eleven Knowledge Hubs will be reduced to six as shown in the following diagram:


- Taking forward the construction of the Euskampus-Bordeaux Euro-regional Campus of International Excellence as one of the priority lines of joint internationalization of the aggregation, and of widening the regional perimeter of the Basque Country to include the Aquitaine-Euskadi Euroregion. The objectives of the Framework Agreement between UPV/EHU and University of Bordeaux have solidified into an Action Plan with four main themes: Education and employability, Research cooperation, Connection with the Aquitania-Euskadi Euro-region for innovation and competitiveness, and International projection. In addition, a fifth, cross-cutting, coordination theme is proposed to support the previous four themes. Each theme has its specific aims, well-defined actions, priorities for the period 2015-2016, and a dashboard of precise indicators to measure performance and success in the development of the Euro-regional campus. The key metrics are:
 - Number of double postgraduate degrees: double the current figure by the start of academic year 2016-17.
 - Increase student mobility: double the current figure by the start of academic year 2016-17.
 - Number of theses done via co-tutelage: maintain a minimum of 30 active theses every year.
 - Number of joint international projects: over 30 projects in the period 2014-2020 in H2020, Erasmus+ and other European programs.
 - Number of joint indexed papers in first quartile journals: 100/year for 2020.
 - Number of Associated International Laboratories: 3 at end 2016.
 - Number of Euro-regional partnerships (with companies) in priority sectors: 4 at end 2016.
 - Number of joint international alliances: 2 at end 2016.
- Participating actively and in a coordinated manner in the KICs: as spaces to deploy Knowledge Hub actions, as well as Euro-regional Campus collaborations, and as preferred arenas for international projection in order to:
 - o diversify the international training offer in the field of each KIC,
 - deploy an international research agenda responding to the calls for proposals launched by the KICs, and taking advantage of consortiums between KIC's partners that respond to H2020 and Erasmus+ programs,
 - develop Euskampus' international strategy of knowledge transfer and innovation with pan-European opportunities made possible by the KICs.
- Being a benchmark initiative for key agents of the Basque System of Science, Technology and Innovation, and for the deployment of Basque Government research and innovation policies.
- Continuation of the coordinated work done in the promotion of science communication and scientific culture.

This mission of Euskampus, with the focuses listed above and the corresponding value proposition of Euskampus Fundazioa as the instrument for its development, sits well within the Basque Country's Science, Technology and Innovation Plan 2020 (PCTI2020). Specifically, the following actions are proposed as an extension of CIE Euskampus:

- Promotion of projects arising from the Community of Knowledge Hubs in the Program of "Collaborative research for the scientific-technical development of Smart Specializations – ELKARTEK".
- Participation to set up "spaces and processes of entrepreneurial discovery" in each RIS3 priority area and 'niche of opportunity', identifying pilot projects, and promoting the concourse of capabilities and the necessary disciplines to generate collaborative activities with high impact and high added value.

- Design new approaches and mechanisms for a new program "Integrated Tractor Projects", inspired by the "Investment fund" concept developed to provide impetus to the Knowledge Hubs. That is to say, acting as a source of secondary funding, complementing the existing instruments and programs in the system and aiming to leverage and strengthen both national and international public and private funding.
- Develop an evaluation and management model of the dynamics of multidisciplinary and multiagent collaborative research for the integrated tractor projects and for the spaces of entrepreneurial discovery, including metrics allowing objective-based evaluation and management. In this regard, evaluation and management refers not just to the results of collaborative effort. Rather, they include metrics to improve and strengthen the "dynamics of collaborative research" itself within each project.

In addition, the Basque Country University Plan 2015 - 2018 recognises Euskampus as a catalyst for:

- the deployment of collaborative research oriented to societal and global challenges between UPV/EHU and Basque Country agents,
- UPV/EHU's international projection, via alliances with benchmark international centres, and participation in European programs, especially the KICs.

This Plan contains several lines of specifically-funded action lines to develop this catalysing work that will go on to allow continuity to the Community of Knowledge Hubs, to the Euro-regional Campus shared with Bordeaux, and to the proactive work being done by Euskampus in the KICs.

As mentioned, in 2014 Euskampus contributed to the definition of the Aquitania-Euskadi Euro-region Strategic Plan 2014-2020. In its Challenge 2, "Knowledge economy, innovation and business competitiveness", this Plan recognizes the Euskampus-Bordeaux Euro-regional Campus as one of the crucial assets for the development of human capital, research, knowledge transfer and connection with the business tissue. The result of this recognition is the "Strategic Collaboration Agreement between the Aquitaine-Euskadi EGTC² and Euskampus Fundazioa". This agreement establishes an action plan for meeting this Strategic Challenge, with corresponding funding that can be increased year-by-year if evaluation results are positive.

The various EU Programs, including H2020 and Erasmus+, are also key for the future of Euskampus; its entities will continue the high level of participation but with extra value-added thanks to the experience of the aggregation and CIE Euskampus project. In particular, as has been repeatedly emphasized, the KICs are the most coherent opportunities for a Campus of International Excellence like Euskampus. Currently, the aggregation entities, together with University of Bordeaux, are coordinating their work within the KIC of raw materials (KIC Raw MatTERs) and are working actively in the preparation of two proposals in Advanced Manufacturing and Food for the next EIT Call. The Euskampus aggregation partners have decided that Euskampus Fundazioa is the technical secretariat and the strategic coordinator of their joint participation in the various KICs. This is without doubt one of the most promising role for the future international projection of Euskampus.

Finally, the Euskampus aggregation entities, and Euskampus Fundazioa itself, have committed themselves to applying for the various calls and programs in training, research and innovation that the Spanish Ministries could launch for entities recognised as Campus of International Excellence.

² EGTC = European Grouping of Territory Cooperation

Ultimately, Euskampus has a future because its founders designed it as a long-term strategic proposal, with a vision transcending the horizon of the original Call of the Campus of International Excellence. 2015 is a milestone along the way. Today we can declare that key objectives set out in 2010 have been met. This outcome and the experience obtained give us the confidence to go to the 2020 horizon forging a science, technology and innovation ecosystem which offers local answers to global challenges, and at the same time putting the Basque Country on the world-wide map of the Knowledge Society.

TABLE OF MAIN RESULTS ACHIEVED

Result No.	Field	Description	Format	Achievement Date
1	Governance	Constitution of the <i>"Euskampus Fundazioa" Foundation</i> , as a public-private inter-institutional legal entity that manages the CEI Euskampus Project. <i>The UPV/EHU, Tecnalia and DIPC</i> are founder members.	Deed of constitution	July 2011
2	Governance	Incorporation of three new private entities to the Board of Trustees of <i>Euskampus Fundazioa</i> : Ormazabal-Velatia Group, CAF and Kutxabank, as well as the <i>Basque Science Foundation IKERBASQUE</i> , reinforcing its public-private nature.	Deed	July - December 2012
З	Governance	Creation of the organisational structure of <i>Euskampus Fundazioa</i> : Training, Cooperative Research and Innovation, Communication, Internationalization and Resources.	Management Structure	September-December 2011
4	Governance	Creation within <i>Euskampus Fundazioa</i> of an operations team of eight multidisciplinary and versatile people, with the capacity to adapt to the project's challenges.	Personnel	December 2012 - January 2013
5	Governance	Creation by <i>Euskampus Fundazioa</i> of an Investment fund to act as a source of secondary funding to promote training, research and knowledge transfer activities collected in the different agendas of the Euskampus Knowledge Hubs. The fund is 1 million euros.	Investment fund	December 2012 - June 2013
6	Governance	Definition of the concept of an Autonomous Unit within <i>Euskampus Fundazioa</i> , to support specific projects devoted to research, training, and interaction with the region and with international impact: <i>Sinnergiak Social Innovation</i> (April 2012) and <i>Agirre Lehendakaria Center for Social and Political Studies</i> , (March 2013).	Agreement	April 2012
7	Governance	Signature of 6 agreements by <i>Euskampus Fundazioa</i> in order to reinforce relationships between the Euskampus Aggregation and regional stakeholders: <i>BCBL (Basque Excellence Research Center on Cognition, Brain</i> <i>and Language); BC3 (Basque Excellence Research Center on Climate</i> <i>Change); Institute BioDonostia; BCAM (Basque Excellence Research Center</i>	Agreement	June 2013

		in Applied Mathematics); Centre of Cooperative Investigation in Advanced Manufacturing, CIC marGUNE; ESSBilbao (Neutron Spallation Facility).		
8	Governance	Official Implementation of the strategic alliance with <i>Bordeaux University</i> , through the signature of a letter of intent for the creation of a cross-border campus.	Document	September 2010
9	Governance	Definition of the management structure and the establishment of a mixed operations team for <i>Euskampus/IdEx Bordeaux</i> .	Document	December 2011
10	Governance	Definition of the Cross-border Campus Strategic Action Plan 2012-2015 based on the implementation schedules of the two Campus of Excellence projects <i>Euskampus and/IdeX Bordeaux</i> .	Document	July 2012
11	Governance	Elevation of the Rector of <i>Bordeaux University</i> 2 and the President of the IdEx Bordeaux to the Board of Trustees of <i>Euskampus Fundazioa</i> as Patron of Honour	Deed	June 2012
12	Governance	Signed Framework Agreement between UPV/EHU and Bordeaux University for the development of the Euskampus-Bordeaux Euro-regional Campus of International Excellence. The Agreement marks the transition from a pilot project to institutionalize the Alliance for the long-term development of the Campus.	Agreement	November 2014.
13	Governance	<i>Tecnalia</i> and <i>DIPC</i> sign up to the Framework Agreement between <i>UPV/EHU</i> and <i>Bordeaux University</i> for the development of the Euskampus-Bordeaux Euro-regional Campus of International Excellence	Agreement	February 2015.
14	Governance	Agreement which recognizes <i>Euskampus Fundazioa</i> as the instrument designated by Euro-regional Campus partners to become a catalyst in euro-region dynamics, as well as interacting agent with the Aquitaine-Euskadi Euro-region.	Record	May 2015

Result No.	Field	Description	Format	Achievement Date
15	Enhanced teaching and consolidation within the EHEA	The UPV/EHU offers 70 Degree courses, all adapted to the EHEA.	Document	Academic year 2014-15
16	Enhanced teaching and consolidation within the EHEA	10% of degree credits obtained via active methodologies (Aim established for 2017 in the Strategic Plan)	Document	Academic year 2014-15
17	Enhanced teaching and consolidation within the EHEA	The percentage of academic staff who have followed quality training courses has risen to 48%.	Document	June 2015
18	Enhanced teaching and consolidation within the EHEA	2010-15, 20% of the Teaching and Research staff participated in the program to evaluate the educational activity of <i>UPV/EHU</i> teaching and research staff (DOCENTIAZ).	Document	June 2015
19	Enhanced teaching and consolidation within the EHEA	Creation and deployment of the IKD GAZtE Excellence Project (Promotion of student empowerment)	Document	Academic year 2012-13
20	Enhanced teaching and consolidation within the EHEA	Creation and commissioning of the Masters and Doctoral School of the UPV/EHU	Document	December 2011
21	Enhanced teaching and consolidation within the EHEA	<i>Tecnalia, Kutxabank and Foundation Ikerbasque</i> (sponsors of <i>Euskampus Fundazioa</i>) become part of the Steering Committee of the Masters and Doctoral School of the <i>UPV/EHU</i>	Document	April 2012
22	Enhanced teaching and consolidation within the EHEA	 104 Masters degrees offered, of which: a) 19 fully or partially in English, b) 5 are jointly organised with other European universities c) 6 are jointly organised with Latin American universities. 	Web	Academic year 2014-15
23	Enhanced teaching and consolidation within the EHEA	 Participation of the UPV/EHU in 2 Erasmus Mundus programs: EM in Marine Environment and Resources, in collaboration with Bordeaux University, Southampton, Liège. Tecnalia is the collaborating entity. The UPV/EHU is the coordinator university. 	Web	Academic year 2012-13

		- EM in Language and Communication Technologies, in collaboration with the universities of Saarlandes , Trento, Malta, Lorraine, Prague, Groningen, Shanghai Jiao Tong and Melbourne		
24	Enhanced teaching and consolidation within the EHEA	65 Doctorate Programs offered. All the programs have been accredited by ANECA in accordance with Royal Decree 99/2011.	Web	Academic year 2014-15
25	Enhanced teaching and consolidation within the EHEA	32 Doctorates with a Mention of Excellence for the period 2011-2012, 2012-2013, 2013-2014. The UPV/EHU leads this ranking of quality and excellence in Spain.	Resolution	From October 2011
26	Enhanced teaching and consolidation within the EHEA	95 agreements signed for co-tutalage PhD theses with international universities.	Agreements	From 2010 to 2015
27	Enhanced teaching and consolidation within the EHEA	The average percentage of post-graduate students (masters' and PhD's) from other countries is 20% for the 2010-15 period.	Web	From 2010 to 2015
28	Enhanced teaching and consolidation within the EHEA	The average figure per year of PhD thesis read in the 2010-15 period is 361. During academic year 2014-15, the % of international thesis and with European Mention reaches the figure of 44%.	Document	From 2010 to 2015
29	Enhanced teaching and consolidation within the EHEA	 The UPV/EHU participates in 2 Innovation Training Networks-European Joint Doctorates : Social Representations and Communication European/International Joint PhD. Led by the University of Sapienza University of Rome and in collaboration with the Universities of Vienna, Paris, Linz, Helsinki, Lisbon and Valencia among others. SUSPOL. European Joint Doctorate in Organocatalysis and sustainable Polymers Led by the UPV/EHU with the collaboration of the universities of Warwick, Bordeaux and Mons. 	Web	Academic year 2014-15
30	Enhanced teaching and consolidation within the EHEA	Creation of 2 <i>Tecnalia-UPV/EHU</i> Classrooms: Economy and Innovation Management Classroom, and Tecnalia-ETSI UPV/EHU Classroom	Web	Academic year 2012-13
31	Enhanced teaching and consolidation within the	Participation in International Education Projects: 2 Jean Monnet projects, 2	Document	Academic year 2014-15

	EHEA	strategic associations, one as partner and one as leader		
32	Enhanced teaching and consolidation within the EHEA	Over 80 PhD thesis defended in the framework of the Latin American Master's and PhD Network.	Document	From 2010 to 2015
33	Enhanced teaching and consolidation within the EHEA	6 double postgraduate degrees UPV/EHU - Bordeaux University	Web	From 2010 to 2015
34	Enhanced teaching and consolidation within the EHEA	Annual Organisation of the Cross-border Doctoriales jointly with the Université de Pau et des Pays de l'Adour, Bordeaux University and Tecnalia.	Web	2013-2015
35	Enhanced teaching and consolidation within the EHEA	22 theses in co-tutelage within the framework of the cross-border Euro- regional Campus	Web	2010-2015
36	Enhanced teaching and consolidation within the EHEA	Celebration of the first Euro-regional Symposium organised by the UPV/EHU and Bordeaux University	Web	November 2014
37	Enhanced teaching and consolidation within the EHEA	Creation of Euskampus Bordeaux International Support (EBIS) promoted by the UPV/EHU and Bordeaux University	Web	January 2014
38	Enhanced teaching and consolidation within the EHEA	Commission the University School of Education Building	Building	Academic year 2011-12
39	Enhanced teaching and consolidation within the EHEA	Commission the new Building of the Univ. School of Technical Engineering (EUITI) and the Univ. School of Mining Technical Engineering and Public Works (EUITMOP)	Building	Academic year 2012-13

Result No.	Field	Description	Format	Achievement Date
40	Scientific Improvement	Consolidation of the dimension of international excellence of the UPV/EHU. In 2012, the UPV/EHU went in to the Shanghai rankings for the first time,	Web	2012

		entering the charts between 301st and 400th, establishing itself as one of the top ten Spanish universities.		
41	Scientific Improvement	 Preparation of a scientometric report for the Euskampus aggregation. Main results. The CEI Euskampus aggregation has increased production by 60% since 2009. The CEI Euskampus receives on average 7.78 citations per paper. CEI Euskampus publishes 54% of its production in first quartile journals. In 2014, CEI Euskampus doubled the number of papers published in first quartile journals, as compared to 2009. CEI Euskampus signs 42% of papers with at least one international centre. 	Document	June 2015
42	Scientific Improvement	Signature of 6 agreements within the framework of the Euskampus Peri- university Space, for links with bodies attached to CEI Euskampus in order to optimize and mutually reinforce resources, capacities and research services of the entities involved, as well as award the category of academic collaborator with the UPV/EHU to outstanding researchers in these research centres: BCBL (Basque Excellence Research Center on Cognition, Brain and Language); BC3 (Basque Excellence Research Center on Climate Change); Institute BioDonostia; BCAM (Basque Excellence Research Center in Applied Mathematics); Centre of Cooperative Investigation in Manufacture Advanced, CIC marGUNE; ESSBilbao.	Agreement	June 2013
43	Scientific Improvement	Creation of 11 Knowledge Hubs in the 4 clear areas of specialization within the CEI Euskampus project.	Web	2012 - 2013
44	Scientific Improvement	 In the collection of Euskampus Knowledge Hubs: 1. Constitution of the co-creation team; 2. Defining the Strategic Framework of the Hub in which the global and societal challenges are set out and with the aim of addressing them by means of training, research and transfer activities; 3. Configuration of the first agendas of education, research and transfer activities. 	Document	June 2013
45	Scientific Improvement	Completion of 77 collaborative actions in the 11 Knowledge Hubs funded through the Investment fund (1 million euros).	Investment fund	2013-2015

46	Scientific Improvement	Creation of the <i>BERC Basque Excellent Research Center For Macromolecular Design & Engineering – POLYMAT</i> by the UPV/EHU, with the collaboration of the Ikerbasque Foundation	Document	2011
47	Scientific Improvement	Creation of the <i>BERC Basque Excellent Research Center (Berc) Achucarro In</i> <i>Neurosciences</i> by the <i>UPV/EHU</i> with the collaboration of the Ikerbasque Foundation	Document	2012
48	Scientific Improvement	Creation of the <i>BERC Basque Center For Materials Applications And Nanostructures (BCMATERIALS)</i> by the <i>UPV/EHU</i> with the collaboration of the Ikerbasque Foundation	Document	2013
49	Scientific Improvement	Commission the Plentzia Marine Station - PIE (UPV/EHU Centre)	Centre	2012
50	Scientific Improvement	 Integration of the UPV/EHU in the Institutes of Sanitary Investigation Biocruces and Biodonostia like referential partner, reinforcing and diversifying the offer and formative capacity of the University in the sanitary field, and the collaborative research capability in the field of the health: Biodonostia, constituted in 2008 and accredited by the IS Carlos III in 2011. Biocruces, constituted like association in 2014 and accredited by the IS CARLOS III in 2015. 	Document	2010-2015
51	Scientific Improvement	Creation of 5 Groups of International Excellence (GEIs) by Tecnalia	Web	2012-2013
52	Scientific Improvement	 Development of the UPV/EHU Science Park, located in the Leioa Campus.Construction of 4 buildings:{1/} Headquarters Building Maria Goyri Building - Centre for Animal Biotechnology (CBA) Martina Casiano Building Building of the Biscay Biophysics Unit (joint CSIC-UPV/EHU research centre) 	Buildings	2010-2015
53	Scientific Improvement	Construction of the Micaela Portilla Centre for Social Sciences and Humanities Research, situated in the UPV/EHU's Alava Campus	Buildings	2015
54	Scientific Improvement	Construction of the Polyvalent Building situated in the Campus of Gipuzkoa of the UPV/EHU	Buildings	2015

55	Scientific Improvement	Attracting post-doctoral researchers in the Euskampus aggregation:	Document	2010-2015
		 Post-doc researchers: 441 Ramón y Cajal researchers: 59 Researchers attracted to Euskampus and beneficiaries of Marie Curie contracts: 48 Recruitment of Ikerbasque Research Fellows:32 Incorporation of researchers to Gipukoa Fellow program: 10 		
56	Scientific Improvement	Attraction of senior researchers to the Euskammpus aggregation:	Document	2010-2015
		 ERC Advanced Grants: 4 ERC Consolidator Grant: 1 ERC Starting Grants: 5 Recruitment of Ikerbasque Research Professors: 54 Recruitment of Ikerbasque Visiting Professors: 44 Number of long stay visitors ((≥ 3 months):342 		
57	Scientific Improvement	Participation of the whole of the Euskampus aggregation in the (2007-2014) VII Framework agreement	Documents	2007-2014
		 Participation in 505 projects (349 in the 2010-2014 period) Leadership in 96 projects (19%) (74 between 2010 and 2014) The corresponding global amount financed in these projects is more than 170 million euros (162 M€ in the 2010-2014 period) CEI Euskampus is the first CEI in Spain in number and volume of 		
		participation as well as leadership in projects in the VII Framework Program.		
58	Scientific Improvement	Up until 30/06/2015, the Euskampus aggregation members have had 81 H2020 projects approved, being leaders in 20, with a contract total of 38 million euros.	Documents	2014-2015
59	Scientific Improvement	Territorial cooperation projects: During the 2007-2014 period 15 projects in collaboration between Euskampus and IdEx were presented, in the fields of marine energies, neurosciences, environment and enology. 8 of them were approved.	Documents	2007-2014
60	Scientific Improvement	Other European and international programs: During the 2007-2014 period, the entities of the Euskampus aggregation have produced a total of 198 projects, amongst which we highlight 15 ERANET projects, 13 COST projects, 22 EUREKA projects, 9 LIFE+ projects and 29 CECA program	Documents	2007-2014

		projects (RFCS), inter alia. The total financed amount obtained thanks to those projects reaches the figure of 21 million euros.		
61	Scientific Improvement	Participation in the KIC EIT Raw Materials (on the part of the EIT) of the <i>UPV/EHU</i> (Associate Partner), <i>Tecnalia</i> (Core Partner) and <i>Bordeaux University</i> (Core Partner).	Document	December 2014
62	Scientific Improvement	Participation of the UPV/EHU, Tecnalia and Bordeaux University in the preparation of the KICs of Food and Advanced Manufacturing	Document	June 2015
63	Scientific Improvement	Tecnalia and the UPV/EHU are members of more than 20 European Technology Platforms (ETPs) and Public private partnership (PPPs).	Documents	June 2015
64	Scientific Improvement	Organisation of 3 DIPC Schools, 284 scientific seminars and 51 workshops by the <i>DIPC Foundation</i>	Web	Academic year 2014-15
Result No	Field	Description	Format	Achievement Date
65	Transfer of knowledge and interaction with business and regional surroundings (TCIEET)	During the period 2010-2015 the total of CEI Euskampus has applied for 500 patents and has obtained licences for 212.	Document	2010-2015
66	TCIEET	The UPV/EHU ranks 5 th place in terms of creation of spin-offs created according to data from IUNE (Research Activity inside the Spanish Universities) – Period 2006-2009: 26 spin-offs created – Period 2010-2013: 41 spin-offs created – Period 2014-2015: 21 spin-offs created.	Web	2010-2015
67	TCIEET	For its part, the Zitek business incubator in the Bizkaia Campus is the sixth best incubator in Spain out of 353 and the only one with an academic background. It is also ranked fourth of all advanced business incubators. Data published in the last Report of the Fundación de Caja de Ahorro de España (FUNCAS)	Web	2010-2015
68	TCIEET	The total of CEI Euskampus has created 80 spin-offs in the 2010-2015 period.	Document	2010-2015
69	TCIEET	The School in Engineering of the <i>Institute of Machine Tools</i> (a centre attached to the <i>UPV/EHU</i>) is giving, from academic year 2012/2013, the	Document	2012-2015

degree 'Engineering in Innovation of Processes and Products', which is the first Spanish based sandwich course degree between the educational centre and the company.	
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70	TCIEET	45 labour agreements signed within the Zabulduz Program framework for as many doctoral theses. The Program has received a grant from the Innovation Fund of the Basque Government's "Science, Technology and Innovation Plan 2015", that in 2012 assigned 3 million euros over a 3 year period	Document	2012-2015
71	TCIEET	Creation of the SINNERGIAK social innovation centre (UPV/EHU)	Document and Web	2012
72	TCIEET	Creation in 2013 of the Agirre Lehendakaria Center for Social and Political Studies by the UPV/EHU, Columbia University and George Mason University for the development of the "Agirre Lehendakaria International Program" with the sponsorship of Kutxabank (patron of Euskampus Fundazioa), joined by Seton Hall University and Ulster University in 2014	Document and Web	2013 and 2014
73	TCIEET	Creation of the Advanced Aeronautical Manufacturing Centre (CFAA) with the participation of the UPV/EHU and 11 aeronautical and machine tool sector of the Basque Country.	Document	2015
74	TCIEET	Creation of 6 University-Company Classrooms, created and funded by the companies to promote their R&D activities: Iberdrola Classroom, Robotiker Classroom, Aeronautical Classroom, Ormazabal Classroom, Ecodiseño Classroom, and the BefesaClassroom.	Web	2010-2015
75	TCIEET	 Creation of Institutional Chairs of the UPV/EHU in collaboration with diverse public organisms of Euskadi: 2 Chairs Unesco in collaboration with Basque Government (Chair Unesco of Landscape and Heritage) and with the Provincial Council of Gipuzkoa (Unesco Chair in Communication and Educational Values) 2 Chairs in collaboration with the Provincial Council of Biscay (Chair of scientific Culture of the UPV/EHU) and with the Provincial Council of Gipuzkoa (UPV/EHU Mikel Laboa Chair). 	Web	2010-2015
76	TCIEET	Creation of the Chair of Scientific Culture in the UPV/EHU in the year	Web	2010 and 2014

		2010.The Chair of Scientific Culture was awarded in 2014 the special jury prize of <i>Prismas de la Ciencia</i> , consolidating CIE Euskampus as a benchmark for communication and scientific culture in Spain.		
77	TCIEET	Creation of the Family Business Chair of the UPV/EHU, financed by the Provincial Council of Biscay and the European Social Fund and integrated in the Family Business Institute's Network.	Web	2010-2015
		In 2015 the <i>Family Business Association of Euskadi</i> was set up (<i>Aefame</i>), integrated in the Institute of Family Business and that will find support from the Chair of the UPV/EHU for the development of its activities of training and awareness, supporting also research and transfer.		
78	TCIEET	Creation and maintenance of four blogs of scientific interest, a blog aggregator and a platform of current scientific news:	Blogs	From 2013
79	TCIEET	Creation of a unique identity for the CEI project, its lines of specialization, the Euskampus knowledge hubs and the Euro-regional Campus of Excellence.	Document and Web	2011
80	TCIEET	 Publish the new web page of Euskampus Publish the first Newskampus (newsletter of Euskampus Fundazioa) Opening CEI Euskampus social networks. Publish the web page of the Euro-regional Campus and its page on facebook 	Web, social networks	2012-13
81	TCIEET	Organisation of the event "Passion for Knowledge - Quantum 13"	Event	2013
82	TCIEET	7th year of the Meetings with Nobel prizewinners TOP@DIPC	Meeting	2009-2015
83	TCIEET	Preparation and implementation of the Style and Usage Guide in social networks, using the new branding within the UPV/EHU strategic communications plan 2012-2015	Web	2014

Result No.	Field	Description	Format	Achievement Date
84	Transformation of the campus to develop a comprehensive social model (TCDMSI)	Preparation of the first UPV/EHU University Social Responsibility Report	Document	June 2013
85	TCDMSI	Preparation and implementation of the Second Equality Plan (2014-17)	Document	2014
86	TCDMSI	Setting up the Sustainability Office.	Document	September 2012
87	TCDMSI	Consolidation of the number of centres that include improvement processes in their environmental management. The percentage of centres that make commitments to sustainability has risen from 30% to 100%.	Document	2010-15
88	TCDMSI	Funding the new sporting facilities in the Gipuzkoa Campus by Obra Social de Kutxabank (patron of Euskampus Fundazioa)	Facilities	Academic year 2012-13
89	TCDMSI	 Municipal Houses Program for university Youth: For the 2013-14 academic year, 14 flats have been allocated to the "Viviendas Municipales de Bilbao para Jóvenes Solidarios" [Bilbao Municipal Housing for Public-spirited Young People] program at a nominal price of 50 euros a month per person. A total of 38 students would benefit from this initiative. In academic year 2014-15 the number of students increased to 45, and the monthly rent to 55 euros. 	Program	From 2013 to 2015
90	TCDMSI	Enlargement of the university residence of Donostia-San Sebastián that has enabled the provision of 130 new places	Residence	Academic year 2012-13
91	TCDMSI	Construction of a new university residence for researchers by the <i>Donostia-San Sebastián City Council</i> , and development of the Donostia-San Sebastián Research Reception Project (Talent House) in collaboration with the UPV/EHU	Document	Academic year 2012-13
92	TCDMSI	12 full years of Placements and Theses in Development Cooperation, involving 848 students doing placements in 23 different countries in Latin	Placements and Theses	2010-2015

		America, Africa and Asia.		
93	TCDMSI	The number of students that devote 0,7% additional of their registration fees to university cooperation to development multiplied by 2,5 between the years 2010 and 2015: from 2.367 to 5.994 students.	Students	2010-2015

TABLE OF INDICATORS

ENHANCED TEACHING	2010	2011	2012	2013	2014- 2015 ³
Number UPV/EHU joint postgraduates and doctorate courses with entities of the Euskampus aggregation.	5	54	53	53	62
Number of Erasmus Mundus Master degrees.	-	-	-	1	2
Number of interuniversity international Master degrees .	6	7	7	8	9
Number of double international postgraduate programs.	7	8	8	9	10
Number of Masters degrees given fully in English.	6	7	7	7	9
Number of Doctorates verified by ANECA and with a Mention of Excellence.	32	32	32	32	NA ⁴
% international master students.	20	21	22	22	19
% international doctorate students.	7	20	20	20	20
% academic staff with accreditation in unofficial languages (who give classes in unofficial languages).	13	22	23	24	26
% of the students doing internships in companies and institutions.	22	22	20	20	27
% of Academic Staff evaluated using Docentiaz.	4	7	9	14	20
% centres evaluated positively in the Program Audit (design of the SGIC).	33	66	100	100	100

SCIENTIFIC IMPROVEMENT	2010	2011	2012	2013	2014- 2015	
SCIENTIFC PRODUCTION ⁵						
Number of Web of Science papers.	1.884	2.076	2.193	2.618	2.754	
% of papers in first quartile journals.	51	54	59	49	59	
Index h.	112	124	129	132	133	
SCIENTIFC RESEARCH FUNDED						
Number of competitive projects approved annually (national and regional).	229	255	146	155	163	
Total competitive finance attracted (national and regional) (M€).	18	31	19	16	22	

 ³ Until June 30 2015, for all areas unless otherwise stated.
 ⁴ Not applicable.
 ⁵ More detailed information on scientometric annexed report. Data are as of 31.12.2014.

SCIENTIFIC IMPROVEMENT	2010	2011	2012	2013	2014- 2015
Number of FP7 projects approved.	62	93	81	90	23
Number of H2020 projects approved.	-	-	-	-	81
Number of FP7 projects coordinated.	15	20	18	15	6
Number of H2020 projects coordinated.	-	-	-	-	20
Total finance attracted in FP7 calls for projects (M€).	25	42	36	33	26
Total finance attracted in H2020 calls for projects (M \in).	-	-	-	-	38
TRAINING OF RESEARCI	HERS				
Number of predoctoral reserachers.	116	223	199	605	433
Number of thesis defended.	331	331	389	398	358
Number of international theses.	62	80	111	124	160
% of international theses and with European Mention.	19	24	28	31	44
ATTRACTING TALENT					
Number of postdoctoral researchers.	78	77	40	108	138
Number of Ikerbasque Professors.	11	13	12	9	9
Number of Ikerbasque Fellows.	0	0	10	З	19
Number of grants obtained from the European Research Council (ERC).	0	З	1	1	5
Number Advanced Grants.	0	2	0	0	2
Number Starting Grants.	0	1	1	1	2
Number consolidator.	0	0	0	0	1
Number Marie Curie (all modalities).	6	12	7	10	13
Number of long-stay visitors (≥ 3 months).	40	70	62	61	109

KNOWLEDGE TRANSFER AND INTERACTION WITH BUSINESS SURROUNDINGS	2010	2011	2012	2013	2014-2015
Number of Spanish patents requested.	71	47	76	37	30
Number of international patents requested.	45	66	57	50	21
Number of Spanish patents approved.	21	11	6	27	22
Number of international patents approved.	17	71	27	46	63
Number of licensed patents.	9	11	75	67	50
Income under contract (M€).	66	68	101	82	195
Number of thesis in co-direction with companies and other organisations.	55	96	121	144	181
Number of spin-offs generated.	13	12	13	18	24

TRANSFORMATION OF THE CAMPUS	2010	2011	2012	2013	2014-2015
% Info-accessibility of the UPV/EHU website.	62	68	70	72	100
Number of students that dedicated an additional 0.7% of their enrolment fee to university cooperation for development.	2.367	2.947	2.599	2.932	5.994
Number of students who annually carry out internships and bachelor theses in cooperation development.	65	74	78	64	149
% of centres that participate in cooperation projects in their formal training.	35	39	45	32	42
% of degrees that have integrated social responsibility into their educational curriculum.	-	46	46	60	88
% of centres that make commitments to sustainability.	-	39	61	74	100
Research teams that work in sustainability.	-	35	38	42	44
Plans related to the prevention of risks, health and hygiene in the workplace.	On Going	On Going	On Going	On Going	On Going
Equal Opportunity Plan for Women and Men.	Approv al I Plan	l Plan	l Plan	l Plan	Approval and on going II Plan
University Social Responsibility Report.	-	-	-	Done	On Going

TABLES OF ACTIONS

ENHANCED TEACHING AND CONSOLIDATION WITHIN THE EUROPEAN HIGHER EDUCATION AREA

1. CONSOLIDATION OF DEGREE PROGRAMS WITHIN THE EHEA

Objectives:

To develop, introduce and consolidate the study plans of first degrees within the EHEA framework.

Summary of the work done:

- Accreditation of degrees to the new EHEA.
- Carrying out monitoring of first degrees adapted to the EHEA, concluding with the preparation of monitoring reports.
- Submission of degree monitoring reports to the Basque University System Quality Agency (UNIBASQ) for their evaluation.
- Review of initial study plans based on the needs arising from their implementation.
- Developing and approving academic management regulations for the implementation of curricular and extra-curricular internships and for the development of the bachelor thesis.
- Designing computer applications to develop and manage the bachelor thesis and to support the management of curricular and extra-curricular internships.
- Improvements in the application of theses and compulsory internships to automate and facilitate the preparation of agreements.
- Incorporation of external academic internships, both curriculum and extra-curriculum, in the student academic records and in the **European Supplement to the Degree (SET)**
- Drive to more plurilingualism: increase in the use of the Basque language in degrees in accordance with the objectives of the Basque Plan Director, and a drive towards the introduction of third languages in study plan subjects.
- Preparation of auto-evaluation reports for the renewal of degree accreditation and submission to UNIBASQ for their evaluation.
- Implementation of double degrees: Administration and Direction of Companies-Law, Physics-Electronic Engineering.

Most significant results:

- The UPV/EHU offers 70 degree courses, all adapted to the EHEA.
- To date, all the UNIBASQ evaluations of degree monitoring reports indicate that degrees are being implemented satisfactorily.

International projection:

The adaptation of the whole degree program to the EHEA facilitates student and teaching staff mobility between EHEA member countries. This allows, among other things:

- that UPV/EHU students can continue their studies, if they so wish, in another university within the system,
- the capacity to attract international students to the UPV/EHU,
- the ability to generate teaching exchange programs between the UPV/EHU and other European universities,
- the establishment of double international degrees.

2. TRANSPARENCY AND QUALITY ASSURANCE IN HIGHER EDUCATION

Objective:

Continuous improvement in quality to achieve excellence in teaching and learning, in order to continue to be the benchmark for higher education within the surrounding area, and to be a presence at an international level. To do this, the UPV/EHU has the following operational objectives:

- To provide tools and support to the Centres, the Master and Doctorate School (MDe) and to University Services to implement a model to assess, control and improve internal management.
- To develop computer tools for management and user support.

Summary of the work done:

- Implementation, deployment, and improvement, in all 31 UPV/EHU centres, of all the processes and procedures that constitute the Internal Quality System (SGIC) through the UNIKUDE-Centros application.
- Development, implementation and evaluation of the Follow-up Reports of all the first and Masters degrees, and of the Annual Management Reports of the UPV/EHU centres (excluding the Faculty of Medicine and Odontology that will report in the next academic year).
- Reviewing and redefining the quality processes that make up the Internal Quality System for the Masters degrees, along with the monitoring indicators. Roll-out the "UNIKUDE-master" software for management support in the MDe as well as the development and deployment of Follow-up Reports for Masters degrees.
- Implementation of the Service Charter for UPV/EHU services, the relevant (<u>UNIKUDE-Service</u> <u>Charter</u>) software, as well as staff training, in order to improve internal management of UPV/EHU units and their corresponding Service Charters and Quality Manuals.

Most significant results:

- Preparing and annually updating the Quality Manual of the 31 UPV/EHU university centres.
- 100% of UPV/EHU Centres have obtained the AUDIT accreditation for the design of quality systems. The sole exception, MDe, expects accreditation in 2016.
- To date, 11 UPV/EHU services have a Service Charter. A further 10 services have a Service Charter awaiting official approval, and 1 service (the Service of Quality and Institutional Evaluation) is under evaluation with the methodology created by Q-epea (a network of Basque public entities, administration and public companies, involved with management excellence) to obtain external certification.

International Projection:

The continuous improvement in quality inherent in the UPV/EHU model guarantees reaching excellence in education and learning and, therefore, projecting the organization as a benchmark for higher education on the international level, in accordance with the European higher education methodologies.

3. DEVELOPMENT AND IMPLEMENTATION OF IN-HOUSE EDUCATION MODEL (IKD)

Objectives:

To develop and implement quality, employability, competitiveness and excellence criteria in an inhouse educational model in official qualifications based on student-focused cooperative and dynamic learning (IKD), to achieve internationalization of the available courses.

Summary of the work done:

- Introduction of innovative educational methodologies in degree curricula (learning based on problems, in projects and case method).
- Development of 157 educational innovation projects between 2010-15 with a participation of more than 1,000 teaching and research staff, with more than 200 communications and papers of the results obtained.
- Ongoing training of the academic staff. Between 2010-15 more than 270 training actions have been developed directed at improving education and learning. Around 1,700 Teaching and Research Staff have participated.
- Academic staff training and evaluation via the DOCENTIAZ program (program to evaluate the educational activity of UPV/EHU teaching and research staff).
- Teaching and Research Staff training for virtual teaching and the creation of digital content.
- Developing the implementation of the IKD model in UPV/EHU centres, by means of the EHUNDU program (curricular development of first degree and postgraduate degrees).
- Consolidation of the Centre for resources of active methodologies (IKDbaliabideak).
- Updating the Unified Quality Management System for First Degree Qualifications (UNIKUDE).
- Driving and participating in research, production and dissemination initiatives of the innovation produced at the UPV/EHU.
- Consolidation of the Polimedia Classroom for the creation of virtual multimedia presentations.
- Preparation and provision of 5 large-scale on-line open courses (MOOC).
- Signing the MiriadaX agreement with Universia, for the use of this eLearning platform.

Most significant results:

- In academic year 2014-15, 10% of degree credits were imparted by means of active methodologies (2017 objective in the Strategic Plan).
- 48% of the Teaching and Research Staff have done quality training courses.
- Between 2010-15, 20% of the Teaching and Research Staff participated in the program to evaluate the educational activity of UPV/EHU Teaching and Research Staff (DOCENTIAZ).

International Projection:

- The UPV/EHU's IKD model is in full alignment with EHEA and Erasmus+ policies:
 - o dynamic and cooperative learning centered on the students,
 - o with criteria of employability, quality, competitiveness and excellence,
 - to reach full internationalization of the training offered.
- European projects and alliances with other universities are being planned to share the experience of the IKD model.

4. DRIVING STUDENT EMPOWERMENT WITHIN IKD'S IN-HOUSE EDUCATIONAL MOVEL, IKD-GAZTE

Objetives:

Development of competences aligned to the sense of the initiative as a growing element of active and responsible learning within the area and the social context. This process of empowerment is articulated through ideas of social and multidisciplinary co-management.

Summary of the work carried out and the role of the aggregation:

- IKD GAZTE has been developed as a UPV/EHU program since academic year 2011/12.
- From the outset, it has receivedd external funding, agreed annually, from Gipuzkoa Provincial Council.
- The IKD-GAZTE strategy impacts:
 - a) The development of degree students' key competences developed through the sense of the initiative.
 - b) The development of academic and social communication skills for those students responsible for this activity in the IKD GAZTE strategy: presentation of communications material and posters for local and international open days and congresses, media publications, and Information Technology (TIC) tools.
 - c) The incorporation of the needs and challenges of the social context in university degree curricula, producing co-management and multidisciplinary learning processes in which students (in interdisciplinary teams) and social agents (who propose real challenges) stand out as the proponents of knowledge and social action.
 - d) The connection with the social context as the backbone of this project deriving from strong links with social agents underpinned by signed collaboration agreements linked to real projects. These links are progressively strengthened in two ways:
 - the incorporation of new agents and
 - the consolidation of collaborations into new projects with the same agents.
 - e) Consolidation of the collaboration with TECNALIA by formal agreements for collaborative projects.
 - f) Progressive transformation and influence on the regulated educational system, specifically, designing and developing flexible learning spaces that contribute to the development of hybrid curricula within higher education.

Most significant results obtained

- Remarkable project growth from the first year (2011/2012) to the fourth year (2014/2015) in regard to:
 - o student participation (from 33 to 62 students),
 - o UPV/EHU degrees that participate (from 4 to 8 degrees),
- A total of 15 social agents are involved in the program, resulting in 17 projects.

International Projection:

- Presentation of results in international academic forums.
- Incorporation of the IKD GAZTE experience as the basis of an "Erasmus plus" project presented in the 2015 call with UPV/EHU partners:
 - The Free University of Bolzano (Italy)
 - University of Trento (Italy)

- Pedagocial University Tirol (Austria)
- University of Bordeaux (France)
- The University of Pau and Pays de l'Adour (France)
- The IKD GAZTE project adds value to internationalisation by its originality combined with its strong alignment with the priorities of the European Higher Education Area (EHEA). There is a clear institutional desire to share and export this experience.

5. MASTER AND DOCTORAL SCHOOL (MDe)

Objetives:

To promote excellence, visibility and internationalization of official Master degrees and Doctoral programs, as well as organize transversal training activities in a multidisciplinary context, to adapt the skills gained during the doctorate to the real needs of society.

Summary of the work done and the role of the aggregation:

- At the beginning of the 2012, the MDe became operational following the process of definition and approval by the UPV/EHU governing agents.
- During the 2012-13 academic year, the government and management authorities of the MDe were established and the previously defined strategic objectives were deployed.
- The MDe is a UPV/EHU centre which coordinates and manages doctoral programs and research training in an interdisciplinary way in all the fields of knowledge developed by the UPV/EHU; it also coordinates and manage official Masters degrees, except for those that are vocational in nature.
- Tecnalia, as an entity of the Euskampus aggregation, as well as Kutxabank and Ikerbasque (patrons of Euskampus Fundazioa) are part of the Steering Committee of the MDe which has the authority to choose the members and supervise the agreements of the Permanent Council of the MDe. This body is responsible, inter alia, for implementation and supervision of doctoral courses as well as policy for collaboration with other entities
- As a consequence of Euskampus project, Tecnalia has assumed a more significant role in the MDe through the incorporation of its Director General in the Permanent Council of the MDe.
- The links with TECNALIA are expanding with the participation of 73 of its Teaching Staff in the educational teams of the 12 UPV/EHU Master programs (see detail in file 8).

Most significant results:

- 104 Master degrees offered in academic year 2014-15, of which 19 are given whole or partially in English.
- 65 Doctoral programs offered in academic year 2014-15. All the programs have been accredited by ANECA in accordance with the Royal Decree 99/2011. This covers structured doctoral training programs, in line with European programs.
- Well placed for the internationalization of the postgraduate programs (Master and doctoral) by means of the development of joint programs with prestigious international universities: 5 Masters degrees organized jointly with European universities and 6 Masters degrees organized jointly with Latin American Universities.
- Over 300 agreements signed with R&Dcentres, institutions and companies for Masters and doctoral programs.
- Consolidation of the Latin American Network of Master and Doctorates made up of 16 universities from 12 countries. (See detail in file 17)
- In academic year 2013/2014, there were 2,688 Masters students (582 international students, representing 22% of the total)
- In academic year 2014/2015, there were 3,744 doctoral students (764 international students, representing 20% of the total).
- An average of 350-400 doctoral theses defended every year, an increasing number of them in co-tutelage and with international mentions.

International Projection:

- The creation of the MDe is totally aligned with the aims of European policies for the training of postgraduate students.
- The MDe has represented a push to the internationalization of doctoral programs, to the number of international theses and to theses in co-tutelage.
- On the other hand, the MDe has also been a key agent in the development of international Masters degrees, including Erasmus Mundus and double degrees.

6. MENTIONS OF EXCELLENCE IN DOCTORATE PROGRAMS

Objetives:

Consolidate the excellence and the internationalization of the UPV/EHU doctorate programs.

Summary of the work done

Alignment of the Doctorate Programs to Royal Decree 99/2011. A total of 65 doctorate programs were submitted to the assessment process. All were accredited by the National Agency for Quality Evaluation and Accreditation (ANECA) and were available in academic year 2014-15.

Most significant results:

- Resulting from a call for granting Mentions of Excellence for doctorate programs in Spanish universities (Order EDU/3429/2010, dated 28 December), 32 UPV/EHU doctorate programs obtained a Mention of Excellence for the period 2011-2012, 2012-2013 and 2013-2014. The Mention of Excellence is a recognition to the scientific, technical and training solvency of Spanish university doctorate programs, as well as research teams and departments or training medical doctors. A further 7 doctorate programs were favorably assessed for the Mention of Excellence.
- The UPV/EHU, with 32 doctorate programs obtaining the Mention of Excellence, leads this state ranking of quality and excellence.
- The result of the adaptation process to Royal Decree 99/2011 was the rationalization of existing courses available, leading to a rather lower number of programs (reduced from 71 to 65) but of better quality, according to all indicators. Furthermore, the research lines were grouped into a number of programs in order to achieve a more organized range of courses available.

International Projection:

- The Mention of Excellence acknowledges the doctorate programs as a benchmark in the international field.
- Furthermore, the UPV/EHU projects itself externally as participating in the master and doctorate programs of Erasmus Mundus.
- 474 international theses have been defended in the last five academic years (2010-15), 220 of them from the 39 doctorate programs with a Mention of Excellence or evaluated favourably towards one.
- In addition, in 2014 the UPV/EHU approved the new Postgraduate Studies Strategic Plan (Master and Doctorate Programs). In line with CIE Euskampus priorities, one of the 3 core areas of the Plan is international projection, with the objective of offering attractive postgraduate courses on the international stage, that facilitates the attraction and training of top-class researchers.

7. MASTERS WITH QUALITY CERTIFICATION

Objetives:

- Establish the quality criteria for all UPV/EHU Master degrees.
- Develop the internal mechanisms for the Internal Quality System, establishing the procedures that ensure the transparency, efficiency and sustainability of UPV/EHU programs.
- Implement continuous auto-evaluation of Master programs, to allow the detection of weaknesses, and to take improvement actions in areas such as:
 - graduate employment,
 - internationalization
 - the promotion of entrepreneurship and professional career development,
 - access to doctorate programs of excellence,
 - mechanisms to resolve conflict.
- Submit all Master degrees to quality agencies (National Agency for Quality Evaluation and Accreditation-ANECA and the Agency for the Quality of the Basque University System (UNIBASQ), to achieve accreditation for all degrees.

Summary of the work done:

Since 2013 a large amount of work has been done in this area. The UPV/EHU actions related to quality assurance for Masters degrees have been:

- Creation of the MDe Quality Commission, a body commissioned to pilot actions that drive Quality accreditation for UPV/EHU postgraduate degrees before the agencies.
- Pilot plan established in 2013 for renewal of UNIBASQ accreditation, by means of two UPV/EHU Master degrees.
- Procedure established in 2014 to allow the submission of 54 official Master degrees to the agency.
- Consolidation in 2015, to put in progress the accreditation of the remaining 24 Master degrees.
- Development of the MDe Internal Quality System, to achieve centre accreditation as soon as possible.

Most significant results:

As at June 2015 all UPV/EHU Master degrees have been accredited by the quality agencies. The procedures developed (annual follow-up reports, change procedures and the renewal of accreditation) ensure the transparency, efficiency and sustainability of UPV/EHU Master programs.

International projection:

- The UPV/EHU Quality System consolidates excellence and outreach on the international stage as a benchmark for higher education.
- In 2014, the UPV/EHU approved the new Strategic Plan for Postgraduate Studies (Master and Doctorate Programs). In line with CIE Euskampus priorities, one of the 3 core areas of the Plan is international projection, with the objective of offering attractive postgraduate courses on the international stage, that facilitate the attraction and training of top-class researchers

8. PARTICIPATION OF EUSKAMPUS ENTITIES IN MASTERS AND DOCTORAL PROGRAMS

Objectives:

To contribute towards directing the teaching of Master and doctoral degrees towards excellence. The objective is therefore to integrate available capacities in member or associated entities into the CIE Euskampus project in order to foster research and educational excellence and the knowledge valorization.

Summary of the work carried out and the role of the aggregation

Creation of collaborative activities, whether educational or research between UPV/EHU groups and the remainder of CIE Euskampus entities, at the level of UPV/EHU Master and Doctoral programs:

- external internships,
- direction of end-of-master project,
- direction of doctoral theses,
- participation of researchers from different entities linked to CIE Euskampus in UPV/EHU Official Master Degrees and Doctoral Programs.

Most significant results:

- Tecnalia participates in 12 UPV/EHU Masters degrees with a participation of 73 teachers in the co-direction of Masters theses, doctoral theses, internships and teaching. In the co-direction of Master and Doctoral theses, the themes aligned with the strategic challenges of the Euskampus Knowledge Hubs have been promoted.
- Since 2013 collaboration agreements have been signed with the following CIE Euskampus entity participants:
 - BC3: Basque Centre for Climate Change. Participates in 5 UPV/EHU Master degrees through internships, direction of Master theses, direction of Doctoral theses and collaboration of Teaching Staff in Master degrees.
 - Biodonostia: participates in 8 UPV/EHU Master degrees through internships, direction of Master theses, direction of Doctoral theses and collaboration of Teaching Staff in Master degrees.
 - BCBL: Basque Center on Cognition, Brain and Language. Participates in 1 UPV/EHU Master degree through internships, direction of Master theses, direction of Doctoral theses and collaboration of teaching staff in Master degrees.
 - BCAM: Basque Center for Applied Mathematics. Participates in 3 UPV/EHU Master degrees through placements, direction of Masters theses, direction of Doctoral theses and collaboration of Teaching Staff in Master degrees.

International projection:

The integration of available capabilities of Euskampus aggregation entities in the UPV/EHU Official Master and Doctoral Programs has consolidated training and research excellence and its international projection.

9. IMPROVING EMPLOYABILITY

Objetives:

- Improve employability in a global context facilitating access to the international market.
- Improve and increase the likelihood of university graduates finding their first jobs.

Summary of the work done and the role of the aggregation

- Professional orientation service through the Employment Centres (UPV/EHU service and LANBIDE the Basque Employment Service).
- Organization of courses to develop competences relevant to finding employment.
- Two-yearly Employment Study of UPV/EHU graduate employment, undertaken in collaboration with LANBIDE.
- Preparation of the University Employment manual.
- Participation in employment fairs organized by local organizations in order to publicize UPV/EHU activities.
- Development of the Praktiges Program that aims to foster voluntary student intnerships in companies.
- Consolidation of UPV/EHU programs for tutored intnerships in international companies, aimed at the development of employability or entrepreneurship in the global labour market:
 - ELKANO Program: 9-12 months, 7th year, 2015: 17 scholarships.
 - EPEZ Program: 12-14 weeks 9th year, 2015: 65 scholarships.
- SCHOLARSHIPS SANTANDER Program to allow students placements of 3 to 6 months through the Educational Cooperation Agreement (2015: 168 scholarships) opening their eyes to the reality of professional life, expanding knowledge and encouraging contact with companies that could help provide future employment.
- UPV/EHU participation in the development of the LEHEN AUKERA program organized by LANBIDE for the employment of new graduates: Student grants for 3 month placements through the Educational Cooperation Agreement and/or grants to companies for contracts of student placements agreements lasting a minimum of 6 months.
- Participation in the GARAITUZ Program (Gipuzkoa Provincial Council and the UPV/EHU) to generate intervention proposals aimed at providing solutions to the problems identified in groups of Basque companies. Expert university staff, with the collaboration of degree and doctoral students (pairs) from previous year, and university graduates, who provide support to participating companies in the program.
- Development of the IKD GAZTE Program (see detail in file 4)

Most significant results:

- Improving the employment rate for the year after graduation. The percentage of graduates that have found employment with regard to the total number of users of the UPV/EHU Employment Centre is 10%, compared with an average of 4% for State Centres.
- Improving university services links with post-graduates, who understand the concern and support of the UPV/EHU for their employment.

International projection:

The UPV/EHU and the entities belonging to the Euskampus aggregation have developed different programs that impact directly on employability in a global context:

- Encouraging participation in international mobility programs (see detail in file 14)
- Internationalization of the Masters and Doctorate Programs (see detail in file 15)
- Development of the Akademia Program (see detail in file 13)
- Organization of the Cross-border Doctorates with the University of Bordeaux (UBx) and the University of Pau and Pays de l'Adour -UPPA (see detail in file 18)
- Participation of several units of the Euskampus aggregation in postgraduate training, opening up partners' international networks to UPV/EHU students.

10. TECNALIA - UPV/EHU CLASSROOMS

Objectives:

The Tecnalia-UPV/EHU Classrooms have emerged to boost the collaboration of both entities in the scientific/technical field, by means of:

- Joint participation in R&D projects.
- The shared and continuous training of researchers.
- The use of an infrastructure and coordination agents that facilitate joint research activities.

The main aim of this initiative is to improve collaborative research and create stable bonds between teams that allow to make progress towards excellence in scientific and technological research.

Summary of the work done and the role of the aggregation:

Two Tecnalia-UPV/EHU Classrooms have been created.

- The first is the Classroom of Economics and Innovation Management. This classroom develops activities through:
 - Educational collaboration and learning spaces for practical activities.
 - Promotion of first degree theses, Masters theses and doctoral theses in areas of mutual interest.
 - Scientific research programs and projects in issues appropriate to the situation.
 - Joint scientific and technical research studies through training mixed work groups between the UPV/EHU Faculty of Economic and Business Sciences and Tecnalia.
 - Reciprocity in the use of scientific and technical information.
 - Collaboration programs for the study, experimentation and promotion of entrepreneurial activities and company creation by means of new methods of work.
 - Collaborative Research Spaces: teams for joint publication of research carried out in the Classroom.
 - Learning workshops: open sessions for researchers to widen and exchange knowledge and aid supervision involving both entities.
- The second is the Tecnalia Classroom within the UPV/EHU's Bilbao Higher Technical School of Engineers (ETSI) that encourages joint activities in the field of scientific and technological research in all engineering fields. Within this collaboration framework there are first degree theses, Masters theses, doctoral theses, and joint projects between the various parts of Tecnalia and the research groups, all of which take place in the ETSI, at conferences, or via research exchanges and educational cooperation placements.

Each academic course makes public the list of projects that are done in each Classroom and the available places for students within the last few years. This is a list of projects proposed by Tecnalia. The candidates are evaluated by a Steering Committee, which makes the selection, assigning to each student a school tutor and a tutor from Tecnalia.

Most significant results:

The activity of the Classrooms during the CIE Euskampus project (academic years 2010-2011 to 2014-2015) have generated the following results:

- Students: 105
- Theses: 78
- Doctoral theses defended in the period: 6
- Congresses: 61
- Indexed Publications: 32
- Collaborative projects: 13

- Educational cooperation grants: 32
- Euskampus knowledge hubs promoted from the Tecnalia-UPV/EHU Classrooms: 3 (Advanced manufacturing with 37 theses, global communication with 22 theses, and health and sustainable development of the oceans with 13 theses).

International projection:

The Tecnalia-UPV/EHU Classrooms are a clear example of the CIE Euskampus aim of continuous research excellence both in teaching and in research, through new initiatives that develop competences via collaboration between different agents, so becoming an international benchmark for higher education and research through dynamic and cooperative learning that leads to better employment prospects, quality, competitiveness and excellence.

11. PROMOTION OF ENTREPRENEURIAL SPIRIT WITHIN MEMBERS OF THE UNIVERSITY COMMUNITY

Objectives:

Promoting innovative talent and entrepreneurship in university training, as well as entrepreneurial culture between researchers and teachers.

Summary of the work done and the role of the aggregation:

- Development of specific programs for the creation of spin-offs and the promotion of entrepreneurial culture in each one of the 3 UPV/EHU campuses (see sheet 60):
 - o Zitek Program (Biscay).
 - Entreprenari Program (Gipuzkoa).
 - Inizia Program (Alava).
 - These initiatives emerge from the perceived need among the university sphere to have structures close to the knowledge sources that enable those projects emerging from the academic sphere to be transferred to the real-life business environment.
 - The programs have the following purposes:
 - o Generate and extend the entrepreneurial culture.
 - Increase knowledge transfer.
 - Align the economic and business worlds.
 - Foster and promote the generation of ideas that lead to the creation of business initiatives.
 - o Consolidation of the incubators for technology companies within the campus:
- Boosting of the GAZE Program: This is a program which fosters entrepreneurial culture, backed by Gipuzkoa Provincial Council and led by UPV/EHU, in which all the local Higher Education institutions take part:
- Development of seminars and face-to-face and on-line courses as well as organization of contests/prizes to boost entrepreneurial culture and the use of new technologies in entrepreneurship.
- Organization and participation of training activities in the field of entrepreneurship.

Most significant results:

- Spin-off Creation Programs: see results in sheet 60.
- GAZE Program:
 - Awareness-raising workshops co-organised with Mondragon Unibertsitatea and TKNIKA (Vocational Training Centres Innovation Network).
 - Running a conference type workshop on entrepreneurial competences.
 - Dissemination of local entrepreneurial initiatives in social networks, communication media, ICT tools and the GAZE electronic magazine.
- Seminars and face-to-face and on-line courses, as well as contests/awards:
 - Consolidation of the "Learn to Entrepreneur" seminars in several batches during each academic course.
 - "Ikasberri" initiative; seminars specifically designed for the qualifications closest to selfemployment. The experience of entrepreneurs from various faculties are combined with training in project management exclusive to their qualification.
- "E-ginkana Entrepreneur" initiative: an activity based on answering some simple on-line questions which gives the opportunity to UPV/EHU students to understand self-employment and how to create companies in a playful, yet educational way. It consists of 2 phases:
 - The 1st phase consists of simple questions on the UPV/EHU entrepreneurship programs and their different activities and forms of support.
 - The 2nd phase delves further into the entrepreneurial nature of the participants, by making them choose a type of company and take considered decisions regarding its creation, development and consolidation.
- "E-mprende" initiative: implemented with theaim of fostering the use of new technologies in entrepreneurship, by offering a global and real vision of business and incentivizing the work force. The initiative is achieved through an annual contest that consists in carrying out the management of a company through a simulator over the Internet, in an environment made up of companies with the same economic situation, and doing this with the same historical data, including balance sheet, sales results and market information.
- Organisation of contests/prizes for developing companies or innovative business ideas at the three campuses: Laborde prize (Gipuzkoa), Think Big prize (Biscay) and Inizia prize (Alava).
- Organisation and participation in training activities
 - Participation in the "Egin eta Ekin" Program of the Provincial Council of Biscay with the collaboration of the centres that provide Professional Training. The program is co-financed by the European Social Fund and aims to promote employment and create new companies.
 - Organisation of the Summer School entitled "University Teachers motivators of entrepreneurial spirit". This activity is in collaboration with the University-Company Foundation of the University of Valencia (AEDIT), that at the same time organizes a Summer School under the same title "University Teachers - motivators of entrepreneurial spirit".
 - In 2015, the "Masters degree in Entrepreneurship and Direction of Companies MBAe3" was launched. It focuses on the creation and direction of organizations and is sponsored by the Provincial Council of Biscay. This degree aims to provide comprehensive and interdisciplinary training in the creation and direction of companies to people, whether or not recently graduated, who aspire to have managerial and entrepreneurial capabilities, as well as create a network of permanent relationships directed at interdisciplinary entrepreneurship and student employability.
 - Launching of an online massive course "Wake up the entrepreneur spirit in the classroom" for the training of teachers in entrepreneurial tools in the classroom.

The Euskampus aggregation, in the framework of the Campus of International Excellence project, is beginning its journey so that the UPV/EHU evolves towards the model of the "Entrepreneurial University", in which the culture of innovation and entrepreneurship, situated in the world of international relations yet also connected to the Basque homeland, plays a central role in the day to life of the university. The above programs, together with the mission of Team Academy Euskadi (sheet 12), point in this direction.

Under this philosophy, the UPV/EHU is participating in particular initiatives that impact on international projection, including:

- Participation in the <u>GEM program</u> since 2014, which measures entrepreneurial activity in the international field with a participation of more than 70 countries.
- Participation in the <u>Start Innova</u> program, in which the UPV/EHU is part of the Technical Committee.
- The UPV/EHU has signed agreements with different international universities in order to exchange methodologies for promoting spin-offs and to the improvement of entrepreneurial education.

Finally, in January 2015 the UPV/EHU participated actively in the Bilbao Biscay Entrepreneurship Meetup 2015, organised by the MIT and the Provincial Council of Biscay, achieving the recognition of several projects in the final stages. One of the projects, ONCOASSESS, was a finalist; it arises from a Biotechnology Company Creation module within the UPV/EHU Masters degree in Biomedical Research.

12. TEAM ACADEMY EUSKADI PLATFORM

Objetives:

- To consolidate the educational programs in entrepreneurship and innovation aimed at fostering the setting up of technological companies.
- To foster entrepreneurs in a space for learning and interconnection in the territory.

Summary of the work done and the role of the aggregation:

- CIE Euskampus, via the "Team Academy Euskadi-TAE" platform, headed by Tecnalia, is developing an open space for experimentation, learning and developing leaders, team-working in intensive knowledge spheres.
- TAE is part of a network of Team Academy (TA) initiatives set up in Germany, France, Great Britain, the Netherlands, Hungary, Brazil and the Basque Country.
- The TAE has developed two types of program:
 - Leadership Adventure:
 - The objective of the program is to foster talent and the competences of young people to create innovative initiatives and their embodiment in social and/or business projects.
 - The program operates via weekly sessions of group coaching and through 5 thematic workshops (Learning, Leadership, Marketing and Customers, Innovation, Strategy, Company Brand) each of two days held during the year of the program).
 - Leadership Experience
 - The objective of the program is to provide participants with a community of practice for organizational learning of innovation and entrepreneurship, which accompanies them in their professional development, by fostering their learning and maintenance of competences. This community of practice is developed around four basic professional competences:
 - 1. Leading one's own professional/personal development project by placing it in a social context and being committed to its learning in constructive dialogue;
 - 2. Designing and offering to the customer collaboration and dialogue solutions, and then establishing and fulfilling the commitments within them.
 - 3. Create innovations within the team;
 - 4. Developing new businesses and sustainable projects (economic, social and environmental) in intensive knowledge areas.

The 2 programs also include a placement in JAMK Jyväskylä University of Applied Science (Finland), during which participants work and learn with other young entrepreneurs in TA Finland. During the stay they have the support of both TA Finland and TAE *coaches*. The participants of the 2 programs are young people who have ended their studies, entrepreneurs, researchers and technologists, intra-entrepreneurs, professionals, technicians or company directors.

- Collaboration between the TAE and the UPV/EHU Masters and Doctorate School for the design and development of a joint program of *Cross-border Doctorates* in the collaboration framework of the Euro-regional Campus. The objective of the joint program is to develop skills to make best use of their knowledge and aptitudes and allow them to benefit society through research and knowledge, and develop a future career within a company, university or research institution. The issues covered in the joint program are:
 - Leading one's own personal/professional development project.
 - Focusing on customers, value for the society and the surrounding area.
 - Transforming knowledge into innovation.
 - Working in multidisciplinary teams.

Most significant results:

- Entrepreneur Activity Rate of 52%. All the people (81) are currently working. 42 are doing so in 10 start ups and 39 in companies that have been up and running for over 3 years.
- The people who have gone through the TAE have set up 12 new companies, 10 of which are currently operating.
- The public investment over 4 years (0.7 million euros) in the TAE has generated over double that amount in private economic activity (> 1.5 million euros), while at the same time driving forward Basque Government policies in:
- creation of innovative entrepreneurs,
- creation of new innovative companies,
- contribution to an entrepreneur culture in Basque society.
- The joint program of Cross-border Doctorates, done via workshops held in 2013, 2014 and 2015, has seen the participation of more than 70 doctoral students, from the UPV-EHU, the University of Pau and Pays de l'Adour and the University of Bordeaux.

International Projection:

The TAE has the clear aim of internationalization through its combination of activities:

- The TAE platform is part of an international network of Team Academy (TA) initiatives, created in Germany, France, Great Britain, Holland, Hungary, Brazil and the Basque Country.
- The TAE programs include a placement in Jyväskylä University of Applied Science (Finland), during which the participants work and learn with other young entrepreneurs from TA Finland.
- The TAE participates in the development of Cross-border Doctorates in the collaboration framework of the Euro-regional Campus.

13. AKADEMIA PROGRAM

Objetives:

- To develop the students' innovation skills at different levels: macro/micro, public/private, local/regional and international.
- To raise awareness about innovation as the necessary attitude to achieve sustainable competitive advantage in organizations.
- To advise and awaken students' interest in entrepreneurship.
- To improve employability based on the capacity for innovation.
- To support UPV/EHU students in the generation of innovative project ideas and their subsequent business plan.

Summary of the work done and the role of the aggregation

- In September 2012 a public-private collaboration agreement was signed between the <u>Bankinter</u> <u>Innovation Foundation</u> and Euskampus Fundazioa for the development of the <u>Akademia</u> <u>Program</u> in the UPV/EHU. Its aim was to select university students doing their fourth year of a degree course, or the last year of a Masters) in order to provide them with specific training in innovation, both theoretical and practical, to achieve the objectives mentioned above.
- The teaching method used is highly innovative and has fully digital material of top quality, generated by the best international experts who work with the Bankinter Innovation Foundation and which has been developed in a select group of Spanish universities in recent years.
- The first year of this Program was in October 2012, and to date, 3 full years have been completed (academic years 2012-13, 2013-14, and 2014-15).

Most significant results:

- Of a total of 183 candidatures presented, 79 students were selected to take part in the program.
- At the end of each year, students defended their projects in front of a public composed of entrepreneurs, as well as Bankinter Innovation Foundation managers responsible for the program, and in the presence of UPV/EHU Vice-rectors. In the last 3 years of the program, 13 innovation projects have been defended.
- The spectrum of students covered 12 different degrees, underlining the multidisciplinary and transversal profile of the program: engineering, administration company management, economics, fine arts, sciences, etc.

International Projection:

The Bankinter Foundation offers students the chance to have internships in international companies belonging to the Bankinter Group, giving the possibility of significantly improving employability in a global context.

14. PARTICIPATION IN MOBILITY PROGRAMS

Objetives:

- Consolidate the service to attract, integrate and offer support to international students and research staff.
- Improve the movement of people and manage mobility programs and international stay programs aimed at first degree and postgraduate students, as well as Teaching Research Staff (TRS) and Administration and Services Staff (PAS).
- Expand collaboration networks with other universities and university networks in Asia, Europe, America, Australia and Canada.
- Develop mobility as a lever in knowledge dynamics in the Euro-regional Aquitaine-Euskadi context.

Summary of the work done and the role of the aggregation:

- The Office of International Relations:
 - From 2011, this office has managed the Buddy program which assists international visitors. Its aim is to help international visitors, (Erasmus, Other Origins, Latin America, researchers) who travel to the UPV/EHU. The buddies are UPV/EHU students or researchers who, given their experience, personal initiative or camaraderie, want to help the newcomers to settle on campus and in the city.
 - At the beginning of each academic course, it organizes familiarization events, including guided visits, on each campus, for the increasing number of international visitors. In addition, during the month of May, it holds farewell events for international visitors.
 - Each year it organizes training sessions for ERASMUS mobility applicants so that they become ambassadors for the UPV/EHU and share common promotional, informative and institutional material in their destination locations.
 - In 2015, for the first time, an International Staff Week was organized to welcome representatives from more than 20 European universities and one from the United States.
- At the same time, the UPV/EHU hosting office:
 - Aggregate the demand of information in the English language.
 - They provide information on Spanish and Basque courses for international visitors: they offer Spanish Language and Culture courses on three levels: elementary, intermediate and higher, and basic courses on Basque Language and Culture, in addition to administering the DELE (Diploma of Spanish as a Foreign Language) Exam, and give Teacher Training Courses of ELE (Spanish as a Foreign Language) jointly with the Cervantes Institute.
 - Process applications to collaborate as conversational English language assistants in local schools.
 - Orientate visitors on the use of libraries and public spaces on the UPV/EHU campus.
 - Understand the sporting and cultural services and activities available to visitors.
 - Strengthen the accommodation services.

Most significant results:

- There has been an increasing number of participants in the mobility programs, in terms of both students from abroad (from 621 in academic year 2011-12 to 744 in academic year 2014-15), as well as students going abroad (from 981 in the academic year 2011-12 to 1,368 in academic year 2014-15). This increase has resulted in an rise in participation in associated activities (familiarization office, the Buddy program, language courses, etc).
- The familiarization office attracts a progressively greater number of visitors, now surpassing 450 per course.

- The collaboration network with other universities has expanded considerably; today there are more than 1,300 Erasmus agreements established by the UPV/EHU, as well as more than 100 agreements in other parts of the world.
- The UPV/EHU participates in the CONAHEC (Consortium for the Collaboration of Higher Education in North America) network, the CREPUQ (Conference of Rectors and of the main universities of the Quebec) network, and in the Science without Borders program funded by the Brazilian Government.

- The results obtained reflect the effort made by the UPV/EHU to generate the right conditions (agreements, participation in international networks, strategic plans, etc.) to consolidate mobility as a key factor of internationalization.
- The rise in the number of international visitors, the increase of students that participate in mobility, and the incorporation in the dynamics of mobility within the Teaching Staff and Adminisration Staff community have a direct impact on the international projection of the UPV/EHU.
- Mobility in higher education forms part of the strategic actions within the Euskadi-Aquitaine Euro-region's 2014-2020 Strategic Plan, which also includes the Bordeaux-Euskampus Euro-regional Campus of International Excellence as a structure project.

15. INTERNATIONALIZATION OF UPV/EHU MASTER DEGREES AND DOCTORATES

Objetives:

To consolidate the availability of a competitive range of courses at an international level, by increasing the number of students and encouraging the recruitment of international students.

Summary of the work done and the role of the aggregation:

- Strengthening the available range of international inter-university Master degrees with the participation of members from the different Euskampus aggregation entities.
- Establishment of collaboration agreements with international universities for the organization and conjoint development of doctorate programs as well as co-tutelage for Doctoral Theses.
- Consolidation of the collaboration with the University of Bordeaux (UBx) and the University of Pau and Pays de l'Adour (UPPA) for the development of Cross-border Doctoriales, address to researchers who are doing their doctoral thesis in both universities (See detail in file 18). The last two years the Innovation Strategy Division of Tecnalia participates in the design and driving forward of team-working activities based on challenges posed by companies in the area.
- Consolidation of the Doctorate Programs in Latin America by extending the Latin American Network. Since 1997, the UPV/EHU has been teaching doctorate courses and supervising doctorate theses in Latin America, in the framework of a specific program of cooperation and collaboration. In 2015, 15 universities from 12 different countries make up the "Latin American Master and Doctorates Network" (See detail in file 17). The number of theses defended in this project framework has risen to 63.
- The internationalization of the doctorate programs has facilitated the design of international inter-university research projects.

Most significant results obtained at international level:

- The UPV/EHU participates in the 2 Master Erasmus Mundus programs:
 - Marine Environment and Resources, in collaboration with <u>the</u> Université de Bordeaux 1, the University of Southampton and the University of Liège. The UPV/EHU is the coordinator university. The Tecnalia technological centre is part of the collaborating body with a formal agreement, and participates with a total of 8 teachers directing Masters theses, doctoral theses, practicals and teaching.
 - Language and Communication Technologies, in collaboration with the universities of Saarlandes, Trento, Malta, Lorraine, Prague, Groningen, Shanghai Jiao Tong and Melbourne.
- The UPV/EHU participates in 2 Innovative Training Networks-European Joint Doctorates (ITN-EJD).
 - Social Representations and Communication European/International Joint PhD. Led by the Sapienza University of Rome and in collaboration with the Universities of Vienna, Paris, Linz, Helsinki, Lisbon and Valencia among others.
 - SUSPOL. European Joint Doctorate in Organocatalysis and sustainable Polymers Led by the UPV/EHU with the collaboration of the universities of Warwick, Bordeaux and Mons.
- The UPV/EHU has agreed a double international Masters degree in Mechanical Engineering with the Tianjin University of Science and Technology (TUST) in China.
- UPV/EHU currently has 95 agreements with international universities for the preparation of doctoral theses on the basis of co-tutelage, with a further 8 in the process of agreement. 22 of these relate to UBx and 27 to UPPA.
- For the collaboration agreement between UBx and the UPV/EHU, a public call has been set up for projects to formalize pre-doctoral agreements relating to undertaking doctoral theses on the basis of co-tutelage.

- A contracting call has been set up for doctoral theses to be done on the basis of co-tutelage between UPPA and the UPV/EHU.
- In 2014-2015 academic year, 160 of the 358 doctoral theses done at the UPV/EHU were awarded an International Mention (44%).
- Out of a total of 104 official Masters degrees:
 - 5 are jointly organized with other European universities
 6 are jointly organized with Latin American universities.
 - ✓ 19 are given whole or partially in English.

16. INTERNATIONAL EDUCATION PROJECTS

Objectives:

The UPV/EHU wants continuous quality improvement to reach education excellence, in order to be a benchmark in international higher education. To achieve this, it defines the following specific aims for international education projects:

- Promote European higher education proposals that have an innovative component and that promote the development of student capabilities through collaboration with other organizations in the labour market, especially technological and business agents.
- Help students gain a set of competences (mobility and flexibility) that better meet the needs of the constantly-changing labour market.
- Exchange best practices between European universities, by means of the development of strategic associations, facilitating the creation of common spaces of institutional collaboration.

Summary of the work done and the role of the aggregation:

- Creation and commissioning of an Erasmus+ project office to support interested UPV/EHU academic staff in the preparation and management of Erasmus+ proposals.
- Strengthening alliances with regional technological and business institutions to reinforce the development of competences and student employability.
- Establishment of alliances with international level agents to promote innovations in the field of the higher education through the exchange of experiences and development of new environments for learning.
- Presentation of proposals for Knowledge Alliances and Strategic Associations coordinated by the UPV/EHU. The role of Tecnalia and the University of Bordeaux has been key, especially in the proposals of institutional innovation and generation of alliances with partners at European level.

Most significant results:

- CIE Euskampus has promoted and given substantive support to international education projects through the following actions:
 - Creation of a management structure for international education projects.
 - Raising awareness of UPV/EHU throughout the university community.
 - Activation of international contacts.
 - Coordination mechanisms between Tecnalia and the UPV/EHU to jointly access DG Education projects.
- Of the proposals presented by the UPV/EHU in the first Erasmus+ (2014) call for entries, 2 Jean Monnet projects, and 2 strategic associations, one as associate and one as leader, were approved.
- In the 2015 Erasmus+ call for entries, 12 strategic associations (5 of them as coordinators and 7 as partners), have been presented; these are currently in the evaluation phase.

International projection:

The proposals presented have allowed the consolidation and expansion of the UPV/EHU's international networks and those of aggregation partners in the fields of educational improvement and pedagogical innovation. The international level alliances developed since 2013 include universities, companies and businessclusters, including the following:

- Dekra Akademie Gmbh (Germany)
- Zentrum Fur Soziale Innovation (Austria)
- Pädagogische Hochschule Tirol (Austria)
- Université De Pau Et Des Pays De l'Adour (France)

- Cluster TIC Santé Aquitaine (France) ٠
- Fontys University Of Applied Sciences (Holland) Universitá Degli Studi Di Trento (Italy) •
- •
- •
- •
- Universitá Di Bologna (Italy) Libera Universita di Bolzano (Italy) Universidade De Coimbra (Portugal) •
- Instituto Pedro Nunes (Portugal) •
- •
- Coventry University (United Kingdom) Universidades da Beira Interior (Portugal) •

17. LATIN AMERICAN NETWORK OF DE MASTERS AND DOCTORATES (RLMD)

Objectives:

Put together a competitive range of Masters degrees and Doctoral programs in Latin America through the Latin American network of Masters degrees and Doctorates (RLMD).

Summary of the work done:

- The RLMD was created in 2008.
- At present it comprises 16 universities of 12 different countries, although it is arranging the incorporation of new universities which will provide Masters and doctoral degrees from academic year 2015/2016.
- To date the RLMD has developed principally in the areas of: law, economy, philosophy, education, computing and linguistics, although it is working on the implementation of new areas like medicine, biology and engineering.
- These universities comprise an academic community that gathers every two years in an International Congress that represents a wonderful excuse for the meeting, knowledge and the exchange of information, with presentations on the latest advances made by doctors and professors in their research.

Most significant results:

- As part of the RLMD there are 7 Masters degrees. These are 2 year degrees. To date, there have been more than 300 graduates.
- In regard to doctoral programs, 80 doctoral theses have been defended since.
- There have been four congresses (2008, 2009, 2011 and 2013). A fifth congress is being organized for October 2015.

International projection:

- The RLMD's good academic performance has boosted the UPV/EHU's international projection, and it has become key to projecting the UPV/EHU on the international stage.
- As a consequence, the Network has widened its sphere of activity to include direct collaborations with the national governments of the countries where RLMD Universities are located, through training specialists and researchers:
 - from the start of academic year 2010/11 the UPV/EHU has worked with MESCYT (Dominican Republic Ministry of Higher Education, Science and Technology, which every year sends an average of 40 students to the UPV/EHU to follow Masters degrees and doctoral programs not available there:
 - in addition, the Government of Bolivia has established an agreement with the UPV/EHU, so that the relationships with the Bolivian universities, that will be incorporated into the RLMD, are formally endorsed by the Bolivian Government, which will recognise the courses and qualifications, and provide support for the objectives proposed.
- The RLMD is key to the establishment of an leveraged international network of networks in the Euro-regional Campus with Bordeaux.

18. EUSKAMPUS--BORDEAUX CROSS-BORDER EURO-REGIONAL CAMPUS OF INTERNATIONAL EXCELLENCE

Objectives:

- To develop a European benchmark university educational space, generating greater synergies in the structure and dynamics of training.
- Promote a conjoint academic degree program with international appeal, both for students in the Aquitaine-Euskadi Euro-region, and for international students.
- Increase mobility between the UPV/EHU and the University of Bordeaux.

Summary of the work done and the role of the aggregation:

- Definition of a work plan for joint coordination to promote actions that widen the range of common Masters and doctorate courses.
- Definition of priority collaboration lines between the directors of the UPV/EHU Masters and Doctorate School, and the Directorate of Value, Research and Doctoral Studies of University of Bordeaux (DirVED in the French acronym).
- Calls of doctoral scholarships under co-tutelage.
- Identification of cross-border sandwich training projects initiatives preparation (eg. Degree in Food Engineering from University of Bordeaux and UPV/EHU's Faculty of Pharmacy) and of common Masters programs (Fine Arts, Sports and Company Management, etc.)
- 4 specific workshops within the framework of the Bordeaux-Euskampus Symposium (Bordeaux, November 2014) designed to consolidate and stimulate cooperation in mobility, participation in European programs, postgraduate training and educational innovation.
- Impetus to the creation of Double Masters degrees:
 - Setting priorities in the areas of common excellence in order to improve mobility and scientific excellence.
 - Definition of a Bordeaux-Euskampus joint work plan.
 - Setting up work groups led by Masters degree directors.
 - Bilateral meetings of Masters degree directors to drive convergences to the conjoint offer, and teaching and student mobility,
- Doctorate
 - Definition of a joint work plan between the directors of the UPV/EHU Masters and Doctorate School and the DirVED (University of Bordeaux).
 - Constitution of a community of co-tutelage or co-directed doctorates.
 - Definition of a training pathway in multidisciplinary competences aimed at the euro-regional doctoral community under a co-tutelage or co-direction regime.
 - Consolidation of the collaboration with the University of Bordeaux and the University of Pau and Pays de l'Adour for the development of Cross-border "Doctoriales" (Cross-border Ph.Ds seminars), aimed at researchers in training who are doing their doctoral theses in both universities. The *Doctoriales* are intensive residential seminars of a week of length in which the doctoral students receive training oriented to the development of communication, innovation, team-working, leadership and entrepreneurship skills, with the aim of obtaining a better preparation for future employment, whether within or outside academia.

Most significant results:

- Incorporation of personnel for educational cross-border dynamics.
- Launching joint coordination projects of conjoint offer of Masters and doctorate in the areas of education, fine arts, computer, family businesses, oenology, nanomaterials, sports management, bioinformation.
- Doctorate:
 - Organization of Cross-border Doctorates: 3 years.
 - Announcements of co-tutelage theses: 3 in the UPV/EHU and 3 in University of Bordeaux.

- 22 theses under co-tutelage done during the CIE Euskampus project duration (2010-2015) which represents an exponential increase (factor of 8). Furthermore, 10 new agreements are expected to be signed in the second semester of 2015.
- Setting-up of a community of pre-doctoral research students in co-tutelage and their thesis directors (November 2014).
- Launching a training pathway of 7 workshops aimed at the euro-regional doctoral community (first workshop in May 2015).

A conjoint internationalization strategy (especially beyond Europe), is being developed, working on the development of a network of international networks to improve the internationalization of both universities and of the strategic partners of their fields of excellence.

The lines of work are as follows:

- Open the Latin American Network of Masters and doctorates led by the UPV/EHU to <u>University</u> of <u>Bordeaux</u> and its partners, via the participation of Bordeaux teachers and researchers in the Masters and doctorates offered.
- 2) Improve Latin American presence and collaboration to appeal to students and researchers from that part of the world via the framework of the Euro-regional Campus project (action as above).
- 3) Boost student mobility and the integration of teaching staff from both the Euskampus aggregation and IdEx Bordeaux in strategic Masters degrees in each university.
- 4) Work jointly on a shared oenology and wine economy course to appeal to China, among other possible priority regions.
- 5) Establishment of a three-way collaboration between Euskampus Aggregation, <u>University</u> of <u>Bordeaux</u> and the University of Cincinnati (US) in aeronautics.
- 6) Help the UPV/EHU develop collaborations with North African nations (like Algeria) where University of Bordeaux has historically more presence.
- 7) Develop a common range of summer school programs (4 to 6 weeks) to attract students and teachers from the US.
- 8) Boost and/or facilitate mobility between the 2 universities and their networks.

Above all, and cutting across everything above, there is the importance of working jointly to establish **double postgraduate degrees** to improve the appeal of the Euro-regional Campus as a destination for students from all parts of the world.

19. EURO-REGIONAL CAMPUS OF INTERNATIONAL EXCELLENCE BETWEEN EUSKAMPUS AND IDEX BORDEAUX – ORGANIZATION OF THE BORDEAUX-EUSKAMPUS SYMPOSIUM 2014 AND FOLLOW-UP OF THE PROJECTS SPAWNED

Objectives:

The first Euro-regional Symposium organized by the UPV/EHU and University of Bordeaux_was held in Bordeaux on 19-20 November 2014.

Its aims and priorities were:

- To consolidate the Euro-regional Campus of International Excellence project shared between Euskampus and IdEx Bordeaux, which has been running since 2011.
- Increase its public visibility and position it in the Euro-regional and European space

The Symposium took place via a group of plenary and thematic sessions with the following two objectives:

- To offer detailed information on what the project has achieved and about the opportunities, tools and programs to boost collaboration between the two campuses of excellence IdEx Bordeaux and Euskampus:
- To stimulate cooperation in areas of knowledge (public health and quality of life, innovative processes and new materials, sustainable ecosystems, heritage, art and social innovation,...) by means of face-to-face meetings between research and teaching staff of both universities and their respective strategic partners.

Summary of the work done and the role of the aggregation:

- At the opening of the Symposium, University of Bordeaux and the UPV/EHU jointly signed a collaboration agreement for the development of the project, in presence of the President of the Regional Council of Aquitaine, Alain Rousset, the President of the Basque Country, Iñigo Urkullu and representatives of the strategic partners of both universities. The agreement allowed:
 - The establishment of a strategic framework for this collaboration of excellence that clearly marked an important milestone not only for the shared Euro-regional Campus project but also for the impact of UPV/EHU internationalization and its campus of excellence project.
 - Formal completion of a pilot phase undertaken since 2011, that had already yielded a series of concrete results, and initiation of a more institutionalized phase that includes the whole university community and its capacities, particularly in the common strategic fields of the two campuses of excellence.
- The Symposium gave considerable impetus to the visibility and socialization of the Euroregional Campus and in the development of a sense of ownership of the project on the part of Euro-regional Campus stakeholders.
- Design of a methodology coordinated between the Bordeaux and Euskampus teams for the follow-up and support of the projects identified in the 2014 Symposium.

Most significant results:

- Signing a collaboration agreement between University of Bordeaux and the UPV/EHU for the development of the Euro-regional Campus of International Excellence project.
- Running of 14 scientific sessions with an average of 15 participants per session relevant to the two Campuses of Excellence in the areas of Archaeology, Advanced Manufacturing, Arts and Sciences, Cancer, Computing, Modelling and Simulation, Ecosystems, Health and Society, Innovation and Creativity. Plus associated lab sessions in Theoretical Chemistry and Physics at the Quantum Scale, Materials, Nutrition and Food Sciences and Technology, Oceans, Photonics and Laser.

- Projects identified (under way or to be initiated) coming out of the sessions: 19 in training, 50 in research.
- 5 administrative work sessions with Administration and Services Staff from the two universities to establish methods of cooperation in mobility, participation in European programs, postgraduate training, university social responsibility and educational innovation. For each issue, lines of work for joint development have been identified.
- A workshop for doctoral students in co-tutelage and co-direction between UPV/EHU and University of Bordeaux (to create a Euro-regional doctoral community (15 participants).
- A poster competition rewarding 2 thesis projects done under co-tutelage.
- Preparation of a Symposium report containing all the session records as well as other event materials (January 2015).
- Design of a coordinated methodology between the Bordeaux and Euskampus teams for the follow-up and support of the projects identified in the 2014 Symposium 2014 that established:
 - road maps (including priorities and support strategy for actions) in training, research and adding value for each of the 14 sessions from the projects identified by Symposium participants, and subsequent analysis via extensive structured interviews done by session coordinators;
 - the design of the 2015-2016 action plan (approved in May 2016).

The Symposium allowed the Euro-regional Campus to consolidate its international excellence, positioning and increasing its visibility within the Basque Country, Spain and France, as well as the Aquitaine-Euskadi Euro-region and the rest of Europe, making this project the only one with these characteristics in Europe.

20. EUSKAMPUS-BORDEAUX INTERNATIONAL SUPPORT (EBIS)

Objectives:

EBIS is a common service provided by the UPV/EHU and University of Bordeaux that works as a 'helpdesk', that is to say, a group of ressources, people and finance to provide services to the Euskampus and IdEx Bordeaux communities in order to manage, support and, ultimately, co-finance potential collaboration initiatives between people and groups of both communities that fulfil the objectives of the Euro-regional Campus.

Summary of the work done and the role of the aggregation

EBIS was launched in January 2014 and re-structured in January 2015.

There are 4 types of activity:

1) Forwarding requests:

Requests (applications of support for research projects, mobility, open days, presentations to calls, etc.) are initially received via an on-line application on line and forwarded. Requests are evaluated, and if there are already channels or means in both universities to manage the initiatives, they are forwarded to them.

- Selection of applications by a joint project evaluation committee based on agreed criteria and to the priorities established every year (eg. 2015 priorities included: projects derived from the Bordeaux-Euskampus Symposium 2014).
- 3) Support (not necessarily financial)

There are 3 types of possible support:

- Integration of the project within existent programs in the 2 campuses of excellence.
- Help in project definition (search for partners, orientation, external means, call preparations etc.).
- Financial support (source of secondary finance).

EBIS never offers primary finance for the development of a project. On a case-by-case basis, it can complement already existent finance, or serve to connect teams, but, it is not a source of primary finance to a project.

4) Follow-up and evaluation

- Record of activities, distribution, communication on actions etc...

Finance is accompanied by monitoring and explicit support by the Euskampus and IdEx teams. It also requires a (disseminable) record of activities to proceed to an evaluation.

Most significant results:

20 applications have been received of which 10 have received direct financial support.

EBIS has given support to the following projects:

- International workshop on food product and process development (Vitoria and Bordeaux, March 2014).
- Meeting between the Doctoral Schools of University of Bordeaux Humanities (Bordeaux Montaigne Humanités) and the University of the Basque Country (Bordeaux, June 2014).
- International junior symposium on "Impediments to a strong recovery in the EU.
- Placement of a UPV/EHU doctoral student in a Bordeaux laboratory to develop a line of work of a thesis entitled "A Multidisciplinary research on biofunctionalized nanoparticles and their application in magnetic hyperthermia experiments" (April to July 2014).

- Three and a half months placement in University of Bordeaux of a doctoral student belonging to the QAProdNat research group to do research related to high quality Bordeaux and Rioja wines (April to July 2015).
- Mechanisms of transmission of dopaminergic neurodegeneration in Parkinson's Disease, a research project between the Achucarro Basque research centre of excellence in neurosciences, LabEx Brain of Bordeaux and the University of Navarra (January-March 2015).
- Construction of predictive models for the design of organic photo-voltaic cells. Financing an end of course assignment of an elite Bordeaux student in a UPV/EHU Masters with the intention of preparing a thesis project (February 2015).
- Seminar (workshop) for Masters students from the UPV/EHU and University of Bordeaux (Masters Program "Masters in Economic Integration" (Department Applied Economics V) and from Bordeaux, the "Magistère d'économie et finances internationales") to present their Master Thesis drafts or specific papers (April 2015).
- Bordeaux-UPV/EHU workshop on systemic lupus erythematosus (June 2015).
- Bordeaux-Euskampus Workshop on lasers (June 2015).

EBIS contributes to the development of the Euro-regional Campus and at the same time to the international positioning of the Euskampus aggregation partners, extending beyond Euro-region borders.

21. COMISSION THE UNIVERSITY SCHOOL OF EDUCATION BUILDING

Objectives:

The UPV/EHU Campus Development Plan (2005-2010), foresaw a deep transformation of the Leioa-Erandio Campus area, with, among others, the following aims:

- To modernize UPV/EHU infrastructure, to guarantee quality teaching and research.
- To provide the infrastructures with the means to generate knowledge in all the areas and transmit it to the society.
- To promote collaboration with economic partners in the surrounding area.
- To facilitate innovation and the transfer of research findings to the productive and social fabric of our country.
- To contribute to the development of industrial enclaves where established.

One of the projected actions is the construction of a new building for the <u>University School of</u> <u>Education</u>.

Summary of the work done:

- The new University School of Education building became operational in September 2011, coinciding with the start of academic year 2011-2012.
- The new facilities replace those in the Arangoiti district of Bilbao, where the school had been located since 1962.
- The building has a surface area of 33,669 square metres, with 42 classrooms, 16 seminar rooms, 5 study rooms, 106 offices for teaching staff, 2 gymnasiums, 4 computing classrooms, 17 workshops, areas for management, administration and services, as well as meeting rooms, venues for students' groups and offices for technicians.
- In terms of sustainability, the building has been designed to maximize the benefit from solar heat depending on the atmospheric conditions for the time of year.

Most significant results:

Since academic year 2011-2012, more than 7,400 students have enrolled in the University School of Education in the new and modern buildings.

22. CONSTRUCTION OF THE BUILDING FOR THE UNIVERSITY SCHOOL OF TECHNICAL ENGINEERING (EUITI) AND THE UNIVERSITY SCHOOL OF MINING TECHNICAL ENGINEERING AND PUBLIC WORKS (EUITMOP)

Objectives:

The UPV/EHU Campus Development Plan (2005-2010) has within its objectives:

- To reorganize the presence of the UPV/EHU in Bilbao according to thematic concentration criteria.
- To boost the university's image and visibility within the Biscayan capital:
 - Sarriko (Legal and Economics Hub);
 - Saint Mamés Technology Hub;
 - Medical/healthcare Hub (Basurto Hospital area).
- To modernize UPV/EHU infrastructure in order to guarantee quality teaching and research.
- To ensure that the infrastructure is able to generate knowledge in all areas and transmit it to society.
- To promote collaboration with the structure of economic partners.
- To facilitate innovation and the transfer of research knowledge to the productive and social fabric of our country.
- To contribute to the development of the city of Bilbao.

Summary of the work done:

- The new EUITI and EUITMOP building was commissioned in September 2012, coinciding with the start of academic year 2012-2013.
- The building has a surface area of 43,418 square metres. The layout of the building is as follows: 56 classrooms, 27 seminar rooms, 5 study rooms, 238 offices for teaching staff, 9 meeting rooms, 45 educational laboratories, 26 research laboratories, areas for management, administration and services (conference rooms, boardrooms, undergraduate classrooms, venues for students' groups, offices for technicians, etc.).
- In terms of sustainability, the building has the latest energy efficient technology, of which the following is particularly noteworthy:
 - Maximizing use of rainwater: saving 8% on water consumption annually.
 - Solar panels: reducing CO2 emissions by 21,151 kg annually.
 - Sustainable illumination: reducing CO2 emissions by 860,160 kg annually.
 - Low temperature boilers: reducing CO2 emissions by 16,871 kg annually.

The annual total saving in consumption is estimated to be worth 201,000 euros.

Most significant results:

The building was officially inaugurated in September 2012, and from academic year 2012-2013 until the current year 2014-2015, more than 8,200 students have enrolled and have received classes in these new and modern installations.

International projection:

The new building that houses the EUITI and the EUITMOP is the first of the infrastructures built for the future Technology Hub of Saint Mamés (Bilbao), next to Bilbao Higher Technical School of Engineering.

The Technology Hub of Saint Mamés aims to improve international projection, by being the focus for top-class research talent.

SCIENTIFIC IMPROVEMENT

23. EUSKAMPUS PERI-UNIVERSITY AREA

Objectives:

- To establish links between the research centres in the Basque Country that expressed their wish to contribute to the Euskampus project in 2010 and the UPV/EHU, so that they can optimise and mutually reinforce their resources, capacities and research services, as well as give recognition to outstanding researchers in these centres as academic collaborators with the UPV/EHU.
- To strengthen the University-Society-Territory relationship and position the UPV/EHU as a central stakeholder in the Basque Science-Technology-Innovation system from an open innovation perspective.
- To generate an innovation and knowledge eco-system based on the Euskampus aggregation with other agents in the area that make up the CIE Euskampus, and so boost competitive advantage for defining and executing the Basque Country's RIS3 Strategy.

Summary of the work done and the role of the aggregation

Euskampus Fundazioa, with the drive given by the UPV/EHU, is the backbone of a periuniversity framework that reinforces and diversifies the opportunities and training capacity of the University, while reinforcing and improving research capacity of the UPV/EHU, thereby increasing its international visibility and appeal.

- In October 2011, an agreement was signed between the UPV/EHU and Euskampus Fundazioa to establish the terms and conditions to regulate the agreements to be signed between Euskampus Fundazioa and its member entities.
- The Euskampus Fundazioa Board of Trustees, in November 2011, agreed to award the honour of EUSKAMPUS FUNDAZIOA Partner to those entities that signed up in May 2010 to a partnering agreement with the EUSKAMPUS Project and that wish to contribute to the setting-up of the CIE EUSKAMPUS, updating and enriching their commitment by means of an agreement framework that supports and regulates specific and relevant actions including training, research, transfer, innovation and knowledge transfer.
- The framework agreements establishes shared use of infrastructures and services, by expanding the spread of the UPV/EHU knowledge community, and with certain researchers being recognised as academic collaborators with the university.
- These spheres of collaboration are specified by means of agreements, settlements, contracts and any other documents developed under the Framework Agreements and which are specifically processed.
- Euskampus Fundazioa likewise acts as the driver to execute that link with the UPV/EHU and monitors it.
- The development and establishment of the institutional agreements reached has been done through the Euskampus Knowledge Hubs initiative set out in files 24 to 35. This initiative enables the CIE Euskampus project to become the backbone of the periuniversity environment in order to allow it to tackle social and global challenges.

Most significant results:

- Six framework agreement have so far been signed with Euskampus Fundazioa:
 - BCBL, Basque Excellence Research Center on Cognition, Brain and Language.
 - BC3, Basque Excellence Research Center on Climate Change.
 - BioDonostia Institute.
 - BCAM, Basque Excellence Research Center in Applied Mathematics.
 - CIC marGUNE High Performance Manufacturing Cooperative Research Centre.
 - ESSBilbao.

- Three new "Basque Excellence Research Centres (BERCs)" were created, two in the sphere of science and material engineering and the other in the sphere of neurosciences, which were already set up linked to the UPV/EHU:
 - BCMaterials, Basque Center for Materials, Applications and Nanostructures (see detail in file 36)
 - Polymat, Basque Center for Macromolecular Design and Engineering (see detail in file 37)
 - Achucarro Basque centre for Neuroscience (see detail in file 38)
- Links with the CIC have been strengthened via the Knowledge Hubs; a highlight is the role played by CIC Biomagune in the development of the Neurosciences Knowledge Hub contributing their capacities of molecular imaging.

The work to integrate periuniversity capacities, and the work to build internal collaboration networks has forged the basis for a more robust internationalization, stimulating new international collaborations that have strengthened the role of Euskampus aggregation research groups in the European Research Space. Positions consolidated in the national innovation system have opened up international networks to allow increased levels of excellence, and an increased role of groups belonging to the Euskampus aggregation within the H2020 Program.

24. EUSKAMPUS KNOWLEDGE HUBS

Objectives:

- Articulate open spaces for inter-institutional and interdisciplinary collaboration in order to tackle social and global challenges using the scientific-technological capabilities of the Euskampus aggregation, and the Basque Network of Science, Technology and Innovation (periuniversityspace, file 23).
- Promote local answers to global challenges connecting local capacities with first class global capacities, thereby reinforcing the visibility of the regional innovation system as a vector of the Knowledge Society.

Summary of the work done and the role of the aggregation

The CIE Euskampus Project was conceived as a Community of Knowledge Hubs. Over the years, 11 knowledge hubs have been defined that have been able to develop by means of the establishment of a 1 million euro investment fund. This fund, managed as a seed fund, has been used as a source of secondary finance to attract competitive public finance, to co-finance collaborations in postgraduate training, research and knowledge transfer, or to promote emerging lines of trans-disciplinaryresearch.

The Euskampus Knowledge Hubs have resulted in a pioneering initiative in the Basque system of Science, Technology and Innovation⁶. Its five main characteristics or special features have been as follows:

- Focus on "pull" in place of "push"; The social and global challenges as "drivers" of collaboration and the scientific-technological capacities as "enablers".
- Focus on "bottom-up" in place of "top-down"; The mobilization of the research and technology community of the aggregation to participate in knowledge hub definition and in the design and execution of the activities. In total, nearly 300 people have been directly involved through Knowledge hub activities.
- Focus on "ecosystem" in place of "ego system"; The logic of financing institutions within the innovation system is replaced by the logic of financing local answers to global challenges.
- Focus on "connect" in place of "construct"; The knowledge hubs are not new structures; instead they are innovation hubsthat allow existing structures to connect and interact.
- Focus on "co-creation" in place of "window". New calls for help have not been made (window); instead the hubs have worked with researchers to design and execute their projects. In this sense, Euskampus Fundazioa has acted as an "investment partner" of the collaborative projects promoted.

The following table shows a summary of the investment made by Knowledge Hub and the degree of multidisciplinary activity attained.

⁶ The Knowledge Hubs have inspired the "Support tools for developing integrated tractive collaboration projects in the country", one of the category of support tools for the convergence of capabilities and cooperative promotion of R&D, contained in the Basque Country Science, Technology and Innovation Plan 2020. This the only support tool within the Plan whose execution falls on the Presidency given its transdisciplinary and multi-departamental character. In the same way, the knowledge hubs have inspired collaborative research effort oriented to societal challenges contained within the Basque Government University Plan 2015-2018.

KNOWLEDGE HUB	INVESTMENT MADE (in euros)	ADVANCED MULTIDISCIPLINARY ACTIVITY
HEALTH AND SUSTAINABLE DEVELOPMENT OF THE OCEANS	381.600	VERY HIGH
AGROFORESTRY ECOSYSTEMS INNOVATION AND SUSTAINABLE MANAGEMENT	54.500	LOW
TERRITORY, LANDSCAPE, HERITAGE	14.000	VERY HIGH
NEUROSCIENCES (MENS SANA)	158.000	VERY HIGH
FOOD AND HEALTHY LIFESTYLE (CORPORE SANO)	44.000	HIGH
ADVANCED MATERIALS (*)	182.500	HIGH
ADVANCED MANUFACTURE	98.500	AVERAGE
SIMULATION, MODELLING AND COMPUTATION (*)	0	HIGH
GLOBAL COMMUNICATION	6.000	VERY HIGH
LABORATORY FOR CREATIVE PROCESS:AUSART	33.000	AVERAGE
SOCIAL TRANSFORMATION	23.000	HIGH

(*) In regard to Key Enabling Technologies (KET), the collaborative projects promoted from these hubs remain within the Knowledge Hub of the final application field (neurosciences, advanced Manufacturing and health and sustainable development of the oceans).

A total of 77 collaborative activities have been promoted, with finance totalling 995,100 euros, that is to say, 99.5% of the planned Investment fund for this activity. The distribution of finance by type provided through the investment fund is as follows:

- Scholarships: 43,500 euros (4%);
- Employment contracts for the development of collaborative research projects: 434,000 euros (44%);
- Co-finance of collaborative activities: 246,500 euros (25%);
- Mobility and international projects: 271.100 (27%)

Our perceptions of the world come fragmented according to the discipline with which we observe it. Each discipline observes reality from different perspectives and poses different questions⁷. In fact, it is precisely these questions that differentiate the disciplines to which researchers belong. And nevertheless, the social and global challenges are increasingly more complex. Hence arises the need to form groups, interbreed and collaborate with different ways of understanding. The dynamic of the Knowledge Hubs has been working for years with this perspective. A perspective that has required building original collaborations of disparate types:

- In the first place, and given the generalist character of the UPV/EHU, many of the collaborations promoted have been collaborations between research groups and departments inside the University itself. Collaborations that have allowed to tackle more complex challenges and a greater orientation of University research activity to the needs of Society in general.
- Secondly, collaborations have been developed between TECNALIA researchers. And indeed TECNALIA is the result of the fusion of 8 Technology Centres within the Basque Country. It is a recent fusion that the CIE Euskampus project authorized to consolidate backbone connections

⁷ Physicist John Wheeler once commented that, "we shape the world by the questions we ask."

and collaborations between divisions from different technology centres, while adding impetus to tackle complex challenges, using each centre's complementary capacities; all this has strengthened the capacity to generate and exploit knowledge to help the competitiveness of Basque companies.

And finally, as the essence of the CIE Euskampus project, new collaborations between
researchers of the UPV/EHU and TECNALIA have given extra strength, increasing the value
chain of R&D thus encouraging the development of the different links. The success of this work
has specifically strengthened in the evaluation criteria of the regional instruments of R&D the
importance of collaborations between different parts of the technology and scientific
community and beyond this as well, that is to say, with the business fabric.

Most significant results:

- The increase in multidisciplinary research in the EUSKAMPUS aggregation;
- The opening of new lines of collaborative research between the entities of the aggregation;
- The activation of cross-cutting scientific-technological capabilities and their orientation to the resolution of social and global challenges;
- The impulse to "genuine collaboration" not driven by opportunism created by calls for collaboration that tend to favour a "window focus" but by the stimulus to offer local answers to global challenges⁸.
- The idea of social and global challenges being drivers for research collaboration has been one of the differentiating features of the Euskampus Knowledge Hubs initiative.
- The development of new competitive public finance mechanisms in the Basque Country inspired by the Knowledge Hubs initiative (ELKARTEK Program (see file 57), for the development of integrated tractor projects in the country, PCTI 2020, University Plan 2015-2018,...).
- An important mobilization of Basque Country agents that have participated directly in the activities promoted by the Knowledge Hubs initiative Investment fund, also acting as a backbone element in the peri-university space (see detail in file 23).
- The orientation of UPV/EHU cross-cutting capabilities to the resolution of the social and global challenges defined in the strategic framework of the Knowledge Hubs, thus aligning the capabilities to those within the Basque Country's Strategy of Smart Specialization Strategy RIS3.

⁸ The search for distinctive value added with the Knowledge Hubs demanded an analysis of the means of competitive public finance, whether regional, national and European. This analysis identified a series of limitations and barriers for the research of local answers to global challenges. As an example, the RETOS program of the Ministry of Economy and Competitiveness limited the possibility of developing interdisciplinary teams by a restriction in the number of days. This fact was appropriately reported to Dr. Clemente López Bounce, general deputy director of research projects with the proposition to soften this restriction in the case of multidisciplinary projects.



The dynamic of the Knowledge Hubs:

- it has been the catalyst for the internationalization of the Euskampusaggregation entities.
- it has positioned the aggregation within the framework of European priorities and, particularly, in the Knowledge Innovation Communities (KIC).
- it has aligned this internationalization with the priorities within the Basque Country's Smart Specialization Strategy RIS3.
- and in turn, the Hubs have been key to the development of the Euskadi-AquitaineEuro-region Strategic Plan 2020.

25. <u>OCEAN ECOSYSTEM HEALTH AND SUSTAINABLE EXPLOITATION</u> KNOWLEDGE HUB (PSVSO)

Objectives:

Align the Euskampus aggregation research and technology community around the social and global challenges expressed in the PCSVSO strategic framework, activating its capacity to design and undertake training, research and knowledge transfer to society. PCSVSO comes under the environmental technologies and sustainable eco-systems specialization of the CIE Euskampus Project.

SOCIAL AND GLOBAL CHALLENGES OF THE KNOWLEDGE HUB

Health of the oceans.		
Renewable energies in the environment		
Human health.		
Industrial processes and products.		
Healthy food (*)		

(*) In the field of the healthy food, a multidisciplinary project has been set up between the Plentzia Marine Station (PIE) and the BERC Achucarro that is included in the Knowledge Hub of healthy food and lifestyle (see file 28).

Summary of the work done and the role of the aggregation

The work done within this Knowledge Hub falls into 2 main areas.

- Ocean ecosystem health has absorbed 57% of the investment in this Knowledge Hub. This main area has faced three big challenges:
 - The preservation of biodiversity.
 - Adaptation to sources of environmental stress.
 - Climate change.
- The exploitation of the oceans from the perspective of marine renewable energies (offshore wind-farms, waves, tides, thermal gradient or salinity gradient). This main area, which has absorbed 42% of the investment in this Knowledge hub, faces three big challenges:
 - The integration within the electricity generating network of the relevant marine environment renewable energy.
 - Cost efficiency in the generation of renewable energy in the marine environments.
 - Spatial planning of renewable energies in the marine environment.

In the field of the human health, there is an emerging collaborative line of research in which the PIE and the Biophysics BERC have reached a joint agreement. In addition, potential collaborations with departments of the Faculties of Pharmacy and Medicine have been identified.



In the field of the industrial processes, the capacities of the PIE and the school of Engineers (Dept of nuclear engineering and fluid mechanics) have been developed, leading to publications in which they analyse the properties of shark skin and its use as a coating for fabric and steel for ship Manufacturing (biomimicry).

Most significant results obtained

The total investment made in this Knowledge Hub has risen to 381,600 euros.

Of the 21 collaborative actions done, the following stand out:

- The **specimens bio-bank** initiative that has allowed the integral management and better availability of samples owned by the UPV/EHU and Tecnalia. In addition, the networking of the Euskampus aggregation biobank with biobanks across Europe has facilitated participation of Euskampus aggregation entities in European programs like H2020.
- The development of an **international Masters in renewable energies in the marine environment** with the University of Strathclyde (Scotland) and NTNU (Norway). This Masters develops multidisciplinary capacities of the Euskampus aggregation, specifically the UPV/EHU, Tecnalia and the BCAM.
- The celebration of marine biotechnology day promoted by the OECD in the framework of its Program: "The Future of the Ocean Economy: Exploring the prospects for emerging ocean industries to 2030" in its "International Futures Programme (IFP)".
- A collaborative project in superplastics for cements employed in the primary generation of renewable energy in the marine environment. First collaborative initiative between BASKRETE and POLYMAT, and the first effort of both agents to tackle challenges related to the cost efficiency of renewable energies in the marine environment.
- Three collaborative projects between the UPV/EHU, BCAM, Tecnalia and the University of Bordeaux related to modelling behaviors and interactions between electricity generating devices in the sea.

This Knowledge Hub strengthens the internationalization of postgraduate training excellence, as well as its leadership in multidisciplinary research in the fields of health of the oceans, and of renewable energies in marine environments,

Initiatives have been developed which impact directly on greater internationalization of the UPV/EHU aggregation entities. In particular, the PIE has significantly enhanced its status, both in the national innovation system and in the European Research Space (see file 39).

26. KNOWLEDGE HUB IN <u>AGRO-FORESTY ECOSYSTEMS: INNOVATION AND</u> <u>SUSTAINABLE MANAGEMENT</u> (PCEA)

Objectives:

Mobilize the Euskampus aggregation research and technology community to respond to the social and global challenges expressed in the PCEA strategic framework, activating its capacity to design and undertake training, research and knowledge transfer to society. PCEA comes under the environmental technologies and sustainable eco-systems specialization area of the CIE Euskampus Project.

SOCIAL AND GLOBAL CHALLENGES OF THE KNOWLEDGE HUB

Effects of global changes on continental ecosystems

Conservation and protection of ecosystems

Smart management of agroforestry systems

Summary of the work done and the role of the aggregation:

The work done within the framework of the present Knowledge Hub has basically consisted in two large lines of work:

- Internationalization with University of Bordeaux of the lines of UPV/EHU and Tecnalia collaborative research to meet the challenge of conservation and protection of terrestrial ecosystems;
- The use of Tecnalia personnel (20 people in total) between UPV/EHU Masters degree teaching staff (Masters in Environmental Agrobiology and Masters in Biodiversity, Operation and Ecosystems Management) for the development of collaborative theses with UPV/EHU and Tecnalia tutors. Therefore, 6 projects have been supported by the grant of scholarships to those students that choose to continue their postgraduate studies by doing a Doctoral Thesis, once they have completed their Masters. To do this, a collaboration agreement between Euskampus Fundazioa and the UPV/EHU Masters and Doctorate School has been signed to grant these scholarships.

Under this Knowledge Hub framework, as shown in the following table, 10 actions have been identified with a total budget of 54,500 euros.

Most significant results:

- The consolidation and internationalization of collaborative research lines in the field of conservation and ecosystems protection. A particular highlight is the participation of TECNALIA, the UPV/EHU's Department of Plant Biology and Ecology and the Department of Zoology and Cellular Biology, together with the BIOGECO Group, of the Institut National de la Recherche Agronomique-University of Bordeaux in the PHYTOSERVE project within the <u>BIODIVERSA</u> <u>Program</u>.
- The use of contacts between Euskampus aggregation professionals to add value to connections around research lines initiated by means of Masters and doctoral theses co-directed by both institutions (UPV/EHU and Tecnalia).



Dept. of Plant Biology and Ecology



- The internationalization of research collaboration between UPV/EHU and Tecnalia in the field of the phytoremediation by means of 6-month placements of Tecnalia and UPV/EHU personnel in the University of Bordeaux and Rothamsted Research (United Kingdom). This internationalization has allowed the presentation of a European project within the H2020 Program.
- The development of 6 Masters theses co-directed by UPV/EHU and Tecnalia researchers. These students will continue their studies by means of doctoral theses co-directed by Tecnalia and UPV/EHU researchers.

International projection:

One of the core areas which collaboration within this Knowledge Hub has affected has been internationalization.

In particular, this has drawn on existing collaborations recognised by the National Innovation System through the National Plan supported by recurrent collaborations between the UPV/EHU and Tecnalia in the field of the bio-remediation.

The Knowledge Hub has driven collaboration with the University of Bordeaux and the Institut National de la Recherche Agronomique-INRA.

These collaborations have developed by means of mobility actions, which have generated, in addition to joint publications, the participation in international congresses and the preparation of a H2020 project with the participation of the UPV/EHU, Tecnalia and the University of Bordeaux.

27. KNOWLEDGE HUB IN TERRITORY, LANDSCAPE AND HERITAGE (PCTPP)

Objectives:

To mobilize the Euskampus aggregation research and technology community around the social and global challenges expressed in the Territory, Landscape and Heritage Knowledge Hub strategic framework, activating its capacity to design and undertake training, research and knowledge transfer to society. The Knowledge Hub in Territory, Landscape and Heritage specializes in sustainable Ecosystems and environmental technologies.

KNOWLEDGE HUB		
Landscape as territory		
Landscape as heritage		
Landscape as resource		

SOCIAL AND GLOBAL CHALLENGES OF THE

Summary of the work done and the role of the aggregation:

This is a Knowledge Hub driven by the local research community with the purpose of promoting lines of collaborative multidisciplinary research to tackle the complexity of the questions that affect the area, such as system of systems, natural habitat and construction.

The circumstances and the current opportunities have oriented collaboration to researching local answers to a global challenge - urban and industrial soil contamination. The leadership of the City council of Bilbao in BRODISE, the only soil contamination project within Horizon 2020, represents a challenge for UPV/EHU and Tecnalia research groups. The aim is to develop technology that can be used in a process of public procurement of innovative Technology for several European cities under the leadership and coordination of the City council of Bilbao.



The Knowledge Hub in Territory, Landscape and Heritage works to generate a network of multidimensional collaboration that covers:

 A public/public collaboration in which the City council of Bilbao takes part along with various Basque Government departments with the competences and capacities to face the challenge of soil decontamination on the Zorrozaurre peninsula (Environment, Economic Development, Housing, Education and Presidency);

- A public/private collaboration within the Euskampus aggregation and also incorporating other institutions of the Basque Network of Science-Technology and Innovation as well as companies with relevant competences and know-how to tackle the challenge.
- A private/private collaboration to equip the business world with the capacity to provide a proposal with guarantees of success in the public procurement of innovative Technology.

Most significant results:

In the framework of this Knowledge Hub, the most significant results have been:

- The inclusion of soil contamination as an opportunity in the Basque Country's Smart Specialization Strategy.
- A summer school course held in 2014 on Basque soil strategy.
- The National Symposium held in 2015 on control of soil degradation and restoration, Condegres, which took part in Bilbao.
- The collaboration with the City council of Bilbao in the framework of the development of the BRODISE Project within the H2O20 Program.
- The preparation of an offer to mobilize stakeholders in the Basque Government's ELKARTEK call for the development of collaborative research to develop remediation technologies for soil contamination.

International projection:

The Knowledge Hub contributes directly to the projection of the internationalization of Euskampus aggregation entities through collaboration with the City council of Bilbao that is leading the European BRODISE project.

28. KNOWLEDGE HUB IN <u>HEALTHY FOOD AND LIFESTYLE</u> (PCAHVS)

Objectives:

Mobilize the Euskampus aggregation research and technology community around the social and global challenges expressed in the strategic framework of the Knowledge Hub in Healthy Food and Lifestyle, developing its capacity to design and undertake training, research and knowledge transfer to society. The Knowledge Hub in Healthy Food and Lifestyle comes under the quality of life and healthy ageing specialization of the CIE Euskampus Project.

SOCIAL AND GLOBAL CHALLENGES OF THE KNOWLEDGE HUB

Food safety
Food quality.
Food processing.
Healthy food and lifestyle.

Summary of the work done and the role of the aggregation:

In the framework of this Knowledge Hub, collaborations between the entities centre around postgraduate training:

- Participation of Tecnalia personnel in the training staff of UPV/EHU Masters degrees:
 - Masters degree in innovative oenology;
 - Masters degree in nutrition and health;
 - Masters degree in food quality and safety.
- Multidisciplinary Project between the Plentzia Marine Station and the UPV/EHU Neurosciences Department on the food quality and safety of tuna.
- Multidisciplinary Project led by the UPV/EHU Urban Elika group with the participation of law, pharmacy, science and technology, etc. researchers to link food safety to food banks and social canteens. A project that in addition to research involves the holding of a Congress entitled "Looking to a Future without Waste or Hunger: Social Challenges. Envisioning 2015" that will be held in November 2015 in Bilbao.

Finally, a training module was launched shared between the apprenticeship course in Agro-food Production of University of Bordeaux and the Degree in Food Science within UPV/EHU's faculty of Pharmacy. It lasts four weeks, of which two weeks take place in Vitoria-Gasteiz and two in the University of Bordeaux. The first course took place in March 2014.

Main UPV/EHU Departments involved	eman ta zabal zazu	
Dept. of Pharmacy and Food Sciences		
Dept. of Analytical Chemistry	Universidad Euskal Herrik	
Dept. Of Immunology, Microbiology and Parasitology	del País Vasco Unibertsitatea	
Dept. Of Physiology		
Dept. Of Biochemistry and Molecular Biology		
Dept. Of Zoology and Animal Cellular Biology	Universidad Euskal Herriko del Pais Valoo Unibertstatea Estación Marina de Pertz	
Dept. of Neurosciences		
Dept. of Constitutional Law and History of Thought and Social and Political Movements	urhan 3	
Dept. of Ecclesiastical State Law and Roman Law.	elika 🖦 🛛 🔍	
Dept. of Sociology and Social Work		
Dept. of International Law, International Relations and History of Law	ana	
Dept. Applied Economics V		
Dept. of Genetics, Physical Anthropology and Animal Physiology		
Dept. of Applied and Statistical Mathematics and Operative Research		

Most significant results:

- The consolidation of the collaborations in the teaching of UPV/EHU Masters degrees.
- The initiation of two high impact multidisciplinary collaborative research projects into local solutions to global challenges such as:
 - URBAN ELIKA that from a multidisciplinary perspective, seeks to remove the barriers, whether legal, institutional, structural or socioeconomic, that, in urban surroundings with a surplus of food, prevent access of some people to safe food, that is nutritionally adequate and suited to their needs and personal preferences. The intended beneficiaries of these solutions are food banks, social cooperatives and similar institutions that distribute foods to people in social exclusion.
 - 2. SELATUN, a multidisciplinary Project between Plentzia Marine Station (PIE, file 39) and the BERC Achucarro (file 38) that researches properties of the tuna that, because of the high content in compounds of bioactive selenium, can diminish the neurotoxic effect exerted by the methyl-mercury in fish and delay and/or slow down the development of Alzheimers. This action is closely related to the social and global challenges within the strategic framework of the Euskampus Knowledge Hubs in Health and sustainable development of the oceans (file 25) and that of Neurosciences (file 29).

International projection:

The clear-cut actions will position the candidature of the Basque Country within the framework of the European initiative to create a **KIC** (Knowledge Innovation Community) in food.
29. KNOWLEDGE HUB IN <u>NEUROSCIENCES</u> (PCN)

Objectives:

To give impetus to the research and technology community within the Euskampus aggregation around the social and global challenges expressed in the strategic framework of this Knowledge Hub, activating its capacities to design and implement actions to train, do research, and transfer knowledge to society. The Knowledge Hub comes under the quality of life and healthy ageing specialization area of the CIE Euskampus Project.

SOCIAL AND GLOBAL CHALLENGES OF THE KNOWLEDGE HUB

Normal functioning of the nervous system.
Cognitive and motor deterioration
Pharmacological therapies and rehabilitation
Environmental conditions
Neuromimetics

Summary of the work done and the role of the aggregation:

In the field of the training, highlights are as follows :

- The search for a strategic alliance with the Bordeaux research community for postgraduate training;
- The active participation of staff from Tecnalia's International Excellence Group in Neurorehabilitation in the UPV/EHU's Masters degree in Biomedical Engineering. (5 people of which 4 are not Spanish);
- The leadership of the UPV/EHU in coordinating a University Masters degree in Neurosciences.

Chart of the Neurosciences activity within this Knowledge Hub

MainUPV/EHUDepartments involved	eman ta zabal zazu	
Dept. of Pharmacy and Food Sciences		
Dept. of Analytical Chemistry	Universidad Euskal Herriko	
Dept. Of Immunology, Microbiology and Parasitology	del País Vasco Unibertsitatea	
Dept. Of Physiology		
Dept. Of Biochemistry and Molecular Biology		
Dept. Of Zoology and Animal Cellular Biology	Universidad Euskal Herriko Paetatako Itxas Estasioa del País Vasco Unibertatatea Estacion Manna de Pieriza	
Dept. of Neurosciences		
Dept. of Constitutional Law and History of Thought and Social and Political Movements	urhan 30	
Dept. of Ecclesiastical State Law and Roman Law.	elika 🖦 🛛 🔍	
Dept. of Sociology and Social Work		
Dept. of International Law, International Relations and History of Law	etwaarde 🛃	
Dept. Applied Economics V		
Dept. of Genetics, Physical Anthropology and Animal Physiology		
Dept. of Applied and Statistical Mathematics and Operative Research		

In the research field, collaborative research projects, developed in the two last years, are particularly noteworthy. It should be stated that these represent new lines of collaboration in emerging and future fields. The connecting work within the Neurosciences Knowledge Hub represents the start of collaborations between current research groups in the Basque network of science technology and innovation. They used to collaborate with groups in other Autonomous Communities but not previously within the Basque Country. In effect, there are Basque research groups in the Biomedical Research Centres both in the Mental Health Network (CIBERSAM) and in Neurodegenerative Diseases (CIBERNED) but they had not collaborated internally.

This failure to collaborate is partly due to the lack of Autonomous Authority mechanisms that would allow it. The mechanisms of autonomic finance have further encouraged fragmentation. Nevertheless, this is set to change for the better through the Basque Government's ELKARTEK Program (see file 57) which articulates the most ambitious collaborative project of the Knowledge Hub in Neurosciences. This is translational research around the neuro-inflammation processes in neurodegenerative and psychiatric illnesses that affect cognitive or motor capabilities of patients with these illnesses.

To date, 12 collaborative projects with a total investment of 158,000 euros have been done, and 16% of the Investment fund used.

All this has allowed various capacities to be activated, not only in the bio-sciences but also of the fields of engineering, computational images, modelling, simulation and computation, robotics, artificial intelligence, physiotherapy, etc.

Most significant results:

- The development of collaborative projects spanning disciplines that up to now have been disconnected and with great potential to offer new results to help tackle the challenges within this Knowledge Hub.
- The presentation of a collaborative translational research project on the neuro-inflammation processes in neuro-degenerative and psychiatric illnesses that brings together a group of

specialists from the Basque Network of Science Technology and Innovation in the field of neurosciences.

• The internationalization of neurosciences in the Basque Country with <u>the</u>University of Bordeaux and the Aquitaine neuroscience cluster of excellence.

The most outstanding projects in the Knowledge Hub are:

- Project for the development of the HAPTIC device for the rehabilitation in hospitals of people that have suffered strokes. Collaboration between Tecnalia and UPV/EHU that involved the participation of a Masters of the School of Engineers student and and that subsequently developed into a doctoral thesis with the help of the Basque Government's pre-doctoral support program.
- Collaboration in computational neuroimaging between UPV/EHU, Biocruces and BCAM that involved the participation of a Masters of Medical Bio-engineering student and that subsequently developed into a doctoral thesis with the help of the Basque Government's pre-doctoral support program.
- Project "Mechanisms of transmission of the Dopaminergic neurodegeneration in Parkinson's Disease", with the participation of BERC Achucarro and the University of Bordeaux. This is the first world-wide study that uses bioptic human material in combination with innovative technologies like microfluidics and the organotypic crop technique, patented by the BERC Achucarro and the UPV/EHU.
- ISMORE Project. Development of a neurorehabilitation therapy based on a Brain Machine Interface (BMI) for patients with severe motor disability caused by a stroke. This is an international and multidisciplinary project with the participation of the University of Berkeley, University of Tubingen, Donosti Hospital, Biodonostia, Tecnalia and the UPV/EHU.
- Gliomagen Project. Retrospective study for the analysis and characterization of gliomas (degree, infiltration, and recurrence) by using technologies of post-processing and segmentation of the neuroimage. The participants are the of Computational Neuroimage department of the Quantitative Biomedicine Unit, BioCruces, the Neurosurgery and Pathological Anatomy departments of the University Hospital of Cruces, and Tecnalia's Computer Vision Group.
- Translational research project on neuroinflammation listed in the new ELKARTEK call of the Basque Government (support to undertaking collaborative research between members of the Basque Network of Science, Technology and Innovation). This is the first Basque community structuring project in neurosciences to develop a CIBER (Networked Bio-medical Research Centre) in neurosciences, using the Basque Strategy of Smart Specialization RIS3 framework.

International projection:

One of the core areas pivotal to the development of the Euro-regional Campus in the framework of the Euskadi-Aquitaine Euro-region Strategy is the creation of a Knowledge Hub of transnational excellence in neurosciences that helps activate and reinforce collaboration between the neurosciences community in the Basque Country and that of Bordeaux. The neurosciences Knowledge Hub has therefore developed into a highly important area of work as much in quantitative terms as qualitative ones.

30. KNOWLEDGE HUB IN GLOBAL COMMUNICATION (PCCG)

Objectives:

The Knowledge Hub in Global Communication is a collaborative space to design, coordinate and undertake training, research and knowledge transfer, and with a strong desire for excellence, aimed to facilitate unlimited global communication by means of technological solutions to improve the availability and universal accessibility of information in all respects. The Global Communication Knowledge Hub lies within the CIE Euskampus specialization of new materials and innovative processes.

Teaching, Education, Learning
Ageing
Disabilities
Immigration and integration
Cultural diversity
Globalisation
Mobility

SOCIAL AND GLOBAL CHALLENGES OF THE

Summary of the work done and the role of the aggregation:

As with other Knowledge Hubs, the ad hoc co-creation team built a strategy based on the social and global challenges that must drive multidisciplinary collaboration.

The work done within this Knowledge Hub has centred on developing new forms of collaboration. These forms are more user-orientated, and break from the traditional vision of collaboration in these subjects which was was more technology-driven. In this sense, it represents an important awareness that technology is not a driver but rather an enabler, and that it is the societal challenges, collected within the strategic framework, which are the drivers. This change of approach demanded the participation of anthropology researchers, adding value and introducing disciplines which had not previously collaborated.



Once this change of approach was determined, a specific experience in the mobility field was initiated. The presence in the Basque Country of a train manufacturer (CAF- the patron of Euskampus Fundazioa) and a rail transport provider (Euskotren) were determining factors in this choice of application.

For this, innovations were required in how Euskampus Fundazioa investment funds were managed and distributed. On this occasion, after validating the two companies mentioned, a "cheque" was issued to CAF to contract the Department of Philosophy of Values and Social Anthropology to carry out a first phase anthropological study of train travellers in order to capture their needs from their experience as passengers.

In the current second phase, researchers with technological capacities are transforming the opportunities identified in the study into solutions with a technological base, mainly based on Information Technology. This phase is developing as a co-creation process involving researchers from Tecnalia, the UPV/EHU Faculty of Computing and School of Engineering, and CAF, devising and prototyping technological solutions that later will be trialled in new trains that CAF sell to their customer Euskotren.

Most significant results:

- The development of a research system in which the societal challenges are the driver and the technology becomes the enabler.
- The development of a new mechanism, innovation cheques, for companies to contract UPV/EHU for first phase work that allows them to evaluate what UPV/EHU can offer as added value.
- The extra value of social anthropology for the development of end products and services, making end-user needs the driver for innovation. Further, in the second phase it explores the technological and economic feasibility of possible solutions to meet previously identified needs. This initiative goes to extrapolate and scale the activation of these capacities in the processes of product and services innovation.
- All these elements have been put in practice within the BIDAIARI project, which is the model for this type of project. This is a project developed in the field of railway transport with the participation of a train manufacturer - CAF (patron of Euskampus Fundazioa) and a transport provider - Euskotren.

International projection

The Knowledge Hub in Global Communication, in line with its strategy, works in key high impact lines of work in the internationalization of the aggregation entities and of the companies that benefit from the results obtained. In the case study above, it has worked for a company, CAF, with a strong international presence (note that CAF is also the patron of Euskampus Fundazioa), to offer high value added solutions that allow a better positioning in the international bid processes in which it participates.

31. KNOWLEDGE HUB IN ADVANCED MANUFACTURING (PCFA)

Objectives:

To mobilize the Euskampus aggregation research and technology community around the social and global challenges expressed in the strategic framework of the Knowledge Hub in Advanced Manufacturing, boosting its capacity to design and undertake training, research and knowledge transfer to society. The Knowledge Hub in Advanced Manufacturing comes under the specialization of new materials and innovative processes of the CIE Euskampus Project.

KNOWLEDGE HUB
Production at micro level in the macro environment
Near net shape manufacturing.
Sustainable production.
Human-centric manufacturing.
Health monitoring.
Modelling

SOCIAL AND GLOBAL CHALLENGES OF THE

Summary of the work done and the role of the aggregation:

The sphere of manufacturing has a long track record of strategic collaboration between the UPV/EHU and Tecnalia. The Advanced Manufacturing Knowledge Hub has achieved the following:

- 1. Reinforce existing collaborations to address new challenges of a strategic sector of the productive economy of the Basque Autonomous Community.
- 2. Extend the mobilization of interdisciplinary capacities from both the UPV/EHU and Tecnalia and from other member entities in order to orientate them towards meeting the challenges of the sector. The aim is, then, to expand collaboration by integrating ICT, robotics, automatic and control, system engineering, etc, capacities to the already mobilized capacities of mechanical engineering. Social sciences is also mobilizing around themes related to advanced manufacturing and the factory of the future (See Social Transformation Knowledge Hub, file 34).

Main UPV/EHU Departments involved	
Dept. Of Mechanical Engineering	-
Dept. of Automatic Systems Engineering	Universidad Euskal Herriko del País Vasco Unibertsitatea
Dept. of Electronic Technology	
Dept. Of Computer Science and Artificial Intelligence	
Dept. of Communications Engineering	· · · · · · · · · · · · · · · · · · ·
Dept. of Nuclear Engineering and Fluid mechanics	
Dept. of Machines and Thermal Engines	Instituto de
	Maquina Herramienta

Most significant results:

• 10 end course projects in the School of Engineers co-directed by Tecnalia and the UPV/EHU.

- A doctoral thesis by educational personnel in the Elgoibar Institute of Machine Tooling, the only national experience of sandwich training (see detail in file 61).
- A doctoral thesis on robotics by Tecnalia personnel in the UPV/EHU. It is important to highlight the significance of this thesis, initiating collaborations between the Department of Computer Science and Artificial Intelligence within the Faculty of Computing, with Tecnalia's Industry and Transport Division. A necessary collaboration to position the Basque Country in Industry 4.0.
- The launch of the ETORTEK project on Physical Cyber Systems (CPS4PSS), a fundamental vector of Industry 4.0: with the participation of Tecnalia and the UPV/EHU.
- The launch of an ELKARTEK project in the field of "Big Data" with industrial sector applications (collaboration between Tecnalia and the UPV/EHU).
- Mechanized cryogenics project. This project is developing by means of contracting staff assigned to collaborative projects between Tecnalia and the UPV/EHU. The project allowed a subsequent collaboration with a Basque industrial company that uses cryogenic gases (CO2 and LN2) to replace coolants in (cutting oils).

International projection

- Participation in the manufacturing KIC.
- Development of the Associated International Laboratory (LIA) for advanced Manufacturing with the CNRS and the University of Bordeaux.

32. KNOWLEDGE HUB IN MATERIALS (PCM)

Objectives:

Develop a Knowledge Hub of world-wide excellence in the field of advanced materials, identified by the EU as a KET (Key Enabling Technology) of vital importance for the world-wide positioning of the EU in the framework of scientific and technological research world-wide. The Euskampus aggregation offers highly relevant capacities to contribute to that positioning. The Knowledge Hub in Materials is in the specialization of innovative processes and new materials within CIE Euskampus.

KNOWLEDGE HUB
Polymers (*)
Cement-based materials (*)
Photonics and sensors
Materials for health
Materials for energy
Metallic materials

SOCIAL AND GLOBAL CHALLENGES OF THE KNOWLEDGE HUB

(*) The core areas of material polymers and cement-based materials have collaborative actions collected not in this Knowledge Hub but in that of health and sustainable development of the oceans in the core area of renewable energies in the marine environment (see file 25). This is because the collaborative research developed offers a local answer to some global challenges, related to the reduction of the costs of energy generation in the marine environment by means of the use of superplastics to improve the provision of the cement bases for wind generators at sea.

Summary of the work done and the role of the aggregation:

The scientific community of the Euskampus aggregation enjoys a level of excellence and is comprised of numerous members situated in the Basque Country because of its high potential to contribute to the European Research Space with the development of the KET of advanced materials. This Knowledge Hub has produced 2 types of collaborations:

- Collaborations to advance the fundamental knowledge of materials and their degrees of application in various uses.
- Collaborations oriented to major challenges like the reduction of costs in the generation of renewable energy in the marine environment.

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MainUPV/EHUDepartments involved	E,	
Dept. of Inorganic Chemistry	Universidad	Euskal Herriko
Dept. of Minerology and Petrology	UEI Pais Vasco	
Dept. of Applied Physics		
Dept. of Electricity and Electronics	Donostia International Physics. Center	Materialis Physics Center Centro de Física de Materiales
Dept. of Communications Engineering	tocolio	Incolsing
Dept. Of Applied Chemistry I	techalla	Business
Dept. Of Mining Engineering and Metallurgy, Materials Science	POLYMAT	
Dept. of Organic Chemistry I	0.00	
Dept. of Chemical Engineering and the Environment		
Dept. of Physical Chemistry	Baskrete Basgue Country Institutive for Cement and Concrete Research	
	แก่งค	ersité

Specially remarkable is the work done in the field of cement based materials (BASKRETE initiative) given the participation of research groups belonging to the three entities of the Euskampus aggregation, the DIPC, Tecnalia and the UPV/EHU. The BASKRETE initiative (Basque Country Initiative for Cement and Concrete Research), promotes the implementation of nanotechnologies in the cement and concrete industry. The team of researchers of the DIPC, TECNALIA and the UPV/EHU, to which we should add the CFM (Materials Physics Centre-CSIC-UPV/EHU) has showed, that in the same way that the consumption of calcium improves bones in osteoporosis, the addition of nano-particles to cement during production combats any problems with a consequent improvement in its mechanical properties. The researchers have also observed, that those same strategies based on nano-technology could reduce the CO2 emissions that the cement plant furnaces release into the atmosphere in the cement process. This is definitely one of the emblematic initiatives of this Knowledge Hub and its success is hoped to be repeated with other materials like polymers in applications such as energy or human health.

Specifically, within the framework of this Knowledge Hub, the core work has been on health materials involving the UPV/EHU Departments of Mining and Metallurgical Engineering, Materials Science, Applied Chemistry and Pharmacy and Food Science, as well as Tecnalia's health team, for the development of materials for the introduction of new drugs. A current area of working in the field of pharmacological therapies within the strategic framework of the Euskampus Knowledge Hub of neurosciences.

Most significant results:

- Significant advances in the knowledge in cement based materials and metallic materials that have been driven by the BASKRETE initiative that brings together researchers from the three institutions of the Euskampus aggregation, the UPV/EHU, Tecnalia and the DIPC.
- A new line of work opened that pulls together the best experts in cement based materials with the best local experts in polymeric materials. This collaboration is designed to offer solutions to questions of cost efficiency of renewable energy in the marine environment. It is one of the emblematic projects of the Knowledge Hub in health and sustainable development of the oceans (see file 25);
- Constitution of a small research cluster made up of researchers in the three institutions in photonics and sensors who are also actively contributing towards internationalization through their collaborations in the framework of the Euro-regional Campus.
- The most emblematic projects promoted from this Knowledge Hub are:

- CAPROCAST Project. Technology for the Manufacturing of light structural thermoplastic components (CFRP) for the car industry. This is the first Tecnalia - POLYMAT collaboration (see detail in file 37). The development of this Euskampus project aims at industrialization of the technology for the Manufacturing of thermoplastic components reinforced with fibre by means of the process of in-situ polymerization using molds for the replacement of structural components in the car industry by lighter and recyclable components. This project has been chosen by Tecnalia Venture (see detail in file 58) with the objective of getting a patent.
- Project for Gas-based sensors based on photonic nanotechnologies that brings together the three entities of the Euskampus aggregation, UPV/EHU (applied photonics group), Tecnalia and the DIPC. This is the first photonics collaboration between the three entities and envisages the design, manufacture, optimization and characterization of a photonic sensor based on liquified gases and/or polymer-based carbon monoxide that shows high sensitivity and low cost, meeting the needs of industry and environmental drivers generally.

International projection:

- The Knowledge Hub in Materials is highly active in the framework of the Euro-regional Campus with the University of Bordeaux. There are numerous research groups within the Euskampus aggregation that already work with research groups of the University of Bordeaux, specifically with LABEX Laphia and Amadeus (clusters of excellence at the University of Bordeaux).
- The DIPC is recognised as an international laboratory associated to the French National Centre for Scientific Research (CNRS) by the University of Bordeaux in the field of nanomaterials.
- This Knowledge Hub plays a decisive role in the participation of the Euskampus aggregation and University of Bordeaux in the KIC of Raw materials.

33. KNOWLEDGE HUB IN <u>ART AND CREATIVITY</u>- AUSART: LABORATORY OF CREATIVE PROCESSES

Objectives:

AUSART is a **laboratory of creative processes** created with the objective to:

- Become the Living Lab of CIE Euskampus to explore creative processes that work to improve modernization of the UPV/EHU itself, and of its leadership that should be driven to meet the social and global challenges which confront society.
- Share with the other Knowledge Hubs the objective of mobilizing the research and technology community of the Euskampus aggregation around social and global challenges, using its capacities to design and undertake training, research and knowledge transfer to the society.

SOCIAL AND GLOBAL CHALLENGES OF THE KNOWLEDGE HUB

Participative architecture and critical action in the common space.
Advanced dialogues in science and art.
Creation in Basque.
Fashion and technology
Intergenerational experience and knowledge transfer
Education for creativity

Summary of the work done and the role of the aggregation:

The co-creation team belonging to AUSART has based its work on three aims that combine Action and Research:

- To experiment with new and diverse creative processes, learning from experience and generating transferable knowledge.
- To transform the social environment by means of performing creative research-action projects that respond to real challenges.
- To connect people to generate an open community, by creating connections between individuals and organizations inside and outside the university.

Research-Action projects take place in the fields of:

- 1. participative architecture and critical action in the common space.
- 2. advanced dialogues in science and art.
- 3. creation in Basque.
- 4. fashion and technology.
- 5. intergenerational experience and knowledge transfer.
- 6. education for creativity.

AUSART is, above all, a creative processes laboratory. Its vocation is to work with an impact beyond the world of academia, generating knowledge, cultivating and inspiring a global vocational community formed by creative agents both within and outside the university. To fulfill this triple objective presents some complexity arises and has to be addressed in a structured way. From the perspective of content generation, impact and knowledge, AUSART proposes a conceptual structure that strongly supports cross-cutting activities.

In accordance with the first objective - to make a measurable impact through project work - the first dimension of the AUSART work are the projects: concrete initiatives with limited resources and a specific outcome that can be measured according to parameters that are established *ad hoc.* AUSART works similarly in another cross-cutting dimension, observing, discussing, documenting and sharing work processes and team experience, as well as finding meeting points and opportunities for cross-pollination in order to explore new areas, tools and methods of work. This activity complements the previous one and is aimed at the two remaining objectives: to generate knowledge about creative processes and to nurture a community.

AUSART thus has to be seen as a service, as a Living Lab that enables a coherent global experience and a maximum connection between projects at the level of people and contents. They require attention and structure and must be addressed in an integrated way: how to go about the creation of a new service whose users are, directly, the creative teams and, indirectly, the community in general. AUSART exists to add value to teams while minimizing interference.

Most significant results:

The laboratory of creative processes - AUSART - has allowed the development of co-creation teams, responsible for designing the strategic frameworks of the Knowledge Hubs, as well as the initial agendas for collaborative projects that have been supported with an Euskampus investment fund grant of 1 million euros, and that has allowed implementation 99.5% of the time.

The co-creation dynamics of the Knowledge Hubs follow the "AUSARTstyle" that is to say, they have been designed using AUSART guidelines:

- The activity characteristics and definitions that guide the creation and operation;
- The conceptual framework for the objectives and management of work;
- The thematic dimension that collects the challenges to be addressed
- Project definition;
- The dimension of process and experience;
- The model of envigoration and management of the projects;
- The capacities and professional profiles of the team.

International projection:

The definition and deployment of AUSART has strengthened bonds with University of Bordeaux in the field of Arts and Creativity. The Euro-regional Symposium held in November 2014 had a specific session dealing with joint projects, both postgraduate training and research, and with connections to other institutions in the area. This session is resulting in the joint preparation of European proposals and cooperation within the area.

34. KNOWLEDGE HUB IN SOCIAL TRANSFORMATION (PCTS)

Objectives:

To mobilize the research and technology community of the Euskampus aggregation around the social and global challenges expressed in the strategic framework of the Knowledge Hub in Social Transformation, activating its capacity to design and undertake training, research and knowledge transfer to society.

SOCIAL AND GLOBAL CHALLENGES OF THE KNOWLEDGE HUB

Welfare, quality of life and human dignity
Education and educational system
A society with roots and open to the world.
Knowledge and its enhancement as a cornerstone of society.
Institutional and Territorial Design
Institutional and Territorial Design Active participation of people:
Institutional and Territorial Design Active participation of people: Measurement and assessment systems.

Summary of the work done and the role of the aggregation:

Following the definition by the co-creation team of the strategic framework for the Social Transformation Knowledge Hub which lists the social and global challenges facing this collaboration space, collaborative projects have been developed in the following areas:

- The preparation and presentation of a collaborative project to the CHALLENGES call, sponsored by the Spanish Ministry of Economy and Competitiveness, on the problem of the precariousness of cultural and creative industry professions;
- The development of a line of research-action in the field of the normalization of the use of Basque, in which the scientific capacities of two UPV/EHU faculties have been mobilized, as well as the public and private stakeholders that work in the normalization of Basque.
- The development of collaborative and multidisciplinary research into the social dimension of the factory of the future by means of monographic seminars that have tackled questions related to the labour market, demography, education, industrial promotion, creativity, values, etc., in order to contribute knowledge from the humanities and social sciences to the benefit of the nation through Industry 4.0 and advanced manufacturing.
- The development of workshops to define from different perspectives (individual, team and relationships, support structures and regulatory framework) the success criteria for developing systematic multidisciplinary collaboration and to find solutions to social and global challenges. A co-creation activity with the participation of researchers from the various disciplines that are or have been involved in the dynamics of multidisciplinary collaboration.

Main UPV/EHU Departments involved	
Dept. Of Hispanic Philology, Romanticism and Theory of Literature	
Dept. of Sociology and Social Work	eman ta zabel zazu
Dept. of Sociology II	
Dept. of Applied Economics I and Methodology of Behavioral Sciences	Universidad Euskal H
Dept. of Social Psychology	del País vasco Uniberts
Dept. of Contemporary History	tecnalia
Dept. Of Zoology and Animal Cellular Biology	
Dept. of Journalism II	
Dept. of Applied Chemistry	A R R P
Dept. of Philosophy of Values and Social Anthropology	
Dept. of Constitutional Law and History of Thought and Social and Political Movements	EUSKO JAURLARITZA
Dept. of Cellular Biology and Histology	GOBIERNO VASCO
Dept. Of Chemical Engineering	
Dept. of Didactic and School Organisation	
Dept. of Audiovisual Communication and Advertising	
Dept. of Research Methods and Diagnostic in Education	SOZIOLINGUISTIKA
Dept. of Art and Technology	KLUSTERRA
Dept. of Applied Economics V	
Dept. Of Drawing	

Most significant results:

The most noteworthy results related to the collaborative work of this Knowledge Hub concern the greater convergence of UPV/EHU to society when tackling questions that affect the socioeconomic challenges faced by Basque society. In fact, part of the results of these research action projects relate to the development of recommendations to political stakeholders so that they consider questions arising from research work, which can result in progress to meet the challenges within the strategic framework of this Knowledge Hub.

The mobilization of researchers, as well as their diversity of background, has been remarkable, and this has allowed them to share complementary and enriched visions.

The most emblematic projects coming out of this Knowledge Hub are:

- The social dimension of the factory of the future. A multidisciplinary project done through holding 20 seminars participated by various departments of the UPV/EHU, Tecnalia and the Basque Government. The seminars have resulted in a series of recommendations incorporated within the Basque strategy for Advanced Manufacturing 2020, entitled Basque Industry 4.0 whose development is counting on the participation of Euskampus in the framework of the development of the priority area of advanced Manufacturing with RIS3 in the Basque Country.
- Normalization in the use of Basque, the AKTIBO.eus project. A multidisciplinary project with
 implications for the quadruple helix to tackle the challenge of normalization in the use of
 Basque, whose teaching was once suppressed.
- The development of a University 4.0 based on a multidisciplinary model oriented to the resolution of social and global challenges. A collaborative and multidisciplinary project that has produced a green book with recommendations on institutional architecture to stimulate a university based on innovation hubs that break down the traditional compartmentalization of disciplines.

International projection:

The line of work related to encouraging multidisciplinary collaboration is being developed in collaboration with the University of Bordeaux. Indeed, in this case it was the University of Bordeaux that invited Euskampus to tackle this problem that appears as one of the arguments justifying the process of fusion being experienced within that French university.

35. KNOWLEDGE HUB IN <u>MODELLING, SIMULATION AND COMPUTATION</u> (PCMSC)

Objectives:

Mobilize the research and technology community of the Euskampus aggregation around the social and global challenges expressed in the strategic framework of the Knowledge Hub in Modelling, Simulation and Computation, activating their capacities to design and undertake training, research and knowledge transfer to society.

SOCIAL AND GLOBAL CHALLENGES OF THE KNOWLEDGE HUB		
Human health (*)		
Advanced Manufacturing (*)		
Energy (*)		

(*) The development of these three challenges collected in the strategic framework of the Knowledge Hub have taken place in the framework of the Knowledge Hub in Neurosciences (file 29), Knowledge Hub in Advanced Manufacturing (file 31) and Knowledge Hub Health and Sustainable Development of the Oceans (file 25).

Summary of the work done and the role of the aggregation

Responding to the wishes of the scientific community, this Knowledge Hub has driven activity in the field of modelling, simulation and computation. Its objectives have been declared and they are aligned with the three priority areas of the CIE Euskampus project. It is an example of the inclusive nature of this project and its ambition to turn those capabilities of excellence within the aggregation into finding local answers to global challenges.

Nevertheless, the collaboration space that this Knowledge Hub represents has remained disseminated in the spaces of the more established Knowledge Hubs. For example, the Knowledge Hubs that have collected initiatives related to the activation of capacities in modelling, simulation and computation are the following:

- Health and sustainable development of the oceans in the area of development of marine renewable energies, by means of the participation of the departments of mathematics and of applied mathematics, statistics and operations research, as well as the BERC BCAM (Severo Ochoa from 2014). In relation to this, a highlight is the collaboration with the University of Bordeaux.
- Neurosciences with the participation of the quantitative bio-medicine unit of Biocruces Institute of Health Research, as well as BERC BCAM.
- Advanced Manufacturing with the participation of 2 Departments from the UPV/EHU and Tecnalia.



Most significant results:

The inclusion of knowledge and capabilities in the fields of modelling, simulation and computation, and their mobilization in collaborative research projects related to the search for local answers to global challenges in the fields of the sustainable development of the oceans, human health (in particular neurosciences) and advanced Manufacturing (Industry 4.0). In particular, in the field of the renewable energies in the marine environment, three research lines are being driven with the respective projects collaborating partners that have required drawing on the investment fund:

- 1. Models for flow-structure interaction of floating ocean energy harvesters in intermediate waters;
- Computational Flow Dynamics (CFD) methods for viscid and unviscid, steady and unsteady flow in bidirectional air turbines serving Oscillating Water Colum (OWC) wave energy devices;
- 3. Adaptive finite element simulations for floating offshore wind platforms.

International projection:

The international projection promoted directly through this Knowledge Hub is about the internationalization of the research line: "*Models for flow-structure interaction of floating ocean energy harvesters in intermediate waters*" with the Institute of Mathematics of Bordeaux.

36. BASQUE EXCELLENT RESEARCH CENTER IN SCIENCE OF THE MATERIALS

Objectives:

Basque Center for Materials Applications and Nanostructures (from now on BCMATERIALS) started in 2013 with the aim to promote a leading-edge research centre linked to the UPV/EHU, conforming to international quality standards in Materials Science research. In particular, developing high quality interdisciplinary research in all research fields of functional or active materials with electrical, magnetic and advanced optical properties; from fundamental principles to potential applications.

The Centre comes under the CIE Euskampus specialization of new materials and innovative processes.

Summary of the work done and the role of the aggregation

BCMATERIALS focuses its activity on:

- To develop an internationally recognised and competitive technology and science by creating a team of first-rate researchers and facilitate post-graduate academic activities of the highest quality.
- To use the major European infrastructures such as neutron and synchrotron radiation for the study of materials, by fostering science and advanced technology on a world scale.
- To attract private and public funds (both national and international) by fostering interdisciplinary collaborations as the fundamental driver of major technology and scientific advances.

The BCMATERIALS research activity focuses on the following 3 fields:

- Active and Smart (materials)
- Nanostructured materials
- Advanced functional materials

The role of the UPV/EHU teaching staff associated with BCMATERIALS during these two years has been essential in:

- the general design of the centre and its strategy
- the impetus to the research lines,
- the attraction of talent, and
- the continuous improvement of the results.

Most significant results:

The research activity of BCMaterials, has achieved the following results:

- The amount obtained in public calls since its creation in 2013 has been 3 million euros.
- The number of publications since its creation is over 80.
- The number of citations since its creation is over 120.
- 28 reports invited in congresses

International projection:

Since its creation, BCMaterials has become a force in the creation of new alliances at international level. In addition to the numerous international contacts with researchers, since the creation of BCMaterials, it has established the following international alliances:

- Europe:
 - ACREO Swedish ICT, Sweden
 - Technische Universität Darmstadt, Germany
 - NCSR "Demokritos", Greece
 - University of Patras, Greece
 - Fraunhofer-Institut f
 ür Silicatforschung ISC, Projektgruppe f
 ür Wertstoffkreisl
 ä
 ufe und Ressourcenstrategie IWKS, Germany
 - ALSTOM, Switzerland
 - Vacuumschmeltze GmbH, Germany
 - The Commissariat à l'énergie atomique et aux énergies alternative -cea, France
 - International Center in Critical Raw Materials for Industrial Technologies, ICCRAM, Spain
 - Fiat research centre (CRF), Italy
 - ARELEC Magnets and Magnetic Systems, France
 - MBN nanomaterials, Italy
 - Danube University Krems, Austria
 - Uppsala University, Sweden
- Rest of the World:
 - University of South Florida, U.S.
 - University of Delaware, U.S.
 - University de Valle, Colombia

37. BASQUE CENTER FOR MACROMOLECULAR DESIGN & ENGINEERING, POLYMAT FUNDAZIOA

Objectives:

The aim of this research centre of excellence linked to the UPV/EHU is research in synthesis, assembled and processed with polymers to contribute to the development of polymers with the ability to meet the technological needs of the 21st century in the fields of energy, electronics, health and sustainability.

The centre has the participation of the UPV/EHU, the Basque Government and Ikerbasque and sits in the specialization of innovative processes and new materials of the Project CIE Euskampus.

Summary of the work done and the role of the aggregation:

The Centre centres its research interest in:

- 1. Develop a fundamental research dynamic for the synthesis, assembly and processing of polymers that allow to face up to technological needs of the 21st century in fields like energy, health and sustainability.
- 2. Be recognised internationally in the field of polymers.
- 3. Develop, attract, attend and retain talent.
- Establish a solid network of collaborations with the Centres of the Basque System of Science and Technology, as well as with the international institutions leaders in investigation in polymers to face up to complex problems.
- 5. Promote the image of the UPV/EHU and also the Basque Country associating them with excellence.
- 6. Promote and participate in the university postgraduate programs.
- 7. Contribute to the spread of the science in our society, paying special attention to youth.
- 8. Transfer knowledge to the productive sector, and especially to Basque industry.

Most significant results:

In scientific terms, the following indicators stand out:

- The amount obtained in public calls since its creation in 2011 is over 20 million euros, more than 50% obtained in European projects.
- The number of publications in 2014 was over 100.
- The number of citations in 2014 was over 700.
- 28 papers invited to congresses.
- 2 patents requested.
- From the point of view of the Euskampus aggregation, highlights include participation in the CAPROCAST projects in the Materials Knowledge Hub as well as in the superplastics in cements project to tackle challenges related to the Health and Sustainable Development of the Oceans Knowledge Hub in the core area of renewable energies in the marine environment.

International projection:

Since its creation, POLYMAT has been very active in collaboration with European research institutions and industries through EU projects such as:

• University of Warwick (polymer hybrids),

- University of Strathclyde (materials for surface-enhanced Raman spectroscopy),
- University of Surrey (film formation),
- ESPCI (adhesives);
- Université de Bordeaux, Université de Pau, Max Plank Golm, Universidade Nova de Lisboa and Université de Liege (polymeric ionic liquids),
- Eindhoven University of Technology (cationic nanogels),
- Imperial College (polymers for biomedicine),
- École Polytechnique Paris (membranes, quantum chemistry),
- Universidad de Barcelona, Universidad de Jaén, and Universidad de Granada (polymers for biomedicine);
- Università di Bologna, University of Freiburg, Universität Erlangen-Nürnberg and Università di Trieste (polymers for electronics);
- Universitat Rovira I Virgili, CCTC Braga, Technical University Hamburg-Harburg, Institute of Membrane Technology and Research/ITM-CNR (Italy), University of Kiel, University of Bonn, and INRA Toulouse (membranes);
- Ecole Superieur de Mines de Saint-Etienne (PEDOT for bioelectronics

Collaboration outside Europe includes:

- King-Abdullah University of Science and Technology/KAUST, University of Kentucky, and Iowa University on membranes;
- Queens University in polymerization kinetics;
- IBM Research-Almaden in organocatalyzed polymerizations.

38. BASQUE EXCELLENCE RESEARCH CENTER (BERC) IN NEUROSCIENCES, ACHUCARRO BASQUE CENTER FOR NEUROSCIENCE

Objectives:

In 2012, the UPV/EHU, with the collaboration of Ikerbasque, drove forward the creation and development of the Basque Neuroscience Research Centre, named in memory of Nicolás Achúcarro (Bilbao, 1880-1918), a pioneering Bilbao scientist in brain research.

The fundamental strategic objective of the Achucarro Centre is:

- to develop research of international importance in the study of the biology of the neuro-glia in the healthy and the diseased brain,
- to train future generations of neuroscientists
- to be an active disseminator and communicator of human knowledge about the brain.

The Achucarro Centre specializes in *Healthy Aging and Quality of Life* within CIE Euskampus.

Summary of the work done and the role of the aggregation:

- The Achucarro Center focuses its research interest on the physiological and patho-physiological functions of the brain, with special emphasis on:
 - In-depth understanding of the organization and processing of the information in the neuronal circuits;
 - Identifying the molecular and genetic origin of the neuronal circuits during development and ageing;
 - Characterisation of the cellular, molecular and genetic mechanism of the autoimmune and neurodegenerative diseases of the brain; and
 - Translational research that contributes to developing new strategies to treat brain diseases.
- The Centre has a significant role within the Neurosciences Knowledge Hub of CIE Euskampus, with a strategy aligned to the Basque Country's RIS3 strategy, providing added value and with a management model based on quality and continuous improvement.
- The Centre will shortly relocate to the new "María Goyri building- Centre for Animal Biotechnology" (see detail in file 45) situated in the UPV/EHU Science Park (see detail in file 43).
- The Centre participates in the UPV/EHU biosciences and neurosciences Masters degree and Doctoral Programs.

Most significant results obtained

- The Centre, which was formed in 2012, now has 68 staff (60% women) distributed between 8 research groups.
- The Centre has incorporated new research talent through 2 Ikerbasque Research Fellows and 2 Ramón and Cajal.
- In scientific terms, the following indicators stand out:
 - 45 publications (85% in first quartile journals in the area), 5 books and 11 chapters.
 - 4 theses finalised and 20 in development.
 - 69 participations in congresses including reports invited, plenary sessions and posters within the organization.
 - Obtaining first prize in the 2014 call of the Merck Serono projects for research and innovation into Multiple Sclerosis.

International projection:

The Centre focuses its activities on the international field and in consequence it has a very significant international projection. Below are some of the prioritized actions in the international field:

- Monitoring the HRS4R strategy- HR Excellence, an EU strategy.
- Follow-up of the hub candidature of the Euro-Biolmaging Network, with the Ministry of Economy and Competitiveness and the Carlos III Institute of Health.
- Development and follow-up of strategic international agreements with UPV/EHU and the Foundation Ikerbasque (research staff membership, collaborations,...).
- Three Biscay Talent projects for international collaboration with researchers from UNAM (Mexico), the Institute of Neurobiology (Slovac Academy of Sciences) and Tata Institute of Research (India).
- Participation in a MSCA ITN project led by the CIB (CSIC, Madrid) on "Mass Spectrometry Training network for Protein Lipid adduct analysis".
- Development of 33 international research seminars.
- Design and development of 2 international advanced training days, one on the tools and opportunities of Allen Brain Atlases" and another on "Advanced Microscopes in Biosciences", in collaboration with the Unit of Biophysics (joint CSIC-UPV/EHU centre).
- Deployment of the centre's strategy of international communication.

39. PLENTZIA MARINE STATION (PIE)

Objectives:

The Plentzia Marine Station (PIE) is a UPV/EHU Centre which does research and UPV/EHU training related to the health of the oceans. The objectives of the PIE are:

- to drive scientific research (basic, strategic and applied) of excellence in the sphere of the health of marine ecosystems by means of bio-technological experimental approaches;
- to develop biotechnological diagnosis tools to analyse and quantify the health of marine ecosystems;
- to explore marine resources that contribute to human well-being;
- to foster internationalization by means of *networking* and to attract young researchers (working on PhDs) and senior researchers:
- to provide first-rate Masters, doctoral and specialized continuous training, as well as offer popularization, awareness, and education programs.

The PIE comes under the *environmental technologies and sustainable ecosystems specialization* of CIE Euskampus.

Summary of the work done and the role of the aggregation

- The PIE went into operation in December 2012. The centre undertakes:
 - scientific and technological research,
 - educational activities in specialized education,
 - dissemination of scientific knowledge,
 - technical advice in areas where it has competences,

the outcome of all this is to transfer to industry and government the scientific and technological results developed in the field of the interaction between the ocean, ecosystems and human health and related disciplines.

• The PIE has an important role in the Health and Sustainable Development of the Oceans Knowledge Hub of CIE Euskampus.

Most significant results obtained

- Educational activity
 - The centre is hosting the Mundus Masters Program Marine Environment and Resources -MER (4 partners and 15 associate international partners) that is coordinated by the UPV/EHU, as well as the Masters in Environmental Contamination and Toxicology.
 - The 2 Masters degrees lead on to doctoral programs with Mention Towards Excellence.
 - Doctorate in *Environmental Contamination and Toxicology*.
 - Doctorate in Marine Environment and Resources.
- Research
 - Collaboration agreement with Spanish Institute of Oceanography (IEO) for the creation of a joint Research Unit (agreement subject to approval by the UPV/EHU Governing Body).
 - European Interreg Projects (LIFE, COST, H2020, JPI, ERANET BIODIVERSA,), Spanish National Plan Projects, Etortek and Saiotek Projects (Basque Government).
- Dissemination of scientific knowledge
 - Oceanic Initiatives 2015. In collaboration with the Surfireder Foundation, the Basque Country Official School of Biologists and Torre Madariaga (Basque Government)
 - Aquaculture Open Days. In collaboration with the Basque Country Official School of Biologists. 2013, 2014.
 - Participation in <u>Ocean Sampling Day</u> (2014, 2015).

Networking

- Network of marine stations of Molecular Biology. The PIE also participates with ECIMAT (Station of Marine Sciences Toralla, Univ. Of Vigo) in the Spanish node (<u>EMBRCes</u>) that came into being by means of the acceptance and signature by MINECO of a Memorandum of Understanding (MoU) (22/09/2014).
- Collaboration with the World and European Networks of Environmental Specimen Banks.
- Official Visits to establish collaboration agreements with the University of Nanjing, China (Oct 2012), with the City University of Hong Kong, (January 2013), University of Western Australia (Perth) & the Oceans Institute (May 2013).

International projection

The PIE focuses its activities on the international field. In addition to the Erasmus Mundus Masters in the educational field, the following scientific initiatives stand out:

- EMBRC -EUROPEAN MARINE BIOLOGICAL RESOURCE CENTRE.
 - The EMBRC (www.embrc.eu) is an infrastructure of European research infrastructure formed mainly of marine stations distributed in several countries.
 - The EMBRC has been in the implementation phase since January 2014, with the intention of becoming a legal consortium in an ERIC (European Research Infrastructure Consortium) becoming a European Research Infrastructure in 2016-2017 (operative phase).
 - The PIE also participates with ECIMAT (Station of Marine Sciences Toralla, Univ. Of Vigo) in the Spanish node (EMBRCes) that came into being by means of the acceptance and signature by MINECO of a Memorandum of Understanding (MoU) prepared to such effect (22/09/2014).
 - The EMBRC intends to be the sole point of contact for access to the European marine ecosystems and to their biological resources, and to implement modern techniques of molecular analysis and advanced microscopy, with a research and technology transfer component in blue biotechnology for health.
 - In this context the PIE offers a catalogue of services (infrastructures, technologies, spaces, training, know-how) and access to local marine ecosystems so that researchers from all over the world who wish to do research or technology transfer in the sustainable use of marine biological resources, can do it either in situ or remotely (eg. databases, environmental specimen banks).
 - The PIE has a number of specific features which make it unique in Europe, in relation to the possibilities of analysis of the effect of environmental variables (chemical pollution, climatic change, eutrophication, illnesses) on the health of marine ecosystems. In addition, it offers access to the singular coastal ecosystems south of the Bay of Biscay, with the extra feature that because it contains the Environmental Specimens Bank of the Bay of Biscay, it is also possible to do retrospective environmental studies. The connection with the networks of Environmental Specimens Banks, both in Europe and worldwide, allows the possibility of building bridges of collaboration between possible clients and specimens banks belonging to other institutions.
- BBEBB (Biscay Bay Environmental Biospecimen Bank)

The BBEBB is an integrated transversal initiative with opportunities for development in various fields of application, which allows the application and development of many different biotechnological facets, with high value research and knowledge transfer activities. Its mission is to guarantee easy access to marine samples to academia and industry that will allow them to respond to the challenges that Society poses in regard to the health of the oceans, human health and well-being. The BBEBB has the commitment and the responsibility to collect and preserve marine biological specimens and make them available for researchers and companies in order to advance knowledge, develop technological scientific applications and exploit these resources in a sustainable way.

The development of the BBEBB mobilizes many of the capacities identified in the Euskampus Knowledge Hub in Health and Sustainable Development of the Oceans, in which the most active agents of the RVCT participate in the field of the biology and marine biotechnology. By its nature, this is a service that promotes internationalization and the establishment of cooperative networks; intimately tied to the European and world-wide networks of banks of environmental specimens and of marine biobanks.

NEAREA

A cooperation agreement is being promoted (North East Atlantic Research and Exploration Alliance; NEAREA) with marine stations and marine research institutes with the participation of entities from the Euskampus aggregation, and of the Euro-regional Campus (PIE-UPV/EHU, Arcachon-UBx, AZTI-Tecnalia, ECYMAT-U Vigo, , IHC-U Cantabria, ICMAN-CSIC, U Cádiz, CIMAR-Algarve, ...), whose field of study would be the Region IV OSPAR of the Atlantic Ocean to promote cooperation and participation in cross-border research and training programs (eg. Interreg, TPC, Atlantic Arch, ...).

• Other initiatives

The PIE participates as partner or associate in a series of networks of international scientifictechnological research in the Oceans and Health field of study, including:

- MARS/WAMS European & World Networks of Marine Research Stations and Institutes.
- IESB International Environmental Specimen Bank Group.
- NORMAN Association-Network of reference laboratories, research centre and related organizations for monitoring of emerging environmental substances.
- AQUA-TNET-European Thematic Network in the field of aquaculture, fisheries and aquatic resources management.

40. BIOCRUCES

Objectives:

The Biocruces Institute of Health Research, was created in December 2008, in agreement with the Carlos III Institute of Health (ISCIII)'s strategy to develop Institutes of Health Research to formalize, the structure of Research in Hospitals, with the following aims:

- Promote biomedical and epidemiological research in public health and health services.
- Give a scientific base to the health system programs and polities.
- Improve cross-cutting research, orientating it to improve scientific knowledge transfer to clinical practice.

Summary of the work done and the role of the aggregation:

The Institute was created in 2008. From 2008 to 2014 the organizational and scientific structure has continued to develop and agreements for the integration of groups, units and organizations inside the Institute have been made. Finally, in 2014 it was set up as Association with no profit motive in mind. The UPVEHU is integrated in the Institute as a reference partner. The entities that comprise the Association are:

- Basque Government Health Department,
- Osakidetza (Basque Health Service),
- BIOEF-Basque Foundation for Innovation and Health Research,
- UPV/EHU.

Most significant results:

- Biocruces has passed the Carlos III National Health Institute's evaluation assessment, and so from 2015 is a bio-sanitary research centre accredited to national level.
- Biocruces is part of the main backbone of the peri-university fabric that reinforces and widens the Health syllabus, as well as strengthening UPV/EHU research capacity, thus increasing visibility and international appeal.
- Biocruces participates in the Neurosciences Knowledge Hub of CIE Euskampus.
- Biocruces has established a network of alliances with biotechnological agents including agreements with CIC bioGUNE, BCAM and Ikerbasque Foundation.
- Biocruces participates jointly with the UPV/EHU in R&D projects, following previouslyidentified lines of research, and shared-interest groups. The collaboration between Biocruces and the UPV/EHU ensures that Biocruces can make use of:
 - the research infrastructure within UPV/EHU's General Research Services (SGIker),
 - the UPV/EHU mechanisms and integration/participation services for sharing results,
 - UPV/EHU and Ikerbasque personnel to do research activities.

International projection:

The aims of the Biocruces Strategic Plan 2013-2017 impacts on internationalization of research activity as follows:

- helps increase the critical research mass by attracting internationally prestigious scientific personnel, whether directly or through lkerbasque (see file 50).
- helps to understand international level activity, and thereby to orientate Biocruces' association with other centres towards highest quality joint researchad.

41. BIODONOSTIA

Objectives:

Biodonostia has been an Institute of Health Research since 2008, and is based within the University Hospital of Donostia; its aims are:

- To promote biomedical and epidemiological research within public health and health services;
- To ensure a scientific basis for health system programs and policies;
- Improve translational research. This research and knowledge transfer is orientated towards clinical knowledge.

Summary of the work done and the role of the aggregation

- Biodonostia is an association with no profit motive in mind. The UPV/EHU is integrated in the Institute as a reference partner. The entities that comprise the Association are, amongst others, Osakidetza (Basque Health Service), Provincial Council of Gipuzkoa, the Basque Foundation for Health Innovation and Research – BIOEF, Inbiomed Foundation, CIC Microgune, Gerontology Matia Institute and the UPV/EHU.
- In 2011, Biodonostia gained accreditation as an Institute of Health Research from the Carlos III Health Institute.
- The Institute improves patient-focused translational research, gives coverage to all the research carried out in Gipuzkoa within the field of Osakidetza the Basque Health Service and strives by means of its multi-institutional and inter-disciplinary collaborative structure to improve the health of citizens.
- the following different collaborative forms between the UPV/EHU and Biodonostia have been developed:
 - Research and innovation activities by means of the development of programs and joint projects, the development of common research spaces, the exchange of technical and research personnel between the parts, and the sharing of infrastructure,
 - Educational, training, dissemination and other joint activities. In this respect, a particular highlight is the work placements done by UPV/EHU students in Biodonostia, the participation of Biodonostia personnel in the teaching activities (Masters degrees and doctoral programs), and joint programs to encourage entrepreneurial culture.

The collaborations extend to the participation of UPV/EHU personnel in Biodonostia and vice versa, as well as to the common use of infrastructure and research services to facilitate the accessibility and availability of the equipment, and make sure it is put to common use.

Most significant results:

- Biodonostia is a part of the main backbone of the peri-university fabric that reinforces and widens the courses and training offered by the University in the field of health, while also improving and strengthening UPV/EHU research capability, thereby increasing its visibility and international appeal.
- Biodonostia participates very actively in CIE Euskampus' Neurosciences Knowledge Hub.
- Establishment of a network of alliances with biotechnological agents, including agreements with CIC bioGUNE, BCAM and Ikerbasque Foundation.
- Joint participation with the UPV/EHU in R&D projects following previous identification of lines of research and shared interest research groups. The collaboration between Biodonostia and the UPV/EHU guarantees the sharing with Biodonostia of the following:
- UPV/EHU's research infrastructures in its General Research Services (SGIker);
- The UPV/EHU integration and participation mechanisms and services for the transfer of results;
- UPV/EHU and Ikerbasque Foundation personnel for research activities.

International projection

The Biodonestia Institute is progressively increasing the number of international research projects (at present 17 projects), with the following main sources of finance:

- The European Commission Directorate General for Research.
- European Territorial Cooperation (INTERREG)
- The Michael J. Fox Foundation For Parkinson's Research.
- European Collaboration in Science and Technology (COST) of the European Science Foundation.

Biodonostia plays an important role in attracting international research personnel to the Basque Country.

42. GROUPS OF INTERNATIONAL EXCELLENCE IN TECNALIA (GEIS)

Objectives:

The Groups of International Excellence (GEI) of Tecnalia are specialized Fields of Application (CA) that have reached accredited levels of international excellence and recognition in specific technologies. Moreover, the Tecnalia GEIs have been designed with the objective of establishing bridges between Tecnalia and the academic world, and, especially, with the UPV/EHU in the framework of the Euskampus project.

Summary of the work done and the role of the aggregation:

The criteria for the identification of a GEI inside Tecnalia are:

- CVs and composition of the research team;
- generation and transfer of technology;
- capture of funding for R&D;
- capacity for networking and building reputation;
- impact on the spread and sharing of knowledge and development.

The GEIs contribute in a significant and sustainable way to the performance indicators in TECNALIA's Strategic Plan relating to presence and international recognition. In addition, the GEIs are vectors for the achievement of Basque Government objectives, actioned through a Decree which regulates stakeholders within the Basque Network of Science Technology and Innovation (RVCTI), and listed in the balanced scorecard of the Technology Centres attached below.

	LÍNEA	INDICADOR	UNID.
Mix de actividad de I+D		Mix de actividad de I+D	
		- % gasto en Investigación Fundamental	%
		- % gasto en Investigación Industrial	%
		- % gasto en Desarrollo Experimental	%
Especializació	n	Porcentaje de gasto en I+D en Fabricación Avanzada	%
		Porcentaje de gasto en I+D en Energía	%
		Porcentaje de gasto en I+D en Biociencias y Salud	%
Excelencia	Investigación	Publicaciones científicas indexadas	Nº
	Fundamental	Publicaciones científicas en primer cuartil (Q1)	Nº
	Investigación	Solicitud de patentes EPO y PCT	Nº
	Industrial	Ingresos por licencias y patentes	€ 000€
	Desarrollo	Nuevos empleos creados en NEBTS	empleos
	Experimental	Facturación procedente de NEBTs	€ 000€
Modelo de	Transferencia al	% financiación privada en la CAPV	%
relaciones	mercado	% financiación privada total	%
		Investigadores transferidos a empresas vascas	Nº
	Colaboración	Co-dirección de tesis doctorales	Nº
	entre agentes de	Co-autoría de publicaciones científicas	Nº
	la RVCTI	Co-invención de patentes	Nº
	Colaboración	% de financiación pública internacional	%
	internacional	Proyectos internacionales con presencia empresas	%

Source: https://www.euskadi.eus/r48-bopv2/es/bopv2/datos/2015/07/1503170a.pdf

In particular, the **GEIs allow a stronger relationship with the UPV/EHU** since they are the means to attain the fixed indicators for collaboration between RVCTI stakeholders that are measured in terms of co-direction of doctoral theses, scientific publications and patents (shown in red in the table).

In the business field, a GEI has to show robustness in value creation, capture and transfer at an international level. In particular, it will have to show excellent results in attracting international clients, some of them sector benchmarks, valuing:

- The contracting and turnover in projects under contract with foreign entities;
- The sale or licence of patent rights in international companies
- Other methods of technology transfer different to the above (e.g.: participation in companies or cocreation with foreign partners.).

Most significant results:

Currently, Tecnalia has 5 GEIs:

- 1. Green Concrete Design (Division of Sustainable Construction)
- 2. Robotics (Division of Industry and Transport)
- 3. Neuro-rehabilitation (Division of Health)
- 4. Advanced Surfaces (Division of Energy and Environment)
- 5. Marine Energy (Division of Energy and Environment)

And, in addition, 4 candidates will be evaluated in 2016:

- 1. Computer Vision (Division of Industry and Transport)
- 2. System Assurance (Division of ICT-ESI)
- 3. Ingredients Bio-processes (Division of Health)
- 4. Big Data (Division of ICT-ESI)

These have all had an important leadership role in the collaborative dynamic driven by the Euskampus Knowledge Hubs initiative, as much in the development of the strategic frameworks that have guided the use of the Euskampus Knowledge Hubs investment fund, as in the development and actioning of collaborative project agendas in training, research, and knowledge transfer within these Knowledge Hubs. In particular:

- The GEI of Green Concrete Design has played an outstanding role in the Materials Knowledge Hub (file 32);
- The GEI of robotics has played an outstanding role in the Advanced Manufacturing Knowledge Hub (file 31);
- The GEI of neuro-rehabilitation has played a strategic role in the Neurosciences Knowledge Hub (file 29);
- The GEI of marine energies has played an essential role in the Knowledge Hub in Health and sustainable development of the oceans, in the development of the area of renewable marine energy (file 25);
- The future GEI of Computer Vision has played an outstanding role in the Neurosciences Knowledge Hub (gliomagen project, file 29);
- The future GEI Big Data works in close collaboration with the Faculty of Computing in the framework of the Advanced Manufacturing Knowledge Hub (file 31).

International projection

The GEIs are vectors of the internationalization of Tecnalia and chief among their qualities is the large capacity to participate and lead European projects within the H2O2O Program and 7th Framework Program for Research and Development. Similarly, their high reputation allows the GEIs' main researchers to participate in the *think tank* or forums on European politics for the promotion of scientific and industrial activity related to technological scientific capabilities.

43. UPV/EHU SCIENCE PARK

Objectives:

The development of the UPV/EHU Science Park, situated in the Leioa Campus, is part of a plan for the creation and enlargement of new infrastructure, in order to:

- Generate knowledge which facilitates innovation and its transfer to the Basque productive framework.
- Attract Research Centres of excellence, including: BERC Achucarro (see detail in file 38); Biophysics Unit (see detail in file 46), BCMATERIALS (see detail in file 36).
- Attract skilled international research staff
- Project the research excellence of the Euskampus aggregation on an international stage.

Summary of the work done and the role of the aggregation

- The Science Park project has been given impetus by the Technology Park of Biscay and the UPV/EHU, in order to generate an excellence and innovation space that promotes university-company *relationships*, and to encourage the generation of new companies based on technology and with a highly qualified workforce.
- The Park foresees 4 use types: headquarters building, technological platform, research centre and facilities.

Most significant results obtained

- The Technology Park of Biscay has built the Headquarters Building. Among other uses, it will allocate 2,000 square metres to Euskampus aggregation uses:
 - Headquarters of Euskampus Fundazioa,
 - Headquarters of UPV/EHU Masters and Doctorate School,
 - Offices of UPV/EHU General Research Services,
 - UPV/EHU Research Results Transfer Office.
- The UPV/EHU has built 2 technological platforms:
 - the María Goyri building Animal Biotechnology Centre, focused on the Euskampus specializations:
 - Healthy Aging and Quality of Life (see detail of the knowledge hubs related to this specialization in files 28 and 29).
 - the Martina Casiano building focused on the Euskampus specialization:
 - New materials and innovative processes (see detail of the knowledge hubs related to this specialization in files 30, 31, 32 and 35).
 - Sustainable ecosystems and environmental technologies (see detail of the knowledge hubs related to this specialization in files 25, 26 and 27).

The 2 platforms aim to diversify and improve research, greatly increasing the attraction and employment of research staff, to transfer technology, and to draw in companies with a technological base that are in the surroundings of the UPV/EHU Science Park. The platforms will support intensive research activity in R&D in the areas mentioned above.

 In addition, a building has been constructed for the <u>Biscay Biophysics Unit</u> which will have space for the CSIC-UPV/EHU joint research centre, as well as the Biophysics Foundation. The Unit is focused on the Euskampus specialization of Healthy Aging and Quality of Life.

At present the four buildings are completed and in acceptance testing in order to be able to proceed to the transfer in of groupings of intensive research in R&D and UPV/EHU General Research Services among others.

International projection:

The development of the UPV/EHU Science Park is a key component in the internationalization of the aggregation:

- To attract Research Centres of international excellence (BERC Achucarro, Unit of Biophysics...)
- To consolidate the appeal and international competitiveness of the Euskampus aggregation in supplying new facilities and latest-generation equipment.
- To attract skilled international research staff.
- To project the research excellence of the Euskampus aggregation on the international stage.

44. CONSTRUCTION OF THE MARTINA CASIANO TECHNOLOGY PLATFORM BUILDING

Objectives:

The Martina Casiano Technology Platform Building, situated in the <u>UPV/EHU Science Park</u>, aims to provide a timely response to the scientific community in the field of the Materials Science and Technology and Sustainable Development:

- diversifying and fostering the research carried out,
- substantially increasing the appeal and pull of research staff and technology transfer;
- encouraging the location of companies based on technology in the surroundings of the UPV/EHU Science Park.

Summary of the work done and the role of the aggregation

The formal handover of the building took place on 24 Dec 2014. Currently, formal acceptance tests are taking place on the facilities to satisfy legal requirements and to draft the end of work documentation by the Construction Management.

- The building has 5 floors, with a surface area in excess of 10,500 square metres.
- The building has 3 functional areas that reflect the types of activity which the laboratories undertake: Central Analysis Service; Prep Rooms and Equipment Rooms.
- The laboratory space is designed to be continuously reconfigured to meet the need to adapt to developing needs, equipment and technologies.
- The ground and first floors are devoted largely to the general research services.
- The second floor will contain EHU/UPV research groups working in materials science and technology.
- The third floor houses the BERC of the UPV/EHU, BCMaterials Fundazioa (see detail in file 36).

The building is designed as a model for cooperation of UPV/EHU research and technology staff, the <u>BERCs</u> (Centres of Basic Investigation and of Excellence) and the UPV/EHU (<u>SGIker</u>) general research services units, that will support the university community and the scientific and production region of the Basque Country. It is therefore a key element of the aggregation in the following specialized areas of CIE Euskampus:

- Innovative processes and new materials
- Sustainable Eco-systems and Environmental Technologies.

Most significant results::

The building will support the activity of 17 intensive research groups in R&D linked with the priority areas of specialization: "Innovative Processes and New Materials", and "Sustainable Ecosystems and Environmental Technologies", in addition to the General Research Services (SGIker) infrastructure. The basic premise of the building is to maximize the flexibility of the facilities over the life of the building.

International projection

The development of the Martina Casiano Technology Platform Building will leverage internationalization of the Euskampus aggregation in the areas of innovative Processes and New Materials, and Sustainable Ecosystems and Environmental Technologies:

- Attracting Research Centres of international excellence (BCMaterials...)
- International Competitiveness in supplying new installations and latest-generation equipment.
- Attracting skilled international research staff.
- International projection of the research excellence generated.
45. MARIA GOYRI BUILDING - CENTRE FOR ANIMAL BIOTECHNOLOGY (CBA)

Objectives:

The Centre for Animal Biotechnology, situated in the <u>UPV/EHU Science Park</u>, is aligned with the Euskampus specialization of Healthy Aging and Quality of Life. The Centre for Animal Biotechnology is devoted, among others, to the production and maintenance of transgenic and "knock out" animals, especially mice, for the development of animal models of human illnesses, as well as for the development of genetic therapies for these illnesses.

It is considered a key scientific infrastructure for:

- Research of excellence and knowledge transfer in the area of Biosciences and Biomedicine.
- Attracting R&D departments from biotechnological and pharmaceutical companies to the UPV/EHU Science Park.
- Developing a strong food industry in the Basque Country.

Summary of the work done and the role of the aggregation:

- The building was formally handed over on 23 September 2014. Currently acceptance testing is taking place to satisfy legal requirements and to draft the end of work documentation by Faculty Management.
- The building has a surface area in excess of 10,500 square metres.
- It houses the BERC Achucarro (see detail in file 38), as well as specialized laboratories, research group spaces, and support areas to these main uses.

The building is designed as a model for cooperation between UPV/EHU research and technology staff, the <u>BERCs</u> and the <u>SGIker</u> general research services, that will support the university community and the scientific and productive region of the Basque Country. It is therefore a key element of the CIE Euskampus aggregation in the specialization of Healthy Aging and Quality of Life.

Most significant results:

- The Centre for Animal Biotechnology will have a minimum of 40 people dedicated to research in the area of Biomedicine. It will have various research laboratories, a viral vector production area with laboratories with bio-safety levels 2 and 3, and an animal facility with a capacity for over 10,000 mice in conditions free of specific pathogens.
- The mission is:
 - to generate high-level scientific knowledge and design its application to solve human health problems, by collaborating with pharmaceutical companies and transferring technology;
 - to train highly qualified staff;
 - to advise official agents on biotechnology issues,
 - to prioritize communication and research transfer through patents and scientific publications.

International projection:

The development of the Maria Goyri Technology Platform will leverage internationalization of the Euskampus aggregation in the area of Healthy Aging and Quality of Life:

- Attract Research Centres of international excellence (BERC Achucarro,...).
- International competitiveness in supplying new installations and latest-generation equipment.
- Attract skilled international research staff.
- International projection of the research excellence generated.

46. TRANSFER OF THE BIOPHYSICS UNIT

Objectives:

The Biophysics Unit, founded in 1999, is a joint CSIC-UPV/EHU centre. It is the only centre in Spain fully dedicated to research in Biophysiccs. The study areas are focused on cellular membranes and on the structure of proteins, with biomedical application to degenerative and infectious diseases, AIDS and cancer. The high international profile of the Biophysics Unit and its huge volume of activity underpinned the decision to transfer it to a new 6,000 square metre building located in the UPV/EHU Science Park.

The aim is to expand, and, in some way, reform the current <u>Biophysics Unit, a joint CSIC-UPV/EHU</u> <u>centre</u>. Expand, in the sense of increasing, the research spaces and the number of researchers. Reform, as the new centre will expand the Biophysics area to undertake a series of projects with much greater scope: Systems and computational biophysics, Biomembranes structure and dynamics, Fluorescence imaging, *Single molecules* and Structure-function relationships in proteins.

Summary of the work done and the role of the aggregation

- The formal handover of the building took place in November 2013. The building is situated in the <u>UPV/EHU Science Park</u>, has 6 floors and a total of 9,736 square metres.
- The building was conceived as a model for research and technology staff cooperation between the UPV/EHU, the <u>BERCs</u> and the <u>SGIker</u> general research services units that support the university community and the scientific and productive surroundings of the Basque Country. It is therefore a key element in the CIE Euskampus specialization of Healthy Aging and Quality of Life.

Most significant results:

The new Biophysics Unit will therefore be better than the existing structure in its capacity to host scientists in the breadth of Biophysics studied, and in the general quality of research. The R&D programs fall into two main lines of research (Molecular Biophysics and Cell and Systems Biophysics), each further sub-divided into five research subdivisions. The objective is to become one of the leading biophysical institutions in Europe in the areas of research, education, knowledge dissemination and innovation.

- There are currently 109 unit staff, made up of (25 principal researchers, 5 junior researchers, 26 postdoctoral researchers, 32 doctoral students, 14 lab and engineering technicians and 7 management and admin).
- In the next few years, this is expected to rise to 150 staff belonging to the UPV/EHU and the CSIC, and also including staff from the BERC (Biscay Biophysical Foundation) whose effect is to support the centre (34 principal and junior researchers, 39 postdoctoral researchers, 50 doctoral students, 17 technicians, 9 management and admin.

International projection

The Biophysics Unit will leverage Euskampus aggregation internationalization in the area of Healthy Aging and Quality of Life:

- Attract research groups of international excellence.
- International competitiveness when supplying new facilities and latest-generation equipment.
- Attract skilled international research staff.
- International projection of the research excellence generated.

47. CONSTRUCTION OF THE HUMANITIES AND SOCIAL SCIENCES RESEARCH CENTRE

Objectives:

The Humanities and Social Sciences Research Centre Building, situated in the UPV/EHU's Alava Campus, that is named after the Alava researcher Micaela Portilla, aims to give service to scientific research in these areas, which are an important presence on the Campus. The Centre is aligned with the Euskampus transversal specialization of Art, Culture and Society.

Summary of the work done:

The Centre has a surface area of 8,669 square metres, made up of the following:

- Space for Campus Research Groups of excellence within the Humanities and Social Sciences areas.
- Space for the General Research Services (SGlker) for these areas.
- Space for permanent or visiting research staff linked to Campus research groups.
- Space for University Research Institutes attached to the Campus.
- Space for the Masters and Doctorate School.
- Administration spaces, common areas (work rooms, meeting rooms and result presentation rooms, etc.)
- Space for strategic collaboration with institutions and companies.

Most significant results:

- In July 2014 the formal building handover was signed, and it is licensed to receive its first occupants.
- In the first semester of 2015 equipment and furnishings were installed ready for full commissioning.
- In the second semester of 2015 the Vice-Rector of Research will publish a call for the selection of Social Sciences and Humanities research units to be housed in the building.

International projection:

The Humanities and Social Sciences Research Centre will leverage internationalization of the Euskampus aggregation in the transversal specialization of Art, Culture and Society:

- Attract Research groups of international excellence.
- International Competitiveness in supplying new installations and latest-generation equipment.
- Attract skilled international research staff.
- International projection of the research excellence generated.

48. CONSOLIDATION OF THE CIE EUSKAMPUS SCIENTIFIC-TECHNICAL SERVICES AND INFRASTRUCTURES

Objectives:

Euskampus boasts first-rate scientific research infrastructures and technical-scientific services that support the university community and the productive sector.

The overall objective is to consolidate the research infrastructures, network connected and integrated. For this, the specific aims are as follows:

- Creation of a specialized critical mass: driving the Science and Knowledge industry.
- Increase in the international visibility of Euskampus.
- Driving the transfer of the research results.
- Regional re-industrialisation: new productive sectors with high value added.
- Local economic growth.
- Greater levels of social well-being.

Summary of the work done and the role of the aggregation

The Euskampus aggregation has various services, facilities and latest-generation scientifictechnical equipment. The following stand out:

- The UPV/EHU General Research Services (SGIker)
 - These comprise units that support Research Groups both within the UPV/EHU and in external agents.
 - The SGlker have highly qualified doctoral personnel (PhDs) and a cutting-edge technologicalscientific infrastructure.
 - The SGIker are made up of functional Units distributed between the three UPV/EHU campuses with this geographical proximity helping to ensure that the technological-scientific infrastructure is within reach of the local scientific community.
 - This ease of access of the business stakeholders to scientific facilities, with highly qualified
 personnel and cutting-edge infrastructure, fosters the interaction between the UPV/EHU and
 the productive sector.
- Singular infrastructures of Tecnalia Contains an extensive network of laboratories and semi-industrial plants for research and development, which are also useful for activities that support Industry. In these:
 - they develop research projects, both pre-competitive and industrial,
 - they build demonstrators and prototypes,
 - do tests, and
 - provide technological services on demand.
- Singular infrastructures of the DIPC

The highlight is the Computer Centre, created in 2003, and that in 2015 has sixteen clusters devoted exclusively to computation (currently 12 active) representing more than 7,000 processor cores and around 33 terrabytes of RAM memory at the disposal, among others, of centre researchers, DIPC researchers, and those of the UPV/EHU, Tecnalia and of the joint CSIC-UPV/EHU centre.

Most significant results:

- The SGlker have reoriented its constituent parts to support the Euskampus priority specializations (see files 44 and 45):
 - Biomaterials and Materials Characterization Platform.
 - Biomedicine and Biotechnology Platform.
 - Sustainable Development and Environment Platform.
- The new SGIker facilities and equipment, provided through the CIE Euskampus project, include the following:

- Setting up the Rosalind Franklin Microscopy Centre which includes the installation of a Titan transmission electronic microscope with ultra high resolution of 300 KV and an FIB unit: Focused Ion Beam (FIB) combined in cross-beam mode with a MEB-FEG.
- Expansion of the General Service Unit of the Animal Facility.
- Helium recovery system for the PPMS Quantum Design magnetometer for the Gipuzkoa Magnetic Measurement Service in order to save on helium consumption.
- Updating Nanoman II to Dimension Icon-PT with PeakForce QNM system for the Nanotechnology-Mesostructure-Macrostructure Service in order to improve the atomic force microscope performance (AFM).
- Enlargement of the Arina computer cluster.
- Massive NGS Sequencer.
- Differential scanning calorimeter.
- SQUID Magnetometer.
- MRI scanner for solids.
- High sensitivity mass spectrometer.
- Level 3 Biological Containment Laboratory (NCB3), essential to be able to safely handle biological agents.
- Level 2 Biological Containment Laboratory (NCB2), allocated to research related to forensic entomology.
- X-ray photoelectron spectroscope (XPS) to reinforce the X-ray unit.
- Maldi-LTQ-Orbitrap mass spectrometer to expand the Biscay Central Analysis Service with the Lipidomics Unit, dedicated to studying and characterizing cellular lipoids, the molecules with which they interact and their functions in the body.
- In reference to Tecnalia's Infrastructures, a remarkable peculiarity is that they allow the development of technologies and the construction of prototypes and demonstrators relating to products or processes, that will be tested later in industrial instructions for use either in a laboratory or in the plants of the industrial customers). These include:
 - Division of Sustainable Construction:
 - KUBIK Building: a unique building for R&D oriented to the development of new concepts, products and services for the improvement of buildings energy efficiency, +Info in: <u>http://goo.gl/5nwlsu</u>.
 - Laboratory of Fire Safety.
 - NANOC Laboratory: Centre for the Application of Nanomaterials in construction (Unit Associated to the CSIC).
 - Energy and Environment Division:
 - o INGRID: a unique facility for R&D in smart electrical networks.
 - Platform of facilities for the treatment and exploitation of waste.
 - o Electrical PTO Lab.
 - Laboratory of Surfaces Engineering.
 - o Laboratories for tribology testing and corrosion testing.
 - Industry and Transport Division
 - Laboratory of flexible Robotics: mecatronics for pilot stations, advanced control architectures, manipulators, easy-programming, perception systems, planning of autoadjustable paths or mobile robotics.
 - R&D Plants for R&D for cutting machines and mechanization of materials.
 - Pilot plants for the development of light structures in multi-materials: plants for R&D in compound materials, innovative file metal processes, and joint technologies.
 - Laboratory for transport electrification.
 - Pilot plants of Foundry and Steelmaking, industrial applications for high power plasma and development of reinforced metallic materials.
 - o Computer Vision.
 - o Laboratories of Nanotechnology and development of new materials.
 - Laboratories and Plants for development of materials for advanced systems: SHS (Selfpropagated High-temperature Synthesis), uniaxial hot press, powder metallurgy, PIM – Powder Injection Molding, ceramics and porous materials manufacturing technologies, etc.

- Centre of Thermal Projection.
- Computing Division
 - Platform for Second Generation screen content, for providers of Digital Services.
- Division of Health
 - Laboratory of bio-processes for development of new foods and food supplements, for food conservation and oenology.
 - HomeLabs with technologies for smart environmental control and monitoring of home activities.
 - Laboratory of biomechanics: for the study of the body movement through systems of motion capture in real time.
 - Laboratory of physiological signals.
 - Centre for Biological Testing.
 - Laboratory of cellular crops.
 - Centre of Biotechnology and Microbiology.
 - Laboratory of ingredients, for R&D oriented to the obtaining of ingredients and/or bioactive compounds.
 - Laboratory of micro and nano-encapsulation, with advanced and specific equipment for the stabilization and protection of active ingredients and immobilization of microorganisms for fermentation processes.
 - Laboratory of storage and packaging.
 - Laboratory of oenology.
 - Laboratory of Bio-processes and Microbiology.

The accessibility and availability of the facilities by Euskampus aggregation researchers improves the capability to participate in R&D projects and to access sources of competitive public finance. From the point of view of scientific production, there is an important correlation between the use of the infrastructures and first quartile publicationsl.

International projection

The provision of services, facilities and cutting-edge scientific-technical equipment consolidates the attraction and international competitiveness of the Euskampus aggregation. This results in a significant increase in the volume of collaborative work with the international scientific community and with R&D departments of the big multinationals with a technological base.

49. POSTDOCTORAL RESEARCH STAFF RECRUITMENT AND RECOVERY POLICIES

Objectives:

Increase the scientific quality of research done by Euskampus aggregation entities, through the incorporation into the Basque Country scientific-technical fabric of post-doctoral researchers with promising scientific careers, belonging to prestigious institutions or groups, and able to promote new research lines.

The basic aims of these actions are to improve:

- fundamental research to increase knowledge, as an end for itself;
- strategic research to boost innovation as an element in improving competitiveness and social welfare;
- the university's relationship with companies and social stakeholders.

Summary of the work done and the role of the aggregation

- Euskampus, through the UPV/EHU, makes annual calls for entries for doctoral researchers and Ramón and Cajal researchers to help create stable R&D Groups that will develop research of excellence:
 - The call for doctoral research staff aims to promote specialization and professional integration, by means of contracting temporary doctoral staff in university research groups, in any area of the scientific knowledge.
 - The call for entries to incorporate Ramón and Cajal researchers aims at 5 year contracts for national or foreign research staff with a defined career path in R&D centres and the creation of permanent posts.
- Euskampus through the UPV/EHU has made a Collaboration Agreement with the Ikerbasque Foundation for the promotion and development of research, ensuring that the selection of research staff that affects the Ikerbasque Foundation will always meet the UPV/EHU's strategic interests, and, therefore, those of the Euskampus project and its strategic specializations.

It was under this framework that in 2012, the UPV/EHU called for entries to fill a younger talent "gap", as detailed below: **Ikerbasque Research Fellows** (<u>www.ikerbasque.net</u>). Its characteristics were as follows:

- Doctorate to have been completed between 2003 and 2010.
- 5 year contract. Researchers in their fourth year can opt for the "*lkerbasque Research Professors*" call for entries.
- A letter of support is required from the principal researcher of the institution/department/group that employs the researcher.
- The announcement is co-funded by the European Commission through the COFUND Program.
- A minimum of 75% of the places will be reserved for candidates who fulfil the Marie Curie international mobility criteria, that is to say, that the researcher has not lived, worked, or studied in Spain for more than 12 months in the 3 years up to the call for entries.
- Efforts have been made to substantially increase the number of international postdocs through the different Marie Curie programs. This activity has been managed by the UPV/EHU European Project Office, having increased the resources allocated to the PEOPLE Program during the Seventh Framework Program and the MSC Actions in H2020.
- On the other hand, Euskampus, through the DIPC Foundation, is developing a program for contracting researchers with solid postdoctoral training in world class research groups in Material Physics (Gipuzkoa Fellow Program). The program is funded by the Provincial Council of Gipuzkoa. The annual calls for entries follow the principles of transparency and process peer review for the selection of the best candidates:
 - These are researchers that come from the Basque Country, that have trained in the Basque Country or have collaborated with groups within the Basque Country, committing themselves definitively to becoming part of the Basque system of science and technology.

- The intention is that during the duration of the agreement or until its conclusion, the benefiting researcher remains attached to one of the Basque Country centres of science and technology in a permanent research post.
- The maximum contract duration of a Gipuzkoa Fellow is 5 years.
- The projects should be in the following research lines (principal reference framework for DIPC activity): Electrical Properties at the Nanoscale, Surfaces and Interfaces, Polymers and Soft Matter, Photonics and Plasmonics, Computational Chemistry and Physical Chemistry.
- The interested candidates must be doctors with an excellent research CV, with post-doctoral placements in world class research groups, and have done research in any of the DIPC lines of activity.

Most significant results obtained

- The number of postdoctoral researchers recruited in the aggregation Euskampus by means of the UPV/EHU calls has been 441 during the 2010-2015 period.
- The number of Ramón and Cajal researchers has been 59.
- Recruitment of Ikerbasque Research Fellows by Euskampus in 2010-15: 32.
- The number of researchers attracted to Euskampus through Marie Curie contracts has been 48.
- In addition, 10 Gipuzkoa Fellows researchers have joined in the period 2010-15.

International projection:

- The policies to attract postdoctoral research staff through calls that prioritize researchers with a high level of internationalization through postdoctoral placements in world class research groups allows CIE Euskampus to attract internationally-prestigious researchers in different Specializations.
- This researcher attraction policy allows the UPV/EHU to generate research of excellence and to improve the Euskampus aggregation's international networks to include the institutions from where these researchers come.

50. ATTRACTING AND RETAINING RESEARCH TALENT OF EXCELLENCE

Objectives:

The attraction, care and retention of talent, as well as its integration within Euskampus so that it has a driving effect on the aggregation, has been one of the key aims of CIE Euskampus. To achieve this, CIE Euskampus has worked:

• To create an environment of excellence, which generates and drives talent, based on the virtuous circle of talent that attracts talent and generates quality and innovation naturally.

Summary of the work done and the role of the aggregation:

- The entities of Euskampus have made a remarkable effort in increasing the number of
 researchers funded by the different forms of ERC contracts, both from other countries and from
 within the Basque Country with a recognized excellent track record. This activity has been
 managed by the UPV/EHU's European Project Office, whose resources have been increased to
 deal with the associated workload; the support is both economic and practical to researchers:
 during the selection phase, and later, once selected, for ERC contract management.
- The Ikerbasque Foundation is the organization promoted by the Basque Government to strengthen science in the Basque Country by means of programs that attract and integrate researchers and give drive to research, in cooperation with research centres and universities, all committed to excellence.

Euskampus, through the UPV/EHU, has a Collaborative Agreement with the Ikerbasque Foundation in relation to Research Staff, for the promotion and development of research, ensuring that calls for the selection of research staff that impact on the Ikerbasque Foundation will always meet the strategic interest of the University and, therefore, of the Euskampus project and its strategic specializations.

In 2012 the Ikerbasque Foundation became part of the Board of Trustees of Euskampus Fundazioa, thereby increasing its involvement and commitment with the Euskampus project.

To this end, lkerbasque is developing the following calls for entries:

- 1. Recruitment, through competitive announcements, of "*lkerbasque Research Professors*". The main characteristics are the following:
 - Candidates must have completed their doctorates before 1 Jan 2008.
 - Only the researchers operating at a high level in a substantive line of research and with international research experience will be considered.
 - Researchers with a permanent post in the Basque Country are not eligible for this call.
- 2. Recruitment, through competitive announcements, of "*lkerbasque Visiting Professors*". The main characteristics are as follows:
 - Candidates must currently be at a relevant research institution outside the Basque Country.
 - The scholarships last 12 months.
 - The visiting professor grant will mainly depend on the line of research of the candidate and the interest in the research project submitted.
- In addition, Euskampus, through the DIPC Foundation is developing a recruitment strategy for top class international research staff for visits or placements that allow the development of collaborative work with research groups in the Basque Country through a Visiting Researchers Program.
 - The DIPC lines of research have a highly significant technological and conceptual impact.
 - Within the general field of materials science and nanosciene, the DIPC currently hosts lines of research dedicated to attophysics (physics of electronic processes on the scale of the attosecond), plasmonics (collective excitations in solids, low dimensionality systems and nano-objects), different spectroscopies and microscopies, apart from projects specifically dedicated to materials with promising technological properties, such as graphene or topological insulators.
 - Some of these research lines require external knowledge to complement and help the current DIPC research teams and those in nearby research centres (*DIPC Community*: *This*)

community mobilizes researchers of the UPV/EHU Faculty of Chemical Sciences, the UPV/EHU Faculty of Science and Technology and the UPV/EHU Bilbao Higher Technical School of Engineering, the Joint CSIC-UPV/EHU Centre of Material Physics and CIC nanoGUNE).

 The optimum strategy to implement this knowledge transfer is by means of research visits, where the scientist or technologist can develop a full research and exchange program with the local team at DIPC: With this aim, the Visiting Researchers Program was created.

Most significant results:

- ERC contracts (ERC grants) in Euskampus aggregation:
 - 4 ERC Advanced Grants
 - o 1 ERC Consolidator Grant.
 - o 5 ERC Starting Grants.
- Recruitment of Ikerbasque Research Professors by Euskampus in the period 2010-15: 54.
- Recruitment of Ikerbasque Visiting Professors by Euskampus in the period 2010-15: 44
- 97% of these Ikerbasque researchers are incorporated in the UPV/EHU
- In addition, in relation to the DIPC Visiting Researchers Program:
 - The program has meant that numerous first-rate researchers, including several Nobel Prize winners, have made short, medium and long-term visits to the DIPC, including sabbaticals.
 - Between 2010 and 2014 there have been a total of 632 short stay visits (< 1 month) and 287 long stay visits (> 1 month).
 - The excellent result of the Program and the fruitful collaborations established as a consequence of the visits, as well as the very positive feedback from of some of the notable researchers who want to repeat the experience and expand collaboration, have consolidated its continuity.

International projection:

• Attraction and loyalty of experienced and internationally prestigious researchers through the Ikerbasque Foundation to be part of Euskampus aggregation entities.

The DIPC, thanks to its recognised international presence, is an essential institution in attracting lkerbasque researchers to the region. There are currently 10 lkerbasque senior researchers and 4 junior researchers directly affiliated to, or associated with, the DIPC.

51. PARTICIPATION OF THE EUSKAMPUS AGGREGATION IN PROJECTS OF THE 7TH FRAMEWORK PROGRAM (FP7) AND HORIZON 2020 (H2020)

Objectives:

The participation in European projects through the Euskampus aggregation and the Euro-regional Campus is one of the big challenges for CIE Euskampus. This participation is a key means for international projection and consolidation and for developing excellence, crucially based on combining capabilities to respond to social and global challenges.

With CIE Euskampus being one of the most active players in the Basque Country's Science-Technology-Innovation system (file 57), the increase in CIE entities' participation in European projects levers further improvement of the status of the Basque Country in European programs. Specifically, the purpose is to improve the generation of knowledge transfer and to attract researchers, through the opportunities that the European programs provide, to turn Euskampus and the Basque Country into an internationally-attractive hub.

- In particular, the Euskampus project aims are:
 - Increase joint UPV/EHU-Tecnalia partnership in H2020 projects, leveraging it in international networks and the driving force of Tecnalia in European programs.
 - Increase the number of projects and activities in which Euskampus provides the coordinators and task leaders.
 - Improve the rate of return achieved in getting positive outcomes from FP7 calls for projects.
 - Improve the success rate (projects approved against proposals presented) from Marco Program calls for projects.
 - Increase the average funding obtained via participation in the Marco Program.
- The Euskampus aggregation, in the framework of the Euro-regional Campus, aims to significantly
 increase the number of European projects with University of Bordeaux and its strategic partners
 in IdEx Bordeaux. In this sense, the Euro-regional Campus plays a decisive role as a lever for
 participation in European projects, given that it has partners from many different countries.
- The Euskampus aggregation aims to double the financial returns and the number of projects relating to FP7 by 2020, by positioning itself in a global manner.

Summary of the work done and the role of the aggregation:

• Analysis of the initial position

At the start of the Euskampus project, the FP7 was already in its concluding last stage, so the aggregation entities began to work jointly aiming at the longer-term horizon of the year 2020, and taking advantage of the change over to the Framework Program. Although the FP7 stats for aggregation participation in European projects are very good (see 'Results' section), the analysis of joint participation in FP7 projects reveals a result that could be better: they presented just 11 projects with joint UPV/EHU/Tecnalia participation, of which 4 were approved, all coordinated by Tecnalia.

• Collaborative research as a substrate to increase joint participation in Horizon2020:

The analysis conclusion was to take advantage of the Knowledge Hubs initiative as a nucleus for collaborative initiative under the Euskampus project, to add to the potential offered by the Euro-regional Campus with Bordeaux, to improve collaborative activities between the researchers of the Euskampus aggregation, as well as with researchers from Bordeaux, resulting in a growing joint participation in H2O20 programs. In this sense, a significant part of the Euskampus investment fund (file 24) and of Euskampus-Bordeaux International Support (file 20) has been allocated to facilitate the preparation of European proposals.

• Coordination and reinforcement of the structures of support to researchers for the design, preparation and management of European projects.

The entities of the Euskampus aggregation, and especially the UPV/EHU, have provided more resources to strengthen the services they offer to the Euskampus aggregation research community. Likewise, they have established coordinations mechanisms between the aggregation entities and with University of Bordeaux, mainly by means of:

- periodic meetings of the managers and technicians of the European project offices,
- the shared use of databases and management tools,
- the exchange of personnel,
- diffusion of support material for participation in H2020 and organization of awareness events and training.

Most significant results obtained

FP7

The aggregation participated throughout the period of FP7 (in some cases still participates, because still there are projects running that were approved at the last call for projects) in 505 projects, leading 96 (19%). The global funding associated with these projects is more than 170 million euros. With regard to the FP7 period (2007-2014) the following is notable:

- The UPV/EHU set up the Office of European Projects EHUROPE in the year 2007 as a management structure whose aim is to support and encourage UPV/EHU international research activity. The creation of this office has been key in internationalizing the UPV/EHU through EU Programs. During the FP7 period, the number of European projects in which UPV/EHU has participated has increased by a factor of by six since 2007.
- Indeed, Tecnalia ended its participation in the FP7 with a notable success. Tecnalia's participation represents more than 30% of that attained by technology institutions in the Basque Country and 4.2% of all institutions in Spain. This gives Tecnalia a ranking of 20th in Europe, out of the thousands of companies, universities and research centres that participated in the FP7 (European Research Ranking), and a ranking of first private institution in Spain in terms of quantity and quality of agreements achieved.
- H2020
 - Until June 30, 2015, the Euskampus aggregation members have had 81 H2020 projects approved, leading 20 out of them, with a contract total of 38 million euros. Although this last figure is still modest, there is a lot of work going on to increase the number of projects.
- Finally, note the institutional adhesion to new European platforms. Tecnalia and the UPV/EHU are members of over 20 ETPs and PPPs.

International Projection:

The participation in European projects allows Euskampus aggregation entities and the Euro-regional Campus to:

- position itself in regional dynamics as a key European player in its specializations; •
- reinforce collaborations with University of Bordeaux and other Aquitaine business stakeholders; •
- improve international visibility and status;
- generate collaboration links, not only with other European universities, but also with companies and important business groupings in Euskampus specializations

52. REGIONAL COOPERATION PROGRAMS AND OTHER EUROPEAN AND INTERNATIONAL PROGRAMS

Objectives:

In addition to the Framework Programs (VII Framework Program and H2020), there are many other programs, both inside and outside the EU, that are key drivers for the internationalization of the Euskampus aggregation. The following extended list of large and varied programs is divided into two groups:

- Regional Cooperation Programs, including Interreg IV SUDOE, Interreg IV B ATLANTIC ARC and Interreg IV A POCTEFA, with EU funding, and the Aquitaine-Euskadi Euro-regional Regional Cooperation Program. These programs are key to boosting collaboration in the context of the Euro-regional Campus with Bordeaux.
- The other Programs, are funded either by the EU or by countries outside the EU (COST, LIFE+, EURATOM, EUREKA, ESF, BORN, NSF, etc.).

The main objectives of Euskampus activity are the following:

- Promote collaborations identified as being of interest in the dynamics of the Euro-regional Campus.
- Explore other Euro-regional and inter-regional collaborations that position the Basque Country as a key region in the fields of excellence, aligned with its strategy of smart specialization.
- Strengthen and diversify the strategy of European and international positioning through the coordination of the Euskampus aggregation entities in the framework of different programs.

Summary of the work done and the role of the aggregation

The activities done in this action have been the same as those described in file 51, since both actions have been done in parallel:

- Analysis of the initial position.
- Promotion of collaborative research as a substratum to increase joint participation in all these programs.
- Coordination and strengthening of support structures to researchers for the design, preparation and management of European projects.

Most significant results obtained

- Regional cooperation:
 - During the period 2007-2014, the Euskampus aggregation and IdEx Bordeaux presented 15 projects of territorial cooperation in the areas of marine energy, neurosciences, environment and oenology. Of these projects, 8 were approved within the above programs.

In this way, the Euro-regional Campus's strategy of collaboration has allowed a strengthening of the joint Euskampus – IdEx Bordeaux participation in European level regional cooperation programs.

- Other European and international programs:
 - Through these programs the Euskampus aggregation entities have obtained a total of 198 projects during the period 2007-2014, including 15 ERANET projects, 13 COST projects, 22 EUREKA projects, 9 LIFE+ projects, and 29 CECA (RFCS) program projects, among others. The total finance attained through all these projects rises to 21 million euros.

International projection:

Participation in the regional cooperation programs and other European and international programs has allowed the Euskampus aggregation entities to:

 reinforce existing collaborations with University of Bordeaux in particular, and with other business stakeholders in Aquitaine;

- contribute to the Basque Country's strategy of smart specialization and to the Strategic Plan of the Aquitaine-Euskadi Euro-region;
- position itself in regional dynamics as a key European player in its specialization fields;
- diversify and expand the spectrum of international projects, to widen the potential network of partners for future collaborations and new projects.

53. PARTICIPATION IN THE KNOWLEDGE AND INNOVATION COMMUNITIES (KICs)

Objectives:

CIE Euskampus was conceived as a **Community of Knowledge Hubs** in its areas of specialization. The Hubs are open spaces for inter-institutional and interdisciplinary collaboration with the aim of tackling social and global challenges using science.

The Community of Knowledge Hubs is the centre of gravity of CIE Euskampus and one of his main activities in contributing to the deployment of the Basque Country's RIS3 Strategy and to the positioning of the aggregation in the framework of the European priorities **and particularly, in the Knowledge Innovation Communities (KIC**). In fact the Euskampus Knowledge Hubs and the KICs share a similar philosophy regarding their conception: both initiatives are oriented around major social and global challenges, although how they achieve this is different.

In consequence, a major aim of CIE Euskampus is to position he aggregation Euskampus aggregation within the **Knowledge and Innovation Communities** (KICs) that are driven at European level in the different Societal Challenges identified.

Summary of the work done and the role of the aggregation:

- The Euskampus aggregation has participated actively in the preparation of the KIC of Active Aging and Healthy Life as well as in the KIC of Raw Materials, under the call of KICs published by the European Institute of Technology in 2014. In both initiatives, the Euskampus aggregation has had a key part together with Bordeaux University as partners of both KICs. Likewise, Euskampus Fundazioa (see section of Management and Governance) has played a key role in the definition of both proposals, being spokesman for the interests of the aggregation and coordinating the participation and contributions of the UPV/EHU and Tecnalia.
- Currently the Euskampus aggregation, together with University of Bordeaux, and aided by Euskampus Fundazioa, are participating actively in the configuration of a Basque node in the KIC of Food and KIC of Advanced Manufacturing, ready for the next European Institute of Technology call in 2016.
- The key actions relating to the KICs are:
 - Establishing and designing the priority actions for the UPV/EHU in the framework of each new thematic KIC that is launched.
 - Coordinating the different agents of the Euskampus aggregation and European partners in the participation in the distinct KICs and the actions each are taking.
 - Generating collaborations with proposal partners for the KIC of Active Aging and Healthy Life as well as the launching collaborative networks and projects at European level. The aggregation is working to capitalize on the effort made, given that it learnt at the end 2014 that the proposal it submitted in participation with UPV/EHU, Tecnalia and University of Bordeaux had not been selected by the European Institute of Technology.

Most significant results:

- Participation in the KIC of Raw Materials which already has European approval: Tecnalia and University of Bordeaux are Core Partners, whereas the UPV/EHU participates as an Associate Partner.
- Participation of the UPV/EHU, Tecnalia and University of Bordeaux in the preparation of the KICs of Food and Advanced Manufacturing. The three entities have already consolidated their role as Core Partners in the Advanced Manufacturing proposal.

International projection

The participation in the KICs:

- Contributes to the important international positioning of the different partners of the Euskampus aggregation and the Euro-regional Campus.
- Facilitates a more coordinated participation by the different regional organizations in each European strategic challenge.
- Allows greater collaboration links, not only with other European universities, but with important companies and business groupings in Euskampus' specializations.

54. STRUCTURES AND INTERNATIONAL ALLIANCES

Objectives:

- Expand and consolidate international collaborations improving the positioning of Euskampus aggregation entities in the fields of education, research, innovation and transfer.
- Generate a network of networks between close associates at an international level that allows an expansion of networks to access those of associates while opening Euskampus networks up to these strategic alliances.
- Create joint infrastructures between the Euskampus aggregation entities, University of Bordeaux and entities of its perimeter of excellence.

The purpose of this is to:

- Generate educational, research and joint innovation projects.
- Improve research capability in teams through access to better research facilities.
- Improve its joint international status in terms of training and research.

Summary of the work done and role of the aggregation:

- Creation in 2008 and later expansion of the Latin American Network of Masters and Doctorates (RLMD) to consolidate a competitive offer of Masters degrees and Doctoral Programs in Latin America.
- Configuration of a Euro-regional Campus through a partnership between CIE Euskampus and IdEx Bordeaux, creating a cross-border excellence network in the Euskadi-Aquitaine Euro-region that has international impact.
- Enlargement of the UPV/EHU collaboration networks with Universities of the Mediterranean, thanks to the relationship of University of Bordeaux with universities in Morocco and Algeria. This enlargement of collaborations through the network of networks aims to improve rapprochement with French-speaking nations, to attract students of these countries, and set up joint research projects with these countries.
- UPV/EHU forward-looking policies relating to Chinese Universities. One of the most interesting fields in which Chinese university students might be received is oenology. China is interested in this field, in which University of Bordeaux and the UPV/EHU have a wide course offering of Masters degrees and doctorates, and in which the participation of Tecnalia can expand its value with training activities involving technology transfer.
- UPV/EHU forward-looking policies relating to Middle East Universities. Marine Biotechnology, with which a relationship has been established between a Tecnalia researcher and the King Abdullah University of Science and Technology (KAUST) has been identified as being a field of great interest and potential.
- Presence of Euskampus through Tecnalia in international markets with the triple aim to connect knowledge, talent and technology, to add value for customers; to work with companies in their international activities; and to exploit research results both in developed markets that encourage technological excellence, and in emerging markets that offer opportunities for development.
- Signature of DIPC international collaboration agreements with:
 - International Center for Materials Nanoarchitectonics (MANA) of the National Institute for Materials Science of Japan.
 - Max Planck Institute of Quantum Optics of Germany (MPQ)
- Preliminary collaboration agreement between DIPC and CNRS attached to University of Bordeaux, with the aim of signing a formal agreement for international collaboration.
- Signing the agreement between the UPV/EHU and the two American universities, Columbia University (New York) and George Mason University (Washington) for the development of the "Agirre Lehendakaria International Program" (see file 66).

Most significant results:

- At present the Latin American Network of Masters and Doctorates comprises 16 universities in 12 different countries, and is negotiating the incorporation of new universities for academic year 2015-16. The good academic performance of the group has enhanced UPV/EHU's international projection.
- Euskampus also has a notable International presence through Tecnalia:
 - At operational level, through its own international offices (France, Italy, Serbia, Mexico and Colombia), associated innovation centres (France, Bulgaria and Egypt); joint ventures (Belgium and Portugal); and an extensive network of business development and commercial partners in another 23 countries.
 - In the strategic field, through its presence in the EU centres of decision-making for R&D: Joint Institute for Innovation Policy (with TNO, VTT and Joanneum Research), Member of the Executive Committee of EARTO (European Association of approx. 300 main R&D Centres), Member of EUROTECH (select group of the most important organizations of EARTO), presence in 22 European Technological Platforms, (on the Steering Board of 9 of these), and in another 10 notable European initiatives.
- Creation of the "Agirre Lehendakaria Center for Social and Political Studies" within the Euskampus Fundazioa for the development of the "Agirre Lehendakaria International Program" (see file 66).
- Agreement with the MPQ so that the DIPC Ikerbasque Research Professor, Geza Giedke (long time collaborator with the MPQ director), can open a new line of research in the boundary between solid state physics and quantum computation (the 2 research fields in which the DIPC and MPQ respectively stand out). A postdoctoral student is shortly expected to work with Prof. Giedke. In 2016 a summer school will be organized in Donostia jointly with the MPQ to train young students in this new line of research.
- Agreement with MANA: In August 2015 a MANA-DIPC workshop will be held in the DIPC to encourage new collaborations between the two centres.

International Projection:

The creation of structures and international alliances:

- allows better access to international research teams for international researchers attracted by both universities,
- represents an opportunity to give greater drive to joint research work, and improve scientific results thanks to a greater access to leading European infrastructures,

better attracts international talent to strengthen existing collaborations, improve new collaborations and initiate new common research projects.

55. DIPC SCHOOLS, SEMINARS AND WORKSHOPS

Objectives:

The DIPC (Donostia International Physics Centre) aims to promote scientific research in the field of Basic and Applied Physics, relevant to those fields of interest for Basque society and for international scientific development. The DIPC is composed of a community that mainly mobilizes researchers in the following Euskampus Aggregation entities:

- UPV/EHU Faculty of Chemical Sciences,
- UPV/EHU Faculty of Science and Technology
- UPV/EHU Bilbao Technical School of Engineering
- Joint CSIC-UPV/EHU Centre for Material Physics
- CIC nanoGUNE

Through the organization of the DIPC Schools, seminars and scientific workshops, the DIPC aims to:

- Build a quality training environment directed at Master degree and doctoral students, and young researchers.
- Boost exchange and creativity between the international research community.
- Promote the spread of scientific knowledge through visiting researchers in order to create forums for meeting and exchanging scientific ideas, scientific advances, and research experiences both within the national scientific community and the international community, and to identify future collaborations.

Summary of the work done and the role of the aggregation:

Since 2014, the DIPC has collaborated with other International Doctoral Schools in organizing the DIPC Schools, in the framework of the UPV/EHU Summer School Courses. The DIPC Schools run in 2014/15 have been the following:

- International Summer School on Semiconductor Interfaces Methods and Model Systems. Organized by: Centre of Material Physics (CFM-CSIC)-UPV/EHU, DIPC and Philipps-Universität Marburg.
- Scanning Probe Microscopy: A Tribute to Heinrich Rohrer. Organized by: Materials Physics Centre (CFM-CSIC)-UPV/EHU, DIPC, IFIMAC-UAM and CIC NANOGUNE.
- Frontiers of Condensed Matter. Organized by: Materials Physics Centre (CFM-CSIC)-UPV/EHU, Ecole Doctorale of Physique of Grenoble, Casimir Research School Delft-Leiden and Ecole Doctorale de Physique et d'Astrophysique (PHAST).

In addition, during the period 2010-2015, the DIPC organized a total of 284 scientific seminars and 51 workshops:

- The speakers have developed their research activity in the centres and universities of more than thirty different countries, and ten autonomous communities within Spain.
- The workshop and seminar themes are very varied and include physics of condensed matter, computational simulation, nanosciences, photonics, polymers, interaction of ions with materials, physics of surfaces, etc.

Most significant results:

- In the 3 DIPC Schools organized in 2014-15, around 230 people participated, made up of Masters and doctoral students and young researchers
- For academic year 2015-16, a minimum of 2 new DIPC Schools are already scheduled.
- In the period 2010-2015, more than 4,000 people have participated in the seminars and workshops.

International projection:

The participation, collaboration and organization of these types of events impacts the projection of DIPC's own research.

This is an essential initiative for the Materials Sciences Community of the Euskampus Aggregation, as much in the training of researchers as in the researchers own professional careers, for:

- the establishment of scientific networks,
- learning and
- the development of research projects and future papers with international projection.

56. EUSKAMPUS-IDEX BORDEAUX EURO-REGIONAL CAMPUS OF INTERNATIONAL EXCELLENCE

Objectives:

- To develop a European benchmark research space, generating greater synergies in the structure and dynamics of research and development.
- To develop strategic alliances among the convergent priority commitments that exist between CIE Euskampus (Knowledge Hubs) and IdEx Bordeaux (LABEX).
- To foster this excellence by means of international partnerships consolidating the positioning of both campuses of excellence in the future Horizon 2020.
- To align the specialized areas with the framework of the Smart Specialization Strategy (RIS3) of the regions of Aquitaine and the Basque Country.

Summary of the work done and the role of the aggregation:

- Support the creation of networks between research units within the 2 campuses.
- Meetings between the project directors of the clusters of excellence of the IdEx Bordeaux and researchers from the CIE Euskampus knowledge hubs.
- Promotion of collaborations in the framework of international events.
- Doctoral and post-doctoral placements in Bordeaux supported by EBIS Euskampus Bordeaux International Support (See detail in file 20).
- Organization of workshops between R&D groups of the Bordeaux clusters of excellence and the Euskampus knowledge hubs supported by EBIS.
- Organization of the first Bordeaux-Euskampus Symposium centred on research excellence (Bordeaux, November 2014) with the aim of stimulating cooperation by means of direct meetings between the Research Teaching Staff of both universities and their respective strategic partners, by holding 14 scientific sessions (See detail in file 19).
- Design of a Roadmap (priorities and strategy to support activities) by thematic field of excellence (mainly derived from Symposium sessions) coordinated by researchers and technicians belonging to Bordeaux-Euskampus projects.
- Design and joint participation in shared proposals in response to Euro-region and European calls for projects:
- The Symposium Bordeaux-Euskampus 2015 in San Sebastian will include, in addition to thematic sessions, a group of sessions oriented to the social and global challenges aligned to the knowledge hubs and strategic priorities of the University of Bordeaux (the symposium is an annual event that rotates between Bordeaux and the Basque Country). These sessions are called Challenge Oriented Sessions and their dynamics are based on a hybrid of the dynamic methodologies used in the Euskampus knowledge hub meetings and the University of Bordeaux initiative called "Agenda eau".
- Laboratoire International Associé (LIA): from the IdEx Bordeaux and Euskampus is promoting the creation of joint international structures, financed by both entities, and based on the LIA model created by the CNRS:
 - LIA is a "laboratory without walls" without a legal identity.
 - It combines teams from a CNRS-affiliated laboratory and a laboratory in another country.
 - It commits common resources and materials, for a mandate of four years, renewable once, to a clear-cut joint program.
 - The LIA laboratories conserve their independence.
 - LIA does not require the researchers involved to move to a new country.
 - LIA receives specific resources (teams, mechanisms, missions, Research Scholarships, etc.) from the CNRS and the institution associated.
 - LIA is coordinated by two jointly responsible scientists, who establish the research

program that is presented to the directing committee, composed of representatives of the institutions associated and high level scientists from LIA.

 The scientific field, together with the field of knowledge transfer, is where the Euro-regional Campus has greatest intensity, involving not only the 2 universities but also the group of organizations that make up the aggregation.

Most significant results:

- Creation of mixed Bordeaux-Euskampus teams to ensure the harmonization of collaborative actions in each scientific field.
- Progress in the constitution of two associated research laboratories (LIA, CNRS character) in nanomaterials and in manufacturing.
- Joint participation in the KIC proposals of Active Aging and Healthy Life, Raw materials, Advanced Manufacturing and Food (see detail in file 53).
- Participation in the KIC of Raw Materials which already has European approval: UPV/EHU (Associate Partner), Tecnalia (Core Partner) and University of Bordeaux (Core Partner)
- Support to 15 collaboration activities with University of Bordeaux (mobility/research placements, workshops, open days, presentations) of which the most recent highlights are the following:
 - 3 months stay of doctoral student Eneko Garaio to develop a line of research for the project "A Multidisciplinary research on biofunctionalized nanoparticles and their application in magnetic hyperthermia experiments." (March to June 2014). It reinforced research collaboration and transfer between the Polymer Self-Assembly & Life Sciences group of the Bordeaux laboratory LCPO and the UPV/EHU Electricity and Electronics Department.
 - IdEx Bordeaux Euskampus Workshop on lasers and photonics (9-10 June 2015). Meeting
 of about 20 researchers from the Bordeaux Laphia cluster of excellence, the DIPC,
 Tecnalia and the CFM (Materials Physics Centre-CSIC-UPV/EHU). This marked the launch of
 the euro-regional network in Photonics and Lasers to work on a wide range of projects in
 the areas of training, research and adding value.
 - 1st Bordeaux-UPV/EHU workshop on systemic lupus erythematosus (June 2015).
- Presentation of 14 research project proposals of which 3 have been approved.
- Constitution of a euro-regional community of doctoral students undertaking this in cotutelage or under co-direction in which their directors of thesis also participate. Through these projects, research projects are articulated, making this a backbone for scientific research relationships between Euskampus partners and University of Bordeaux and its partners.

International projection:

- The Euro-regional Campus is contributing to the important international status of the different partners of the Euskampus aggregation and of the Campus itself.
- The KICs and the European projects are becoming backbone elements of the scientific collaboration of excellence of the Euro-regional Campus, as well as further afield beyond the boundaries of the Euro-region.
- The Euro-regional Campus improves the visibility of the areas of smart specializations within each region.
- The Euro-regional Campus facilitates a European level participation by the different agents within the working environment that is more coordinated to the knowledge hubs of Euskampus and the Cluster of Excellence (IdEx Bordeaux).
- The Euro-regional Campus generates collaboration bonds, not only with other European universities, but with international companies and blue-chip business clusters in its specializations.

KNOWLEDGE TRANSFER AND INTERACTION WITH THE BUSINESS AND REGIONAL SURROUNDINGS

57. EUSKAMPUS AS VITAL FOR THE DESIGN AND DEVELOPMENT OF THE BASQUE SYSTEM OF SCIENCE, TECHNOLOGY AND INNOVATION

Objectives:

- To showcase the CIE Euskampus initiative as a lever and best practice of a smart specialization strategy (RIS3) that the European Union is driving to orientate the use of structural funds. CIE Euskampus thus represents a specific example aimed at positioning the UPV/EHU in the fourth mission of the Universities that the RIS3 strategy believes that they have to assume: its leadership in the regional transformation and smart specialization strategy.
- Contribute to the design of PCTI 2020 so that this collects the CIE Euskampus experience and thus integrates new programs into its strategy and mechanisms in a way that it guarantees the consideration of the social and global challenges as drivers of R&D activity. At the same time, it seeks to facilitate multidisciplinary collaboration as a mechanism to respond in seeking local answers to global challenges, and in this way guaranteeing the continuity of the Euskampus Knowledge Hubs.

Summary of the work done and the role of the aggregation:

Within the RIS3 framework, a report was produced with a firm proposal defining 5 priority areas for the Basque Country, drawing on the experience of the CIE Euskampus project: energy, advanced manufacturing, sustainable mobility, healthy life habits and the territory as a constructed and natural habitat.

The four first were integrated in the 3 priority areas of the Basque Country, **advanced manufacturing** (which largely integrates with **sustainable mobility**), **energy and biosciences**. On the other hand, they defined four niches of opportunity that reflect the rest of the Euskampus proposals: **feeding, territory, smart cities and entertainment and leisure**.

In the framework of PCTI 2020, they equally made contributions that allowed the incorporation of CIE Euskampus' experience and learning. In particular, from the strategic perspective, the PCTI managers endorsed these contributions in defining the 4 strategic lines:

- Promote from Science, Technology and Innovation the strategy of intelligent specialization oriented to the societal challenges of the Basque Country;
- Strengthen industrial leadership by means of public-private collaboration;
- Leverage the excellence of the Basque system of science, technology and innovation;
- Guarantee the development of human capital in science, technology and innovation, as well as the two transversal axes;
- Open up and internationalize the System of Science, Technology and Innovation;
- An innovative and connected system.

From a more operational perspective, the knowledge gained by CIE Euskampus remain collected in the new ELKARTEK program (shown as ETORTEK PLUS in PCTI 2020), as well as in the action "Help for undertaking Basque Country integrated tractor collaboration projects", the only action that falls under the responsibility of the Lehendakaritza (Presidency) given its multi-departmental character. This action is the result of the ERRONKA (the word means "challenge" in Basque) mechanism; this has transferred to the Basque government as a continuity mechanism for the investment fund designed and executed in the framework of the CIE Euskampus Knowledge Hubs initiative.

In addition, the Basque Government has approved a new decree that regulates the different agents of the Basque Network of Science Technology and Innovation (RVCTI). In this decree the connections and collaborations that knit the various agents according to the RIS3 strategy are listed as a criterion for the evaluation of the activity of the different agents; this benefits the future sustainability of the knowledge hubs, opening up this initiative further to members of the RVCTI. In fact, this new Decree will allow Euskampus Fundazioa to continue its mission as a gobetween linking offers and requests since it includes for the first time the work to develop R&D projects in collaboration with members of the RVCTI agents (offer-offer).

Finally, within the framework of the Basque Government's University Plan 2015-2018, under the core area of UPV/EHU Reseach and Knowledge Transfer, a collaborative research action is listed, oriented to societal challenges, with a total budget of 10 M€ that will allow work to continue that was started with the knowledge hubs action

Most significant results:

The CIE Euskampus has become an exemple of performance and guarantees the continuity of its mission through:

- The consideration of the social and global challenges as drivers of R&D activity in the new Basque Government programs,
- Multidisciplinary collaboration as a mechanism to respond to the challenge of finding local answers to global challenges (Euskampus Knowledge Hubs).

All this remains reflected in the following strategies:

- The Basque Country University Plan 2015-2018.
- The Basque Country RIS3 Strategy.
- The Basque Country Plan of Science Technology and Innovation, PCTI 2020. (www.euskadinnova.net/documentos/2697.aspx)
- The new Basque Government Decree of the Basque Network of Science, Technology and Innovation. (https://www.euskadi.eus/r47-bopvapps/es/bopv2/datos/2015/07/1503170a.pdf)

International projection:

The work done to deploy, in the future, the mission of the CIE Euskampus project via the different strategic regional R&D plans (in particular PCTI 2020, University Plan 2015-2018 and RIS3), equally translates to the international field.

This dimension remains expressly listed as one of the conditions under which different members of the Basque Network of Science Technology and Innovation, of which the Euskampus aggregation is one, received finance from the Basque Government.

In the control dashboards of members of the Euskampus Aggregation international collaboration figures explicitly as core to the relationship model that members must promote.

58. VALORIZATION AND KNOWLEDGE TRANSFER

Objectives:

- To improve and increase interaction between the company, the aggregation entities, and the research centres that participate in the CIE Euskampus project.
- To foster the valorization processes of the results of the research for knowledge transfers by means of company start-ups, patent licences and new business models.

Summary of the work done and the role of the aggregation:

Both the UPV/EHU and Tecnalia have developed strategies for valorization and exploitation of research results during the course of the Euskampus project, which have developed from earlier strategies. The main work that has developed in the framework of CIE Euskampus has been in coordinating and tuning these strategies, so that they become shared Euskampusaggregation strategies for valorization and exploitation, which give coverage to the Community of Knowledge Hubs, as well to the particular entity dynamics and, eventually, to other research centres both within and outside the Basque Country.

The UPV/EHU:

- has promoted three major programs of entrepreneurship in each of the three university campuses, which develop through business incubators for technology-based enterprises in various locations and that are managed in collaboration and with the support of the Provincial Councils (see sheet 60).
- has promoted and participates in the UNIVALUE company. UNIVALUE is an initiative led by the UPV/EHU and developed by the G9⁹ Group of Universities, which includes the UPV/EHU. UNIVALUE was created at the end of 2011 with the mission to calculate the value, identify market sectors, channel, promote, commercialize and transfer knowledge gained as a result of university research.

Tecnalia is developing its valorization strategy through Tecnalia Ventures S.L. with its mission to comprehensively manage the lifecycle of active technological innovative in terms of patent rights, know-how and participation with technological companies. The distinguishing marks of Tecnalia Ventures are:

- **Focus on Business Opportunity,** taking off from the technology or the problem that generates it.
- Accompanying the development of the Business Opportunity from conception **incorporating the investor perspective**.
- **Connection with the business ecosystem**, networking with entrepreneurs, technologists, companies, investors, universities, public administrations and other agents like business schools, business incubators and lawyers.

The work done within the framework of the Euskampus project consists of tuning the UPV/EHU's valorization initiatives and tools with Tecnalia's valorization strategy. Specifically, given Tecnalia's clear market orientation and its mission to contribute to the generation of GDP, this is one of Tecnalia's major contributions to CIE Euskampus. To summarize, the integration of the UPV/EHU and Tecnalia strategies, adopting the model of Tecnalia Ventures, gives rise to Euskampus's strategy of valorization and knowledge transfer shown schematically in the following figure:

⁹ Group G9 encompasses the 9 Spanish universities that are alike in being the only public universities in their respective Autonomous Communities.



Collaboration

Among others, the activities related to the valorization and exploitation of knowledge that have been done in the framework of the Euskampus project, of which tuning and integration are key, include:

- Introduction of transfer activities from the Knowledge Hubs in the dynamic "Omega 3" of Tecnalia Ventures to be developed jointly between the UPV/EHU and Tecnalia and accompanied by an external capital investor.
- Opening of the Entrepreneurs Club of Tecnalia Ventures to the UPV/EHU, for students, educational personnel and researchers with a vocation for entrepreneurship, including them in the distinct dynamics of the club: Pitch&pintxos (meetings to share entrepreneurial experiences and success stories in the Basque Country, Speed-dating (events to connect people with business profiles with spin-off projects to turn them into SMEs), Coaching sessions (to get the "know how" of relevent international angel investors), Entrepreneurship Experience (Development of business ideas with experienced mentors) and Entreprenership series (inspiring sessions with an internationally important business leader)
- Opening of the "Inspiring Business Forum-IBF"¹⁰ to UPV/EHU business incubator companies.
- Opening of the "Campus of Technological Transfer" organised by Tecnalia Ventures to the UPV/EHU. At mid-term, it is hoped that this campus can be run coordinating the UPV/EHU Masters MBAe3 (sheet 11) with this initiative of Tecnalia.

Most significant results:

The process is as relevant as the end-results. The latter are the typical quantitative results measured by products, company creation, turnover, employment generated, and products brought to the market, etc., whereas the former comes from the coordination work described above.

The final results for 2010-2015 include the following:

- The UPV/EHU:
 - has requested 317 patents (80 national and 237 international).
 - o has obtained 25 patents.
 - o as detailed in sheet 60, the UPV/EHU has created 62 spin-off companies

¹⁰ The Inspiring Business Forum – IBF is the benchmark forum for corporate investment in the Basque Country, containing driving-force enterprises with innovative capability represented by its "Corporate Venture" division, to search for opportunities based on technology and with potential to invest, to diversify and to grow businesses.

- through UNIVALUE, it has strongly impacted on the transfer of technology and knowledge:
 - 86 submissions for 24 products totaling 2.8 million euros (average amount/quote of 320,000 euros).
 - 133 reports issued.
 - 49 marketed products.
- Tecnalia has requested a total of 183 patents and has obtained 187. On their side, Tecnalia Ventures has achieved:
 - 11 companies developed in the last few years with 16 companies in the managed portfolio with 159 employees and 9.5 million euros of accumulated turnover.
 - An average of 40 business opportunities analysed per annum, of which more than the half are considered investible and generate investment agreements with strategic partners including local Family Offices Industrial Partners or Business Incubators.
 - 308 patents in the portfolio grouped into 88 families of patents, with an average of 30 applications for new patents per annum.
- The CIE Euskampus aggregation has requested 500 patents and has obtained 212.

In terms of process results (and first steps to integration), the following stand out:

- The inclusion of activities called 'acceleration to the market' within the Knowledge Hubs in Tecnalia Ventures"Omega 3" initiative.
- The assistance of UPV/EHU students and academic staff (participants on the UPV/EHU entrepreneurship programs and academic staff linked to the MBAe3 Masters degree, see sheet 11)
 - in the four Pitch&*Pintxo* events that have been held in 2015.
 - to the Leadership Series and Coaching Session of 2015 given by Paulo Andrez, Emeritus president of the European Business Angels Network (EBAN).
- Participation of a biotechnological company in the UPV/EHU's Zitek business incubator in the Inspiring Business Forum held in July 2015.

International projection:

The Euro-regional Campus is connecting the Euskampus strategy with the different strategies developing in Aquitaine, and specifically in the framework of IdEx Bordeaux, like the creation of Aquitaine Sciences Transfer (AST). There have been different meetings between the managers of Bordeaux University Technology Transfer and AST directors with the directors of UNIVALUE and Tecnalia Ventures. In the framework of the Bordeaux-Euskampus Euro-regional Symposium in November 2015 there will be a session centred exclusively on the valorization and exploitation of knowledge from which a euro-regional route map with an international vocation is expected to be developed.

Major efforts are being made to strengthen the distinct international connections:

- To reinforce the relationship with the Medici Venturing Group.
- To consolidate the relationship with EBAN (European Business Angels Network).
- To work proactively in the framework of the European Technology Transfer Offices Circle. The next Annual Meeting of the Technology Transfer Offices Circle will be held next year in San Sebastian in the Basque Country.

Not only does this work maintain institutional connections with these networks and entities, but it also helps :

- The recruitment of entrepreneurs who can develop business opportunities in the Basque Country.
- The enlargement of the client base to foreign centres and universities.

59. PROMOTION OF ENTREPRENEURSHIP IN TEACHING AND RESEARCH STAFF

Objectives:

- To transform knowledge into entrepreneurial and innovative talent through actions that facilitate the setting up and consolidation of technology companies.
- To recognize dedication to entrepreneurship as an academic milestone in the professional career of Teaching and Research Staff (TRS).

Summary of the work done and the role of the aggregation:

- CIE Euskampus has created and developed a program of entrepreneurship from the results of research obtained in the institutions of the strategic aggregation Euskampus.
- CIE Euskampus is placed to take advantage of the opportunities that they give to draw out knowledge by encouraging these UPV/EHU Teaching and Research Staff to take part in company creation projects, since this community is critical in the development of knowledge. In particular, work is being carried out on a program that includes licences and teaching exemptions, incentives for leave and academic recognition for this dedication, pursuant to the Innovation, Technology and Science Act 14/2011.

Most significant results:

The UPV/EHU has proceeded to contract substitute teaching staff to allow the full-time dedication of 2 academics that are in process of creating and developing technology companies arising from the results of their research:

- ✓ SOC-e company, research staff Dr. Armando Astarloa.
- ✓ BILAKA company, research staff Dr. Raquel Maya.

Both lecturers have been granted a teaching exemption licence and a recognition of their activity within the UPV/EHU's teaching career assessment process.

60. CREATION OF NEW SCIENCE AND TECHNOLOGY BASED COMPANIES

Objectives:

To promote the creation of business tissue drawing on the entrepreneurial ideas not only of the results of R&D by research groups, but also of any entrepreneur with present or previous links to the UPV/EHU committed to the development of innovative ideas and with the capacity to generate innovative business tissue.

Summary of the work done and the role of the aggregation:

The UPV/EHU has three university programs devoted to business initiative, one for each campus (ZITEK, ENTREPRENARI and INIZIA) to help support the generation of innovative and technology based companies that allow the exploitation of University research results:

- The ZITEK program is a stable collaboration framework between:
 - Provincial Council of Biscay
 - o UPV/EHU,

•

to promote activities in support of the creation of companies in the UPV/EHU Biscay Campus.

- The ENTREPRENARI program is a collaboration framework between:
 - BIC GIPUZKOA BERRILAN (Business and Innovation Centre of Gipuzkoa created by the Provincial Council of Gipuzkoa and the Basque Government, through SPRI)
 - o UPV/EHU,

to promote activities in support of the creation of companies in the UPV/EHU Gipuzkoa Campus.

- The IINIZIA program is a collaboration framework between:
 - City council of Vitoria-Gasteiz,
 - CEIA of Alava (Business and Innovation Centre of Alava: a society controlled by the Basque Government, through SPRI, the City council of Vitoria-Gasteiz and the Provincial Council of Alava
 - o UPV/EHU,

to promote activities in support of the creation of companies in the UPV/EHU Alava Campus. These programs are developed in collaboration with the Provincial Councils and the Technological Park.

In its turn, it is actively working to tune these programs with the dynamics of Tecnalia Ventures, to establish a Euskampus strategy of valorization and exploitation of research results (sheet 58). For its part, Tecnalia Ventures has its own technology business incubator in its Biscay Technology Park facilities.

Most significant results :

- Due to its efforts over the last few years, the UPV/EHU occupies fifth place in terms of creation of spin-offs according to data from IUNE (<u>Research Activity inside Spanish Universities</u>)):
 - o Period 2006-2009: 26 spin-offs created
 - $\circ \quad \mbox{Period 2010-2013: 41 spin-offs created} \\$
 - In the Period 2014-2015, as yet unpublished by IUNE, the number of spin-offs created by the UPV/EHU is 21. During the project (2010-2015) 62 spin-offs have been created.
- Tecnalia, for its part, has created 17 spin-offs.
- Even the DIPC has created a spin-off.
- Hence **the CEI Euskampus aggregation has created 80 spin-offs in the period 2010-2015**. The company creation programs are a clear demonstration of the involvement of aggregation institutions and local administrations in the CEI Euskampus project.

 On their side, it is notable that the Zitek incubator of the Biscay Campus is the sixth best business incubator in Spain out of 353 and the only one in the top ten that is university-based. It is also ranked fourth of all advanced business incubators. Data published in the latest Report of the Fundación de Caja de Ahorro de España (<u>FUNCAS</u>)

International projection:

As mentioned in file 11, the Euskampus aggregation, in the framework of the Campus of International Excellence project, is beginning its journey so that the UPV/EHU evolves towards the model of the "Entrepreneurial University", in which the culture of innovation and entrepreneurship, situated in the world of international relations yet also connected to the Basque homeland, plays a central role in the day to life of the university. Consequently, it's key to have powerful business incubators for the development of business opportunities derived from research results, as well as to configure these incubators to be collaboration spaces, connecting with other regional bodies (public administrations, other business incubators, scientific and technological parks, etc) and with international outreach (open to international entrepreneurs).

Under this philosophy, the UPV/EHU is participating in particular initiatives that impact on international projection, including:

- Participation in the <u>Start Innova</u> program, in which the UPV/EHU is a part of the Technical Committee.
- The UPV/EHU has signed agreements with different international universities in order to exchange methodologies for promoting spin-offs and to the improvement of entrepreneurial education.

Finally, in January 2015 the UPV/EHU participated actively in the Bilbao Biscay Entrepreneurship Meetup 2015, organised by the MIT and the Provincial Council of Biscay, achieving the recognition of several projects in the final stages. One of the projects, ONCOASSESS, was a finalist; it arises from a Biotechnology Company Creation module within the UPV/EHU Masters degree in Biomedical Research.

61. ESTABLISHMENT OF COLLABORATION NETWORKS BETWEEN PROFESSIONAL TRAINING - EUSKAMPUS

Objectives:

The multi-level educational campuses constitute a good example of collaboration to offer training courses that meet the needs of the region. The proximity allows the educational sector to:

- share facilities and technology,
- collaborate in activities of research and teaching, combining theory and practice,
- provide an improvement in the competences and the recycling of the adult population that reconciles work and studies or finds itself in a situation of unemployment.

In all of this, the UPV/EHU, in the framework of the Euskampus project, seeks to create a learning environment by means of collaborative networks with high quality Professional Training centres and the business sector, with the following aims:

- to optimize resources to improve the quality of the education-learning process,
- to facilitate sandwich courses,
- to increase employability and qualification
- to reinforce the links between vocational training, university and the work market.

Summary of the work done and the role of the aggregation:

- The Institute of Machine Tooling-IMH and the UPV/EHU have established collaboration networks in Gipuzkoa for the design and joint management of professional training at higher technical level and university degree courses, establishing three fields of work:
 - coordination Framework Program-University,
 - coordination of continuous training, and
 - coordination of company-tertiary education (sandwich courses)with two lines of development; a) EHEA-European Qualifications Framework-Bologna and b) Observatory of new qualifications and emerging competences.
- The UPV/EHU, in collaboration with a working team from the OECD, has developed two actions that derive from two projects in the Education Directorate of the OECD (OECD/IMHE and OECD/ETP):
 - preparing a report on collaboration between university education and the Framework Program in the OECD, and
 - organization of the International Seminar on Collaboration between the University Education and the Professional Training.
- General Research Services (SGIker) of the UPV/EHU have reinforced the activity with the Centres of Professional Training.
 - The aim is for students to receive advanced training, learning about cutting-edge techniques and state-of-the-art equipment.
 - Furthermore, the interaction with the technicians and researchers of different fields of science enriches the training process and fosters their professional development, thus enhancing business competitiveness when they are part of the production fabric.
 - Currently, it works with 4 Framework Program Schools and seeks to extend this collaboration to the companies settling in the UPV/EHU Science Park located within the Biscay campus, so that it creates and consolidates a network comprising Framework Program Schools , University, and technology-based companies directly integrated under Euskampus.

Most significant results:

The structural relationship between IMH and UPV/EHU and the 4 years of association with Sandwich Degree courses (see detail in file 62), have generated a collaboration pathway in different lines of work that could lead to important development in the future:

• Development of the first Sandwich Degree within the state that is accredited by ANECA.

- Complementarity of the range of IMH School of Sandwich courses in Engineering with the current UPV/EHU range of courses.
- Joint use of the physical resources of the IMH.
- Exchange of teaching staff.
- Development of Continuous Training. A study of emergent competences in strategic sectors has been completed, and the result is the design of a joint catalogue of continuous training starting in academic year 2015-2016.
- Development of innovation in the SMEs through the ASMAOLA Project: creation of an Innovation Centre in manufacturing processes for industrial SMEs.
- Development of innovation and entrepreneurship competences and of attitudinal competences helpful in the pedagogy of sandwich training.
- The UPV/EHU teaching staff are directing 2 teaching theses being done at the School of Sandwich courses in Engineering. In addition, one student is developing a thesis in the IMH, directed by UPV/EHU teaching staff and contracted by Euskampus.
- Two academic staff from the School of Sandwich courses in Engineering have been integrated into University research teams.
- Development of new engineering courses based on the sandwich course model in partnershipwith: UPV-IMH-AFM and European Universities that use sandwich courses.
- Two Gaitek projects have been submitted, involving the UPV/EHU, the IMH and two companies.
- 4 teachers from the School of Sandwich courses in Engineering have participated in the ERAGIN program whose aim is to develop subjects based on problems or projects.
- It has participated in the three orientation fairs organized by the UPV/EHU.
- The UPV/EHU and the IMH will select an INTERREG project led by the University of Toulouse that will be presented in 2015 and in which one of the areas of work is sandwich courses.
- The UPV/EHU is member of the Board of Trustees of the IMH.

International projection

From September 2015, the IMH will participate in an Erasmus+ project led by a German university which aims to analyse and identify best practices for relationships and pathways between university and professional training.

62. SANDWICH COURSES - INSTITUTE OF MACHINE TOOLING (IMH)

Objectives:

- To give courses developed through alternate study and work which are conducive to obtaining an official qualification which has validity in all the regions of the State.
- To be an international benchmark in Spain for dual training.

Summary of the work done and the role of the aggregation

- The Institute of Machine Tooling-IMH is a centre of Training and Technological Innovation to the benefit of industry and of the community, through its technical training and dissemination of technical knowledge. After 16 years giving higher engineering courses in dual or sandwich format as a centre aligned with to a French school of engineering, the IMH, through the School of Sandwich-courses in Engineering, requested formal alignment with the UPV/EHU for the development of this model in the Spanish university system, giving courses conducive to obtaining an official qualification which has validity in all the regions of the State.
- The University approved the formal alignment, and the school designed and developed the first Sandwich Degree_course evaluated by the Basque University System Quality Agency and accredited by the <u>National Agency for Quality Evaluation and Accreditation</u>.
- The IMH School of Sandwich-courses in Engineering (centre formally aligned with the UPV/EHU) gives, from 2012/2013, the degree courses 'Engineering in Process and Product Innovation', which makes it the first qualification in the Spanish university system based on alternation between an educational centre and a company.

Most significant results:

- In academic year 2014-15, 111 students enrolled on this degree, with an occupancy rate greater than 90% (Relationship between the number of new registrations and the number of places offered).
- In September 2015, the 4th course will start, and at the same time one complete cycle of the degree will complete.

International projection

The IMH is leading an Erasmus+ project to create a European network of universities that offer sandwich course or dual training. The project, of three years duration, is composed of a consortium of 7 partners, from Spain, Germany, Austria, France, Sweden and Italy.

With this activity the UPV/EHU positions itself as an international benchmark Spanish university in sandwich course or dual training.

63. ZABALDUZ PROGRAM

Objectives:

ZabaldUz is a labour contract program to produce doctoral theses in companies or institutions of the Basque Country interested in addressing an internal challenge by means of its being the focus of a doctoral thesis.

- The objectives of the Program are:
 - To consolidate and strengthen ties between the UPV/EHU and the social and production environment.
 - To foster public-private collaborative research development.
 - To help to generate highly-qualified jobs in the social and business structure.
 - To increase progressively the number of doctoral graduates for their incorporation into the socio-economic environment, not only for the development of R&Dprojects, but also as key people to lead companies at a time when creativity is one of the keys to future success.
 - To contribute to the development and innovation of the industrial tissue by means of the transfer of research talent to companies.
 - To retain talent and foster business competitiveness.
- The purpose is to train students within UPV/EHU doctoral programs in cooperation with the productive and social environment, by means of formal pre-doctoral contracts based on article 21 of the Science, Technology and Innovation Law 14/2011 dated 1 June 2011, in any area of scientific knowledge.
- The cooperation is based on companies or social entities, which propose research projects that include doctoral thesis projects by researchers selected by means of this call for entries.
- The operation of the ZabaldUz agreement is detailed below:
 - Research staff employment contracts of up to 3 years.
 - Contracting body: UPV/EHU
 - Implementation of the project: in the facilities of the organization and in those of the UPV/EHU, with a schedule to be negotiated according to the project.
 - Commitments of the organization:
 - Respect and facilitate the training activities of the doctoral student.
 - Designate a tutor (co-director for doctoral students).
 - Facilitate the use of resources, instruments, teams, etc.
- The actions to be implemented are binding on the doctoral student, the organization and the UPV/EHU.
- In regard to the organization type, this can include all sectors of activity, whatever the size, with corporate headquarters in the Basque Country.

Summary of the work done and the role of the aggregation:

A call was held in two phases from the Vice-Rectorship for Research of the UPV/EHU:

- PHASE 1: gathering expressions of interest from entities, including project and tutor.
- PHASE 2: Allocation of candidates to the selected projects, in accordance with a standard predoctoral call style.

The selection of the expressions of interest was done by the Innovation, Development and Research Commission using the following criteria:

- the existence of a project of interest to the organization and its commitment to it, with an appointed director, who, if a doctor, could be a co-director of the doctoral thesis.
- the commitment of a member of the UPV/EHU teaching or research staff to oversee the PhD thesis with the project submitted.
- establishment of the necessary conditions so that the researcher in training may complete the doctoral thesis project within the three-year period.
- the presentation of a project that shows the reasonable possibility of contracting the doctoral student once the objectives have been completed within the three-year period. For this reason, the existence of previous contracting of UPV/EHU doctors will be positively assessed.

- the collaboration commitment to fund the pre-doctoral contract over the three years.
- Preference for companies from the productive sector and social entities over public agents or those with private research, like Technological Centres, non-university Institutes and similar that usually already have pre-doctoral research staff in training.

Most significant results:

The Zabalduz Program has had funding from the Innovation Fund from the Basque Government's Science Technology and Innovation Plan 2015 that in 2012 assigned 3 million euros over 3 years for 45 labour agreements to do others such as doctoral theses:

- 21 with companies,
- 12 with Business Associations and
- 12 with Technology Centres.

By areas of knowledge:

- 19 of the organizations came from the Sciences,
- 11 from Engineering,
- 4 from health,
- 5 from social sciences and
- 6 from Humanities.

The first theses will be read in academic year 2016-2017

International projection

UPV/EHU and University of Bordeaux are analysing the feasibility of holding a Zabalduz Program for the Euro-regional Campus.
64. INSTITUTIONAL CHAIRS (PROFESSORSHIPS)

Objectives:

Research and social transfer of knowledge as a key tool in University-Society-Regional relationships.

Summary of the work done and the role of the aggregation:

The UPV/EHU has promoted the creation of a number of "Institutional Chairs", or professorships, university structures without legal status created in collaboration with various Basque Country public agents (Basque Government or Provincial Councils), as fundamental channels for knowledge dissemination and transfer, which help to strengthen the essential relationship between the university and the social surroundings.

Most significant results:

The UPV/EHU has had the following Chairs in the period 2010-2015:

- Chair of Scientific Culture: that promotes scientific and technological culture, encouraging
 interventions from within the people of the Basque Country. This has an impact on nonspecialized knowledge of the main scientific and technological developments taking place in the
 world today.
- Mikel Laboa Chair: that promotes and spreads research into Basque art, folklore and artistic creation, based on the work of Mikel Laboa in all its variety. The program of activities and actions within this chair focuses on music, dance and bertsolarismo (Basque improvised poetry).
- **Chair of Family Businesses:** that carries out research and training into family-owned companies, contributing solutions to address the problems they face.
- **Miguel Sánchez Mazas Chair:** an open space for trans-disciplinary reflection on science, technology, innovation and modern society.
- Chair of International Studies: created in order to generate ideas, help establish rules, offer information and raise public awareness of international issues. This knowledge, in the shape of ideas and projects, is intended to improve the effectiveness of Basque society working in a global environment.
- **Chair of Law and Human Genome:** working to benefit the coordination and development of research, study and legal understanding related to human genome research and its applications.

In addition, the UPV/EHU has four UNESCO Chairs :

- UNESCO Chair of Landscape and Heritage: providing a training and research platform to help manage physical change within the region, and thus of the landscape, in order to conserve priceless historical and natural landmarks, and to preserve the environmental and productive assets of the region.
- UNESCO Chair of Communication and Educational Values: space for the study of the influence of communication in educational decisions through social and interpersonal models of behavior that tackle identity creation and educational value issues.
- UNESCO Chair of World-wide Linguistic Heritage: that promotes research, training, information and the production of papers relating to Linguistic Heritage throughout the world.
- UNESCO Chair on Sustainable Development and Environmental Education: that boosts an integrated system of research, training, information and documentation activities in sustainable development and environmental education, facilitating collaboration between top class international researchers and UPV/EHU academic staff.

International projection

The UNESCO Chairs are part of the UNESCO UNITWIN Network, which in addition to encouraging cooperation between universities, and strengthening knowledge exchange between them, is an element of the international projection of the UPV/EHU and CIE Euskampus.

65. CREATION OF THE SINNERGIAK SOCIAL INNOVATION CENTRE (UPV/EHU)

Objectives:

- Founded in 2012, SINNERGIAK Social Innovation (UPV/EHU) is a Social Innovation Centre promoted by the UPV/EHU as part of the strategy of the EUSKAMPUS - Campus of International Excellence.
- SINNERGIAK promotes the development of knowledge and fosters collaboration with heterogeneous agents, both from a social and regional perspective and both locally and internationally. All of which encourage cooperation between different agents, providing solutions to problems, and meeting social needs through innovative approaches, perspectives and activities.
- Therefore, SINNERGIAK's activity aims to promote the development of skills in people, and the innovation capabilities of organizations and communities, both of which are basic requirements for achieving results with a socially visible and useful impact.

Summary of the work done and the role of the aggregation:

SINNERGIAK was set up as a knowledge organization structured around an interdisciplinary team that is headed by university researchers and also consisting of other professionals who specialize in training practices and intervention and transfer.

To do this, SINNERGIAK is based on an interdisciplinary social innovation approach which is divided into four core areas:

- Research: Focusing on the development of innovative projects whose most visible results are: indicators, models, products, networks and strategic partnerships. The priority areas are:
 - identification and development of indicators,
 - construction of analytical and practical models,
 - design and application of assessment or management tools
 - coordination of monitoring systems.
- Training: Planned to create content and contexts for teaching and learning that are based on social innovation:
 - construction of a coherent body of knowledge;
 - development of coding and storage of knowledge systems;
 - guides designed for educational activity (development of tools for the managing information, knowledge integration, exploring alternatives, prototyping solutions);
 - implementation and testing of various training methods (Masters degrees, courses, communities of learning and practice, summer schools
- Action and Intervention: Designed to encourage collaborative learning processes in classroom and virtual (workshops) environments that promote and facilitate methods that are aimed at:
 - structuring through hybridisation,
 - experience of diversity,
 - the acquisition of professional skills and competencies,
 - collective and shared generation.
- Knowledge Transfer. Aimed at the dissemination of:

- experiences (projects, cases),
- reports and documents (assessments, impacts),
- scientific publications (books, articles) and
- networking (community building, positioning).

Most significant results:

The most significant projects done to date have been the following:

- Transcreativa: a European project led by Sinnergiak Social Innovation (UPV/EHU) and funded by the Interreg Program IV B SUDOE (SOE3/P1/E529) of the European Union whose aim is to promote the creation of youth employment.
- **Ergolab**: a living lab for the improvement of information systems through co-creation and co-design with users.
- Regional Social Innovation Index: a pilot research project which is part of the innovation assessment initiative in the Basque Country by INNOBASQUE (Basque Innovation Agency), and that has been directed and developed by SINNERGIAK Social Innovation (UPV/EHU) in collaboration with the Agency. The aim of this project is to create a model (dimensions and indicators) to develop a regional social innovation index.
- Creative Skills and Social Innovation: a project funded by the Regional Government of Gipuzkoa which makes it possible to evaluate the state of innovation in some of the subsectors of the Creative and Cultural Industries in Gipuzkoa. 5 of the top subsectors from the cultural and creative industries were selected (fashion-oriented design, museums, videogames, service companies and music), with six selection criteria being established for them: diversity, sufficient level of implementation, presence of technology, current and future prospects, levels of visibility and presence in the public and private spheres.
- Boosting the Impact of Social Innovation in Europe through Economic Underpinnings: a project that investigates the economic dimensions of social innovation, the creation of new concepts, models and instruments for politicians, innovators, investors and intermediaries. The project, funded by the Seventh Framework Program of the European Union, has developed into a consortium of 11 partners led by the University of Westfalia.
- Hedabide is a project promoted and funded by the Regional Government of Gipuzkoa as part of the program to promote Gipuzkoa as a learning region. The aim of the project is to identify proposals that could help make it possible to overcome certain challenges that are considered essential for the development of the region.
- **INNOC**: The aim of this project, funded by the Spanish Ministry of Economics and Competitiveness, consists in highlighting a rising alternative paradigm in innovation studies, centred around the concept and methods of analysis of social innovation, which not only comes from companies, but also the public sector and the third sector.

On the other hand, from academic year 2015-16 there will be a "Masters degree in Social Innovation" coming out of the alliance between the UPV/EHU and SINNERGIAK Social Innovation. The Masters degree is a balanced proposal of theoretical approaches and real project experience based around social innovation. It uses current information on the list of problems in the social innovation field and offers tools and methodologies so that professionals and researchers are able to address new challenges, and organizational and social opportunities with the capability to understand and transform.

International projection

SINNERGIAK Social Innovation focuses its activities on the international field; in consequence it has a very significant international projection and impact.

To achieve this, the Centre has created networks and agreements with different international organizations with the aim of exchanging ideas, experiences, organizing congresses and participating in social innovation research projects.

The following stand out:

- Agreement between the Metropolitan Technological Institute (Colombia) and SINNERGIAK Social Innovation for carrying out joint projects, as well as publishing new papers that have been written by both parties. The ITM and SINNERGIAK are united by common interests and goals in the fields of culture, research, extension and technical assistance.
- Agreement between the Faculty of Sciences at Buenos Aires University and SINNERGIAK Social Innovation with the aim of cooperating, complementing one another and carrying out an academic exchange between the parties, which includes holding an International Conference on Responsible Financial Innovation, Social Innovation and Innovation in the Public Sector (December 2014).

In addition, for carrying out projects SINNERGIAK collaborates with the following international institutions:

- ANTIC (Bidart/France) Public Institution/Creative Industries Group
- Ashoka International Network
- Association RMS-RBS (France) University/School of Business
- Coimbra Municipal Council (Coimbra/Portugal) Public Institution
- Centre for European Policy Studies (Belgium) Think tank
- ESTIA (Bidart/France) Technological Centre
- Glasgow Caledonian University (Glasgow/UK) University
- IPN/Institute Pedro Nunes (Coimbra/Portugal) Technological Centre
- KEDGE (Bordeaux/France) University
- Nordregio (Sweden) Nordic Centre for the spacial development
- Politecnico di Milano (Milan) University
- TNO Netherlands Organization for Applied Scientific Research (Holland) Research Centre
- TU Dortmund (Dortmund) University
- Coimbra University (Coimbra/Portugal) University
- University of Bordeaux (Bordeaux/France) University
- University of Bath (UK) University
- University of Maastrich (Maastrich) University
- VSEM University of Economics and Management (CzechRepublic) University
- Westfalian University of Applied Science (Germany) University

66. CREATION OF THE AGIRRE LEHENDAKARIA CENTER FOR SOCIAL AND POLITICAL STUDIES (ALC)

Objectives:

The Agirre Lehendakaria Center (ALC) is a centre for interdisciplinary studies created in March 2013 as part of social sciences linked to the UPV/EHU and to CIE Euskampus. The Centre participates with the following institutions:

- Strategic partners
 - Columbia University in New York (The Advanced Consortium on Cooperation, Conflict and Complexity - AC4),
 - George Mason University in Washington, D.C. (School for Conflict Analysis and Resolution SCAR).
 - UPV/EHU
- Associated agents
 - Seton Hall University in New Jersey, USA
 - Ulster University in Northern Ireland (International Conflict Research Institute Incore)
- In addition, it is sponsored by Kutxabank S.A. (patron of Euskampus Fundazioa).

The Agirre Lehendakaria Centre aims to carry out activities relating to research, innovation and knowledge transfer in order to:

- valorize and share internationally the strategic decisions and projects that have enabled Basque society to be recognized as a successful model of socio-economic transformation,
- promote Human Sustainable Development, seen as a group of values, policies and projects
 of public-private collaboration that allows society to build a future in a balanced socioeconomic way, respecting the environment and engaged with Human rights.

Summary of the work done and the role of the aggregation

The **Agirre Lehendakaria Centre** was created in March 2013 The Centre develops the following lines of action, designing, directing, elaborating and participating in studies, projects and processes of research and reflection, all of a multidisciplinary and strategic nature, both related to the Basque Country and in the international field:

- Competitive Position of the Basque Country in the international context: factors and scenarios influencing its current level of development, while preserving its culture, identity and own model.
- Impact of self-government in the drive and development of the Basque Country's competitive
 position, exploring from this new perspective the scenarios and strategies that will help Basque
 society to grow in harmony with the environment.
- **Impact of values and culture** in the economic and social development of the Basque Country and the importance of Sustainable Human Development in the development of the Basque society of the future.
- Exploration of the major issues that will affect society in the future, proposing social and
 institutional answers as part of social sciences research, in order to contribute to the
 consolidation of Basque society as a modern, advanced society, that satisfy the needs of its
 people in terms of sustainable human development.
- Importance of collaboration, cooperation and Network Creation between the Basque

Country and countries and regions, appreciating that this is as much about societies in advanced environments as it is about ways to develop.

- **Creation of a Network with Research Centres, Universities and International Institutions** and with internationally important personalities in order to collaborate in projects close to the heart of the Agirre Lehendakaria Centre.
- Promote revitalizing work in the Agirre Lehendakaria Centre: detecting opportunities; generating ideas, concepts and papers for discussion and debate; stimulating Innovation and permanent change in society; and facilitating the opening of the Basque Country to new realities and challenges of a global society.

Most significant results:

In the field of the **research**, the Agirre Lehendakaria Centre has developed, in collaboration with international academic institutions and researchers of the UPV/EHU, the following projects:

- BASQUE SUSTAINABLE DEVELOPMENT: the aim of this project is to understand in depth the social economic and cultural elements that have allowed the transformation of the Basque Country, applying the indicators that measure sustainable human development and make a contribution to future research on the integration of the various theories in this field. This project, that generates the theoretical framework for future research, is led by AC4 (University of Columbia in New York).
- BPPS (Basque Peace Process Scenarios): this project analyses the factors allowing an end to violence in the Basque Country, and its relationship with the socio-economic transformation of the country. Specifically, the Basque Peace Process Scenarios will allow the visualization of different pictures of the future, based on opinions collected from Basque civil society. This project is carried out in collaboration with Seton Hall University and Scensei.
- LONERGAN ECONOMICS: this research project applies the economic theory of the Canadian
 professor Bernard Lonergan (a theory that prioritizes the social dimension of development) to
 better understand the performance of Basque society over the last decades. This project is
 directed by Professor Paul Hoyt-O'Connor (Director of the Center for Undergraduate Fellowships
 and Research in the University of George Washington) and is being carried out in collaboration
 with George Mason University and Deusto Business School.
- IDENTITY BASED LOCAL DEVELOPMENT: the project explores the role of culture and local identity in the transformation of the Basque Country in the last decades, also known as the "Basque Case of Sustainable Human Development". Coming from a systematic perspective, and placing emphasis on the values and practical activities associated with this success, the research aspires to be a benchmark for countries or regions that face similar challenges. The project is carried out in collaboration with local and international institutions like Elhuyar, The Young Foundation, and LSE - London School of Economics.

In the field of intervention **projects**, the Agirre Lehendakaria Centre identifies projects of strategic collaboration between Basque entities and international stakeholders interested in knowing "the Basque case" in depth. These projects focus on the socio-economic field, in culture, in institutional development or in human rights, but whatever the field, they play their part in building a practical model of sustainable human development. At present, the Agirre Lehendakaria Centre is working in the following countries: Croatia, Ireland, South Africa, Mexico, Wales, Peru and Japan.

International projection:

The Agirre Lehendakaria Centre was created to be an international centre of interdisciplinary studies which gives it significant projection and international impact:

• The partners and associated entities that comprise the Centre together with the UPV/EHU are international (Columbia University, George Mason University, Seton Hall University, Ulster

University)

- The Centre develops its lines of activity both in the Basque Country and in the international field
- The projects carried out are directed by international specialists and involve collaboration with a variety of international institutions.

67. CENTRE FOR AVANCED AERONAUTICAL MANUFACTURING (CFAA)

Objectives:

- The CFAA is a UPV/EHU centre that derives from a stable agreement signed between the UPV/EHU and a group of companies named the Business Grouping for the Development of Advanced Aeronautical Manufacturing Techniques, AIE (henceforth the Grouping of Companies or AIE),
- The centre has been supported from its beginnings and in the acquisition of facilities and initial machinery by the Provincial Council of Biscay and by SPRI, the Basque Business Development Agency.

The objectives of the centre are:

- To have a joint R&D centre in advanced aeronautical Manufacturing technologies that will be a
 national and international benchmark.
- To undertake activities that allow a fast transfer of results to the productive environment associated with the value chain. Its R&D activity lies between Technology Readiness Level 5 and 7 according to the NASA scale (pillar 2) in relation to its vicinity to the final application.
- To attract innovative initiatives in the field of advanced aeronautical Manufacturing that can develop and generate a new industrial framework or reinforce the existing one.
- To develop advanced manufacturing projects that integrate and focus the resources of partners, while at the same time taking advantage of the resources and knowledge generated by members of the Basque Network of Science, Technology and Innovation.
- To be a benchmark centre for suppliers and equipment Manufacturingrs for aeronautics, in order to open up participation as partners in advanced Manufacturing technology projects, contributing equipment and know-how in doing these.
- To collaborate with other agents that share these aims in this field.
- To take advantage of the synergies between the UPV/EHU, the companies and the institutions, directing efforts to the development of R&D activity and high level training to exploit technologies of interest to the Basque industry and to develop scientific-technological capabilities in the field of advanced manufacturing.

Summary of the work done and the role of the aggregation:

- The UPV/EHU manages and undertakes CFAA activity (created out of the work done by a high performance Manufacturing group from the UPV/EHU Department of Mechanical Engineering).
- With the CFAA, an association of 11 aeronautical companies collaborate and participate, this being the conception of a joint centre.
- The CFAA is a new model of collaboration between companies, university and institutions to boost research applied to the aeronautical Manufacturing process.
- The work of R&D will involve trials in realistic conditions, which implies the use of the same conditions used in production.
- Among the target technologies are: advanced multitask mechanization, laser sintering in metal, EDM, inspection and measuring, rectification, welding using a range of technologies, and others.
- The projects aims to increase productivity, quality and process simplification within companies.
- In addition to the sharing and improvement of processes, it's important to highlight the active initiatives to close the R&D chain, similar to the UK's Catapult centres, where Sheffield's AMRC is the best example. It work with technologies that can give short term value added to our industrial tissue.
- Euskampus has managed, through its manufacturing technology hub, to be an invigorating force through its efforts, especially in the areas of mechanized cryogenics and additive Manufacturing.

Most significant results:

In 2015 all facilities and necessary machines to be installed in 2016 in a building in the Zamudio technology park have been specified. The machines have the latest technology, using current concepts of multiprocessing machine tools, additive Manufacturing in metal, emergent processes and strict control of integrity and quality of components.

International projection:

- Visits and follow-up contacts have been made with equivalent centres in the United Kingdom, (*The University of Sheffield Advanced Manufacturing Research Centre, AMRC*), and in Denmark, (*Danish Advanced Manufacturing – DAMR*), with the aim of generating stable relationships and signed agreements for the development of collaborative projects.
- The CFAA is a key centre for international projection through the Euro-regional Campus, since it contains lines of work and facilities that are complementary to the ones at the University of Bordeaux in the aeronautical field, improving the international connections that both universities can establish in this field. In particular, and as indicated in file 18, it is working on a three-way agreement with the University of Cincinatti (USE).
- The CFAA serves to launch European research projects. In particular, it has recently presented an H2020 proposal with the *University of Bordeaux* and Airbus for which the public/private configuration of the CFAA has been key.
- In turn, the CFAA is a key initiative for the international projection of the aeronautical sector companies within the Basque Country to impact directly and positively on greater competitiveness and diversification of business opportunities of linked to the research carried out in its facilities.

68. STRATEGIC PROJECT TO RESTORE A HISTORIC CULTURAL BUILDING "THE GALLERIES OF PUNTA BEGOÑA", OWNED BY THE CITY COUNCIL OF GETXO (BISCAY)

Objectives:

The aim of the action is for UPV/EHU to work with the City council of Getxo, the Provincial Council of Biscay and the Basque Government, to rehabilitate and restore the Galleries of Punta Begoña. This historic building, listed as a Cultural Asset, with the category of Historical Monumental, can be found in the municipality of Getxo.

Summary of the work done and the role of the aggregation:

This action was contained within a Framework Agreement, endorsed by the 4 parties in 2014, later supplemented by specific agreements, which includes the analysis and diagnostic of the entire site, carrying out a geometrical survey, creating systems of information, doing research into historical, social, architectural, chemical, hydro-geological and other aspects, possible types of strengthening and restoration interventions, socioeconomic and strategic impacts of doing this, knowledge transfer and involving the general public.

The planned actions in training, research, scientific-technical development and knowledge transfer for academic year 2014-2015, have been funded by the City council of Getxo, to the tune of 1,043,000€. The actions are orientated towards the definition of a comprehensive restoration project as well as an appreciation of Punta Begoña, in order to help generate economic activity and increase citizen participation within the municipality of Getxo. Restoration is intended to follow the model of the Cathedral of Vitoria-Gasteiz that was "open for works" throughout redevelopment, in such a way that during the building restoration works, the site can be visited by the public.

This University action was conceived as being comprehensive and multi-disciplinary, and this remains the vision. It covers aspects relative to the scientific intervention on the site -in addition to the geotechnical actions, and the analysis and diagnostics of the site, as well as of historical and social research relating to it -compilation and cataloging of plans, documents and intangible memory related to the galleries and the cultural landscapes in line with sustainability and the economic impact of the project.

Most significant results:

In agreement with the Action Plan 2014-2015, UPV/EHU has achieved the following results:

1.- In regard to the current building condition, its diagnosis and development as well as other actions to take for restoration of the site:

- Urgent preliminary structural analysis to determine stabilization needs.
- Detailed structural analysis and follow-up plan.
- Urgent chemical analysis to determine shock treatment needs.
- Hydro-geological analysis for drainage and protective covering.
- Stratigraphic Reading Analysis of the condition of stones, paintings and coatings, carrying out tests.
- Geological analysis of the sedimentary rock formations of Punta Begoña: sediments and fossils.
- Historical-archaeological analysis.
- 2.- The postgraduate actions are at Masters and Doctorate level:

- 3 doctoral thesis projects in the new Doctorate Program of Interdisciplinary Scientific Strategies in Heritage and Landscape, indicating that the site is a research space appropriate to academic work of the highest level.
- In October 2015 the new University Masters degree in Landscape Management will commence: Heritage, Region and City. The Galleries of Punta Begoña will be used for internships within two Masters degrees and for experimental works within the new Master thesis starting to be developed by some of the students who enrol.

3.- Organization of two joint exhibitions between the City council of Getxo and the UPV/EHU, directed at local people to boost their knowledge and awareness of the value of the Galleries and their surroundings.

4.- Organization of a day-long scientific call between two UNESCO Academic Chairs, the UNESCO Chair of Water Resources Management and Culture (UDELAR, Uruguay) and the UNESCO World Cultural and Urban Landscapes (UPV/EHU), under the title "Socio-Environmental Challenges in the Industrial Landscape of the Estuary of Bilbao".

5.- Two calls for entries, held every two years, promoted by the Basque Government and the Provincial Council of Biskaia, for Special Heritage Projects.

International projection:

This project to restore the Galleries of Punta Begoña has undoubtedly reinforced the projection of the UPV/EHU. It is only necessary to google "Galleries of Punta Begoña UPV/EHU" to see the number of news items, (and in Spanish there are more than a thousand news links) and the acceptance of the public that have been to the exhibitions and open days in such large numbers.

The Galleries of Punta Begoña already are part of the UPV/EHU's international projection, not only for having been accepted by a consortium as a research space for European proposals, but because there have already been scientific publications and communications to international congresses where UPV/EHU have presented part of the results obtained to date.

This is a remarkable project in that the UPV/EHU is leading a project in which it devoting all his capacities and resources to society to develop a comprehensive regeneration in one of the biggest Basque Country municipalities in collaboration with local and regional agents that will become an engine of the municipality's economy. Currently, planning is taking place for the next three years' activities (2016-2018).

69. DRIVING THE SCIENTIFIC CULTURE AND INNOVATION PROGRAM

Objectives:

To drive a long-term policy program that combines teaching, research and extension activities to foster scientific culture in Basque society and to help it to acquire greater understanding of the scientific fact, along with the social implications of the technology and scientific development.

Summary of the work done and role of the aggregation:

- Creation of the UPV/EHU Chair of Scientific Culture Chair in November 2010.
- Accreditation of Euskampus Fundazioa as an Innovation and Scientific Culture Unit of the FECYT. In this way, Euskampus Fundazioa has a coordinating role in the scientific culture and innovation activity of the aggregation.
- Collaboration of the Chair with Euskampus aggregation entities, and with regional agents, to multiply the impact and scope of its activities.
- Signing of an agreement between Euskampus Fundazioa and Alhóndiga Bilbao to facilitate the deployment of the Chair of Scientific Culture program.
- Development of knowledge transfer, training and research activities.

Most significant results:

- Recognition of Euskampus Fundazioa as an Innovation and Scientific Culture Unit of the FECYT.
- Creation and maintenance of four blogs of scientific interest, a blog aggregator and a platform of current scientific news:
 - o <u>Mapping Ignorance</u>
 - o <u>Cuaderno de Cultura Científica</u>
 - o Zientzia Kaiera
 - o <u>Mujeres con Ciencia</u>
 - o <u>Cienciasfera</u>
 - o <u>Zientzia.info</u>
- Annual organization of conferences in celebration of Darwin Day.
- Annual organization of **M4temozioa**, in collaboration with the Basque Center for Applied Mathematics (BCAM) and the Technological Alliance IK4.
- Annual organisation of the **Zientziateka** cycle of conferences.
- Organisation, from 2013, jointly with the BCAM and Aupatuz (Basque Country Association of families of children with high intellectual capacities) of the **Mathematics for restless minds** program, a series of discussions, conferences and workshops aimed at boys and girls up to the age of 15 years.
- Co-organisation of the scientific publicity events **Amazings 2011** and **Naukas Bilbao** 2012 to 2015.
- Scientific supervision of the TV scientific program **Escépticos** (EiTB2) in 2011 and participation in **Orbita Laika** (LA 2) in 2014 and 2015.
- Science Plus 2015 (http://scienceplus.es/) Meeting dealing with the different professional alternatives that exist in the field of science, and especially in the European context. The guest speaker sessions and round table discussions were given by people with wide experience in research, journalism and scientific editing, R&D companies, promotion and R&D finance.
- Organisation and participation in UPV/EHU summer schools:
- 2011: Lecture entitled "Scientific culture makes society more democratic" in the UPV/EHU summer school "The social responsibility of the scientist".
- 2012: "Science and democracy: the dilemmas of scientific research"; the course is organized in collaboration with the Ikerbasque Foundation.
- 2013: "The two cultures and beyond: Science, society and development"; the course is organized in collaboration with the Ikerbasque Foundation.

- 2014: "The science of our lives"; the course is organized in collaboration with the Ikerbasque Foundation.
- 2015: "The demons of science. Science education with conscience"; in collaboration with the lkerbasque Foundation.
- In Autumn 2014, the Chair of Scientific Culture was awarded the special jury prize of Prismas de la Ciencia, consolidating CEI Euskampus as a benchmark for communication and scientific culture in Spain.

International projection:

The Chair projects itself internationally through releasing scientific information by means of its publications and digital material. Thus the blog Mapping Ignorance has more than 80% of its readership from outside Spain; and the blog Mujeres con Ciencia more than 40%. And also with events like Science Plus.

70. "MAPPING IGNORANCE" BLOG

Objectives:

- To carry out first-rate scientific dissemination with experts in their area of research under a "Research Blogging" international standard.
- To strengthen collaboration links between Euskampus aggregation partners and other members of the Basque network of Science and Technology, as well as in the context of the Eurorregional Cross-border Campus with the UBx and its researchers
- To internationalize the science done within the Euskampus aggregation, in the Basque Country and Spain.
- To socialise research.
- To have a ubiquitous presence.

Summary of the work done and role of the aggregation:

- Contracting in the 2012 of a top-class marketing expert to design the blog and later act of editor, curator of content, manager of collaborators and community manager for the deployment and monitoring of the blog in international social networks.
- Establishment of the blog <u>www.mappingignorance.org</u> in 2012.
- The main characteristics of the blog are as follows: in the English language; multi-authored (experts are sought in all fields of science, although it has an editor); publication of weekly summaries of scientific activity, under the title of "MI Selections"; open licence (creative commons) to help the spread of its content.
- Launch of the social networks associated with "Mapping Ignorance" to consolidate the online communication (Twitter, Facebook, Google+)

Most significant results obtained:

- To date, the blog has 64 collaborators, in addition to the researchers invited that have written a single post.
- It has published a total of **589 articles** (167 up until June 2013, 196 in the period July 2013 to June 2014, and 226 between July 2014 and June 2015)
- March 2015 sees the publication of **DIPC channel** each Thursday, devoted to the research done in this centre. It is a regular collaboration in which the editor carries the basic line with occasional collaborations with DIPC researchers.

International projection:

The Mapping Ignorance blog is a key component in extending and socializing the science done in the Euskampus aggregation, thanks to the widespread availability of the internet. In this way, it is a first class benchmark for knowledge dissemination.

	1/1/13-30/6/13	1/7/13- 30/6/14	1/7/14-30/6/15
Pages Views	54,996	185,074	262,123
Unique Users	20,450	107,675	159,930
Pages/Visits	1.63	1.37	1.32

KNOWLEDGE TRANSFER AND INTERACTION WITH THE REGIONAL AND BUSINESS SURROUNDINGS

% outside Spain	49.16%	47.63%	80.76%
Facebook Followers	210	626	1,312
Number of Facebook interactions	133	189	434
Twitter Followers	323	990	2,205
Number of Twitter interactions	1,319	2,908	4,968

71. ORGANIZATION OF INTERNATIONAL EVENTS: PASSION FOR KNOWLEDGE-QUANTUM13

Objectives:

- To organize and host major events with the international figures of science, technology, innovation and culture that have a high impact among citizens and a major international projection.
- To boost the creativity and the scientific vocation of young people and university students offering them the opportunity to have close contact with the leading personalities of the academic, research and innovation world.
- To showcase CIE Euskampus to the leading personalities of the world of science, innovation and culture.

Summary of the work done and role of the aggregation

- The event "Passion for Knowledge Quantum 13" followed up the Passion for Knowledge event held in 2010, celebrating the tenth anniversary of the DIPC with a multi-faceted event that spread passion to people to get involved in research, discovery and the generation of knowledge. The by-line of Quantum13 is inspired by the centenary of Bohr's atomic model which represented a milestone towards the later development of Quantum Mechanics.
- An Organising Committee consisting of 10 people from UPV/EHU, DIPC, Tecnalia, Euskampus Fundazioa, and representatives from other entities, was set up.
- The program included the following activities:
 - A **specialized scientific congress** (the 30th International Brandt-Ritchie Workshop).
 - A cycle of conferences open to the public about quantum mechanics and its implications.
 - Naukas Quantum session that gave the opportunity to listen in person to some of the most distinguished collaborators of the <u>Naukas</u> platform.
 - Three Training Workshops for young researchers. On presentations, communicating knowledge and and valorization.
 - Three **meetings of students with Nobel prizewinners** (see file 72) and other activities aimed at the **educational community of primary and secondary schools**.
 - Nobel Pitch, aimed at young postdoctoral researchers in different areas (biology, physics and chemistry), for a unique session using the "elevator pitch", in which 16 young researchers present their projects in 5 minutes to four Nobel prizewinners (Claude Cohen-Tannoudji, Jean-Marie Lehn, Aaron Ciechanover and Dudley Herschbach).
 - A play, The Interview, co-written by the author Luisa Etxenike and by the DIPC physicist and author Gustavo Schwartz.
 - Leading personalities who will take part in the event: Dudley Herschbach (Nobel prize for Chemistry in 1996), Claude Cohen-Tannoudji (Nobel prize for Physics in 1997) Jean-Marie Lehn (Nobel prize for Chemistry), Juan Ignacio Cirac (Prince of Asturias Prize for Scientific or Technical Research in 2006), Dame Jocelyn Bell Burnell (Dame Commander of the Order of the British Empire), Rafael Yuste (Young Researcher Prize of the Society of Neurosciences), Armand Lucas (Physics), Jose María Pitarke (Physics), Aaron Ciechanover (Nobel prize for Chemistry in 2004), Ginés Morata (Prince of Asturias Prize for Scientific or Technical Research in 2007), Sir John Pendry (Medal of the Royal Society in 2007) or Arantxa UrretaBiscay (Literature).

Most significant results:

The event, held during a week, attracted almost 8,000 people in the three Basque capitals and Pamplona, with almost 5,000 viewing the public conferences, more than 500 students participating in the meetings with Nobel prizewinners, 68 participants in the Brandt Ritchie Workshops, 96 participants in the Nobel Pitch, 176 participants in the training workshops, 1,100 participants in the various parallel events and 910 people watching the play. In addition, there were about 28,000 visits to the event web page, that broadcasted live streaming for most of the sessions. Subsequently, videos of the event have had over 10,000 views. Press coverage includes 47 articles in the local press (with two front page covers of the highest circulation newspaper in San Sebastian), 45 mentions on local radio stations, 5 mentions in the national media and a host of others on national radio stations. In addition, there were more than 100 interviews with participants and 12 appearances on television.

International projection:

The international impact of the event, in addition to getting to know the personalities in the scientific fields presented, is measured by its impact within the press, with two articles in the international press and a mention on international radio, as well as the hashtag used in social networks reach, which was viewed more than 8 million times.

72. MEETINGS WITH NOBEL PRIZEWINNERS: TOP@DIPC

Objectives:

- To awaken passion for knowledge in present and future society.
- To drive vocation towards technological and scientific learning, to ensure that young students embrace that passion for knowledge.
- Internationalization of Euskampus by means of attracting first-rate researchers that have a presence in the foreign and national press.

Summary of the work done and the role of the aggregation

- Holding the TOP@DIPC event since the year 2009 (meetings between fourth year secondary school and Baccalaureate students with top scientists), organized the DIPC, the UPV/EHU and Euskampus Fundazioa:
 - The guest researchers speak about their passion for science and research and answer the students' questions on their life experiences and experiences accumulated during their professional careers.
 - The meeting is re-broadcast using the mechanism of streaming from the DIPC website so that it can be followed from education centres.
 - The meetings encourage close contact between students and researchers, to allow oneto-one discussions.

Most significant results:

Attendance of more than 300 students from 62 educational centres in each one of the different events.

- **2009**: guest appearance of Sir Harold Krotto (Nobel prize for Chemistry in 1996) and Heinrich Röhrer (Nobel prize for Physics in 1986).
- Year 2010: four meetings with the guest appearances of Claude Cohen-Tannoudji (Nobel prize for Physics in 1997), Dudley Herschbach (Nobel prize for Chemistry in 1996), Heinrich Röhrer (Nobel prize for Physics in 1986), Frank Wilczek (Nobel prize for Physics in 2004), Ada Yonath (Nobel prize for Chemistry in 2009), Sir John Pendry (Medal of the Royal Society in 2006), Jean-Marie Lehn (Nobel prize for Chemistry in 1987), Robert S. Langer (Prince of Asturias Prize for Scientific and Technical Research in 2008), Roald Hoffmann (Nobel prize for Chemistry in 1981), Theodor Hänsch (Nobel prize for Physics in 2005), Richard Ernst (Nobel prize for Chemistry in 1991), Sylvia To. Earle (Time Magazine First Heroine of the Planet), Luis of Pablo (Honegger Prize), Juan Ignacio Cirac (Prince of Asturias Prize for Scientific or Technical Research in 2006) and Bernardo Atxaga (included in the 21 Top Writers List by The Observer).
- **2011**: guest appearances of Claude Cohen-Tannoudji (Nobel prize for Physics in 1997), Albert Fert (Nobel prize for Physics in 2007) and Juan Ignacio Cirac (Prince of Asturias Prize for Scientific or Technical Research in 2006).
- **2012**: For the first time this was held in Bilbao with the guest appearances of Aaron Ciechanover (Nobel prize for Chemistry in 2004), Sir Tim Hunt (Nobel prize for Physiology or Medicine in 2001) and Ginés Morata (Prince of Asturias Prize for Scientific or Technical Research in 2007).
- 2013: it was held in the three Basque capitals, to coincide with the science festival Passion for Knowledge: Quantum13 (see file 71). It featured the guest appearances of: Claude Cohen-Tannoudji (Nobel prize for Physics in 1997), Dudley Herschbach (Nobel prize for Chemistry in 1996), Juan Ignacio Cirac (Prince of Asturias Prize for Scientific or Technical Research in 2006), Aaron Ciechanover (Nobel prize for Chemistry in 2004), Sir John Pendry (Medal of the Royal Society in 2007), Dame Jocelyn Bell-Burnell (Dame Commander of the Order of the British Empire) and Rafael Yuste (Young Researcher Prize of the Society of Neurosciences).

- **2014**: there were two meetings, one in Donostia with the guest appearances of Albert Fert (Nobel prize for Physics in 2007) and Elena Cattaneo (Italian Republic Prize for Medical Sciences in 2001) and another in Bilbao with the guest appearances of Claude Cohen-Tannoudji (Nobel prize for Physics in 1997) and Juan Ignacio Cirac (Prince of Asturias Prize for Scientific or Technical Research in 2006).
- **2015** (to be held on 20 October) in Bilbao with the guest appearances of Rafael Yuste (Young Researcher Prize of the Society of Neurosciences) and David Wineland (Nobel prize for Physics in 2012).

International projection:

Knowledge and recognition of the Euskampus aggregation by top international researchers, with coverage in the local, national and foreign press.

The scientific personalities are ambassadors for the scientific activity done by the Euskampus aggregation, and become opinion formers for our centre on an international scale.

73. PROMOTION AND COLLABORATION WITH THE ARTISTIC AND CULTURAL ENVIRONMENT

Objectives:

Promote a close collaboration of the Euskampus aggregation entities with partner-cultural bodies in the artistic field that allow the University to improve connection with the region, to set up coordinated activities and improve the visibility of the cultural and artistic performances in the Basque Country at a European and international level.

Summary of the work done and the role of the aggregation

Both the UPV/EHU and other members of the Euskampus aggregation have been positioned as an art and culture action facilitator both locally and in Europe, by fostering innovative measures in a coordinated way between relevant entities and stakeholders.

In this field the most important action has been to set up the Knowledge Hub AUSART (file 33). This Knowledge Hub was open to ideas from the beginning, participating with the region's distinct cultural and artistic bodies, as well as researchers from the Euskampus aggregation. The aim of AUSART is to have an impact beyond academia, cultivating and inspiring a global vocational community formed by creative bodies inside and out of the university, of the DIPC and Tecnalia. A big part of AUSART meetings and interviews are done outside the university, looking for direct contact with cultural and artistic bodies in their own domains as an exercise in opening up and using cross-cutting skills. Clear examples are the participation of Donostia2016 - DonostiaKultura, Bilbao Museum of Fine Arts, Artium in Vitoria, Alhondiga, UPV/EHU Classrooms of Experience, or the company Maier.

Nevertheless, in parallel they have carried out important activities in connection with the cultural and artistic surrounding:

- Driving a European project for the DG Enterprise Call for entries European tourist routes.
- Call for projects for the Bilbao Maritime Museum.
- Participation in the Trans-disciplinary Forum.
- Participation in the Congress"Imaginary Earths".
- Participation in the II Desktop Hybridization in the deanery of Fine Arts.
- Participation in setting up a proposal to create a Centre of Cooperative Research promoted by the Euskampus aggregation in the field of creative and cultural industries, named Kulturgune.
- Cultural and artistic collaborations with Beijing University.
- Collaboration with the Basque Audiovisual Cluster.
- Grants for on-line courses: Making a living from art. Strategies of management, promotion and finance for artists in the art market.
- Collaboration with Lafa Crea (Laboratory of Creative Manufacturing) and Basque Fab Lab in the organisation of the Informal workshop 3D printing.
- Supporting the organization of KULTURBASQUE in the framework of the UPV/EHU Summer School Courses.
- Art-science workshops within the aggregation boosting the communication between disciplines in the world of art, and those in science in order to generate hybrid contexts.
- Collaborations with BBVA for the organisation and participation of art-science conferences open to the public.
- The Blends Program, organised by the DIPC and the UPV/EHU: Every year, an international meeting on literature and science is organized, attended by prestigious writers and scientists.

Most significant results:

This type of activity presents a big look into the future, and the first steps to consolidate the artistic and cultural activity of the Euskampus aggregation entities as one of the most effective ways to connect and collaborate with bodies within the region. In particular, the following results

stand out.

- A improvement in the participation of aggregation entities in projects coordinated with local stakeholders, promoting the definition of art-science collaborations.
- Strategic visits made to stakeholders in the field of culture and art in the Basque Country and defining strategic collaboration areas.
- Launch of AUSART, a Knowledge Hub acting as a Laboratory of Creative Processes open to the participation of different stakeholders in the region, both cultural and artistic.

International projection

The activity and university capabilities in the artistic field and the art and science connections between the different members of the Euskampus aggregation, and between them and other Basque Country cultural and artistic stakeholders, are an asset for the consolidation of the Basque Country RIS3 priority area as a niche of opportunity for innovation and internationalization.

At the same time, they have identified and established contacts with prestigious European universities in the field of creativity and culture, that allow the promotion of joint collaboration projects in culture and creativity.

74. CIE EUSKAMPUS COMMUNICATION POLICIES

Objectives:

- To showcase CEI Euskampus at regional and international level.
- To deploy a strong digital identity and presence, that makes a connection with the region and leverages internationalization for CEI Euskampus and its strategic partners.

Summary of the work done and role of the aggregation

- Establishment of a strategic brand and a coordinated dynamic between the UPV/EHU, Tecnalia, DIPC and Euskampus Fundazioa communication teams for the development of CEI Euskampus communication activities.
- Development of communication and dissemination support mechanisms: on-line community, web page, IPTV,...
- Development and/or management of content in different formats (news, events, videos, etc) to feed the different communications' media.
- Creation of a unique identity for the CEI project, its lines of specialization, the Euskampus knowledge hubs and the Euro-regional Campus of Excellence (see sheet 76).
- Establishment of mechanisms to monitor Euskampus communication activities (qualitative and quantitative indicators).
- Organisation of Science and Scientific Culture awareness and dissemination events focused on different types of public, improving collaboration from the aggregation.
- Communication activities with CEI partners:

Most significant results obtained:

- UPV/EHU Use and Style Guide for social networks (see file 75).
- Production of communications materials for the Akademia Program (see file 13).
- Publicity release of the meeting of secondary school students with Nobel prize winners. top@dipc (see file 72).
- Set up blogs for spreading science (See file 70).
- Design of logos for each of the knowledge hubs and Euskampus specialist areas.
- Production of CEI Euskampus communications materials: brochures, , computer graphics, photo resources, banners, posters, etc.
- Production of various explanatory and informative videos on the knowledge hubs.
- Organization of a conference entitled "Tips to a Young Scientist" by Pedro Miguel Echenique.
- Establishment of Newskampus (Foundation newsletter).
- Creation of the identity of the Euro-regional Campus of Excellence. Set up of the Facebook page and the web page (see file 77).
- Production of 4 videos to share Science: "<u>Science in the First Person</u>", spread through blogs and webs of scientific exposure, the outlets and channels of the UPV/EHU or the Foundation itselves, and the EiTB (Basque public television channel).
- Organisation and communication of the science festival Passion for Knowledge Quantum13 in September-October 2013 (see file 71).
- Organisation of the First Bordeaux-Euskampus Symposium. Coordination with the communications team of University of Bordeaux (UBx) for the communicative elements: web pages, social networks, other mechanisms (see file 26).
- Organisation of the Second Bordeaux-Euskampus Symposium, to be held in November 2015.

International projection:

Identity and digital presence as a vector of internationalization, and a key to extending and socializing the CIE project to build a ubiquitous campus of excellence.

The deployment of a digital identity guarantees the participation of anyone, from anywhere, which multiplies the benefits and causes it to be an excellent platform for improvement and innovation.

75. USAGE AND STYLE GUIDE TO SOCIAL NETWORKS

Objectives:

- Improvement of the UPV/EHU's digital identity and that of Euskampus partners.
- Deployment of an identity and powerful digital presence that helps to connect with the region and that is a lever for internationalization.
- Provide immediate answers to users.
- Redirect users to the corporate website or portal.
- Facilitate the creation of subject networks to generate important and complementary knowledge that allows the institution to understand the interests of users at first hand.

Summary of the work done and role of the aggregation

- Completion of a preliminary report, auditing the state of the social networks of the University, its departments and centres, and establishing a benchmark.
- Establishment of an editorial team for the guide.
- Adaptation of the Basque Government Usage and Style Guide in social networks to the needs of UPV/EHU social networks.
- Drafting of the Guide.
- Standardization of accounts in social networks for the different centres, departments and areas of the University.
- Publication of the Guide in open format and in downloadable pdf format (bilingual edition).
- Presentation of the Guide and training to responsible personnel and/or the social network managers of the various UPV/EHU centres, including a number of sessions with members of the Euskampus aggregation (DIPC, Nanogune).
- Creation of social networks channels in the DIPC.

Most significant results:

- Publication of the <u>Usage and Style Guide to social networks</u>, using the new branding within the UPV/EHU Strategic Communication Plan 2012-2015.
- Implementation of the UPV/EHU Usage and Style Guide in social networks, with training sessions for the managers and controllers of the various university social networks and of the other members of the aggregation.

International projection:

A better presence in social networks reinforces Euskampus aggregation's international projection, through a better brand recognition and brand awareness, as well as a better interaction with users.

76. PROMOTION OF THE EUSKAMPUS-BORDEAUX EURO-REGIONAL CAMPUS OF EXCELLENCE

Objectives:

- Generate understanding of the Euskampus- Bordeaux euro-regional campus of excellence, promoting its actions, events and projects:
 - Design of a shared common identity in the context of the Euro-regional campus of excellence.
 - Visibility of actions and projects.
 - Creation of an on-line community.
- Move from the sum of the two Universities (UPV/EHU and University of Bordeaux), and their
 respective aggregations to the aggregation of the two Campuses of Excellence (Euskampus and
 IdEx Bordeaux), giving the alliance its own common identity, as much analog as digital.

Summary of the work done and the role of the aggregation:

- Establishment of a strategic framework and a coordinated dynamic between the IdEX Bordeaux and Euskampus communication teams to develop Euro-regional Campus Bordeaux-Euskampus communication actions.
- Establishment of planning and consensus mechanisms relating to the shared publications in the on-line community.
- Guiding and managing the communication actions of each of the activity lines within the Euroregional Campus Bordeaux-Euskampus Action Plan.
- Establishment of mechanisms to monitor communication actions.
- Harmonization of UPV-EHU and IdEx Bordeaux own content to unify previous styles to the benefit of the on-line Community

Most significant results:

- Defining the joint communication policies (January 2013).
- Developing an identity for online presence (March 2013).
- Developing a contents page for bilateral publications (April 2013).
- Putting the Facebook page into operation, (May 2013).
- Putting the www.ehubaq.eu web page into operation, (July 2013).
- Internal and external communication of the First Euskampus-Bordeaux Symposium (held in Bordeaux in November 2014).
- Defining the joint communication policies (February 2015).
- Internal and external communication of the Second Euskampus-Bordeaux Symposium that will be held in November 2015 in Donostia-San Sebastián.
- Presenting the project at international and regional thematic events, along with potential partners and foreign delegations (EU, Brussels Latin America).

International projection:

Consolidation of the image of the Euskampus-IdEx Bordeaux Euro-regional campus of excellence as a key component within the Aquitaine-Euskadi Euro-region, and the European Atlantic axis.

The shared digital identity is a lever for internationalization for the two universities and their strategic alliance.

77. EURO-REGIONAL CAMPUS, KNOWLEDGE TRANSFER AND INTERACTION WITH THE ENVIRONMENT

Objectives:

- Boost joint actions of adding value and knowledge transfer at an international level with direct repercussions on the Aquitaine-Euskadi Euro-region (EAE).
- Collaboration within the Aquitaine-Euskadi Euro-region itself to:
 - Define and establish agendas and innovation ecosystems around the boundaries of the Euro-region.
 - Define the Euro-region intelligent specialization strategy (RIS3) from the respective RIS3 strategies of Aquitaine and the Basque Country.

Summary of the work done and the role of the aggregation:

- Contribution to the Aquitaine-Euskadi Euro-region Strategy 2014-2020 and to the development
 of euro-regional policies and initiatives:
 - Participation in the design of the 2014-2020 strategic plan for the Aquitaine-Euskadi Euroregion (focus group, interviews, contributions to the document).
 - Work to lobby and position for recognition the Euro-regional Campus as one of the engines of Aquitaine-Euskadi Euro-regional politics in regard to the "Knowledge economy, Innovation and Business Competitiveness" (area 2 of the 2014-20 Strategy) and as a key driver for the intelligent specialization strategy (RIS3) of the 2 regions.
 - Active participation of partners and members of the Euro-regional Campus in different crossborder days in key sectors of the economy of the Aquitaine-Euskadi Euro-region (biohealth, aging, etc.): design days, mobilization of speakers, production of papers, etc.
 - Work to position Euro-regional Campus partners in the KIC.
 - Active paper on the management of partnerships that responds to the sector challenges within the strategic plan 2014-2020:
- Entrepreneurship:
 - Contracting a person for IdEX to promote dynamic cross-border activity, in active collaboration with the Euskampus Fundazioa team, to promote the core area of entrepreneurship to students.
 - Collaboration among the programs which foster entrepreneurship for the cross-border dissemination of their awareness raising and training actions for students and teaching staff: competitions, seminars, summer courses.
 - Work meeting between research groups in pedagogy of entrepreneurship and drafting lines of work of interest in research and in training students and teaching staff.
- Valorization and knowledge transfer:

Meetings between the valorization and knowledge transfer agencies of University of Bordeaux (Aquitaine Science Transfert), UPV/EHU (UNIVALUE) and Tecnalia Ventures, in order to define a key Euro-regional roadmap (priorities and strategy of support strategies for undertaking actions).

Most significant results:

- Designation of the Euro-regional Campus as a priority project within the strategic Plan 2014-2020 of the Aquitaine-Euskadi Euro-region. For his implementation, an Agreement has been established between the Euro-regional Campus and the Aquitaine-Euskadi Euro-region that establishes the basis for the development of the Campus in the framework of the strategic line *"Knowledge economy, Innovation and Business Competitiveness"* (one of the 4 core areas of the Plan).
- Signing of an agreement for collaboration priorities between the Euro-region and the partners of the Euro-regional Campus to support and fund a series of projects included in the action plan of the Campus (1 year, 20,000 euros).

- Participation of cross-border groups of students and young companies in open days, entrepreneurship workshops and innovation seminars, awareness of entrepreneurship culture/sense of initiative and training in business models.
- Creation of 3 partnerships that answer sector challenges within the 2014-2020 strategic plan:
 - Biohealth: Contribution to the action plan launched in May 2015, derived from the Chronicity Valley Memorandum of Understanding signed in December 2014 between the regional governments of Aquitaine and the Basque Country. This plan has a series of projects around long-term illness, aging and fragility capitalizing on Euro-regional experience and partnerships between University, public health and industry, all coming together for the preparation of the LifeKIC proposal for the KIC of Active Aging and Healthy Life.
 - **Aeronautical**: European project raised with Airbus (partner of University of Bordeaux) that has been made a partner of Euskampus).
 - **Agriculture and agro-food industry:** double degrees of Masters in oenology and Masters in planning finances (with modules on wine economics), etc.
- Organization of BASKRETE Open Days (Basque Country Initiative for Cement and Concrete Research: joint initiative by the UPV/EHU, the CFM (Materials Physics Centre-CSIC-UPV/EHU), the DIPC and TECNALIA with the double mission to coordinate efforts to raise the level of the Basque Country in nanosciences and nanotechnology of cement materials); Open Days held in 2012 and 2013 in San Sebastián with the following world-wide market leading companies in this sector: Cemex, Lafarge, Italcementi Group and Bozzetto Group.

International projection:

- Strengthening the relationship between BASKRETE and the ICMCB centre (Bordeaux Institute
 of Condensed Matter Chemistry CNRS) integrated in the Amadeus LabEx (Science and
 Technology of Materials) of University of Bordeaux, with the objective to transfer high
 technology knowledge to companies. To do this, a collaboration program with industrial
 members of the Euroregion and other parts of Europe has been established.
- Incorporation of the University of Bordeaux and Aquitaine-Euskadi Euro-region partners in the definition and presentation of the KIC proposal of Active Aging and Healthy Life.
- As a consequence of this, relationships have been strengthened between the Euro-regional Campus entities and the Aquitaine-Euskadi Euro-region that helps joint work on European projects in the field of Active Aging and Healthy Life.
- The KICs and the European projects are becoming backbone elements for scientific collaboration of excellence and of knowledge transfer within the Euro-regional Campus.
- The active participation of the Euro-regional Campus in the dynamics of institutional Euroregional politics has a levering effect in the international positioning of the project.

TRANSFORMATION OF THE CAMPUS TO DEVELOP AN INTEGRATED SOCIAL MODEL

78. UNIVERSITY SOCIAL RESPONSIBILITY REPORT

Objectives:

To take responsibility as an institution committed to society, contributing:

- to the improvement of quality of life, in terms of social inclusion and cohesion with the local community,
- to the sustainable economic development of its area of influence, participating actively in the search for solutions to the social, cultural and environmental challenges in the Basque Country.

Therefore, one of the specific objectives defined is the preparation of a University Social Responsibility (USR), report that will updated annually.

Summary of the work done and the role of the aggregation:

- During the first half of 2013, the first USR report was prepared.
- Various interest groups participated in the preparation of the report:
 - Students, Academic and Research Staff, Administration and Services Staff.
 - Society: Public Administration, Civic Society and Associations, Suppliers, Companies and Institutions, Social Council, Trade Unions.
- The report pays special attention to three aspects that the UPV/EHU considers to be priority:
 - Commitment to training and teaching;
 - ✓ Commitment to research and knowledge dissemination;
 - ✓ Commitment to the workforce.
- On the other hand, the UPV/EHU has started to develop the Sustainability Communication and Interaction Web Platform in order to gather information on relevant aspects of sustainability and foster the participation of the university community.

More significant results

- Production of the first USR report by the UPV/EHU.
- Follow-up, review of the scope and update of the report via a process of participation with all the agents involved.

International projection:

The University Social Responsibility Report is projected internationally as an example of best practice through forums and seminars.

The UPV/EHU is working with University of Bordeaux, in the framework of the Euro-regional Campus, in the exchange of best practice in social responsibility (see file 87).

79. EQUALITY OF WOMEN AND MEN

Objectives:

To introduce an integrated approach to gender - the equality of women and men- in all university activity. The intent is to :

- integrate the perspective of gender in the generation and transmission of knowledge;
- guarantee the equality of treatment and opportunity;
- show the UPV/EHU's commitment to equality.

Summary of the work done:

After the completion of the UPV/EHU's First Equality Plan for women and men (2010-13), work continued on to the preparation and implementation of a Second Equality Plan (2014-17), through 4 core intervention areas: Teaching; Research; Socio-labour relationships and Social projection of the University

Most significant results:

- Improvement in communication and awareness within the university community through the exchange of equality experiences.
- Greater coordination between different agents (equality committees) and people to take common equality actions throughout the UPV/EHU.
- Improve the standard use of non-sexist language in university activities.
- Make equality a normal part of academic activities.
- Promotion and visibility of gender perspective in research, as well as gender and feminist research.
- Inclusion of parity clauses in personnel selection processes and making these effective in selection boards.
 - o Increase in the visibility of women in university areas:
 - María Goyri Centre for Animal Biotechnology,
 - Martina Casiano Neurosciences Centre,
 - Micaela Portilla Research Centre Ikergunea
 - Elbira ZipitriaTraining Centre.

International projection:

The Equality Directorate promotes international projection:

- speakers with teaching and professional backgrounds in international fields;
- grants to doctoral students for participation in open days, congresses and international events;
- spread of acknowledgements and prizes for women trained in the UPV/EHU and exercising their profession abroad.

80. SUSTAINABILITY PLAN

Objectives:

To address Sustainability from a global perspective, focusing on management, teaching, research and raising awareness in the university community.

Summary of the work done:

- Deploy the UPV/EHU Sustainability Rin order to:
 - improve environmental management,
 - drive research based on sustainability criteria and education extension in sustainability,
 - communicate in matters of environmental sustainability.
- Creation and deployment of the Office of Sustainability, which has the following fields of activity:
 - Acts as a service unit for the university community, supported by other directly-related university structures.
 - Advises and offers training to academic staff to incorporate sustainability into educational practice, and university commitments to sustainability into the educational curriculum.
 - Gives technical advice to university centres and structures for the implementation of systems of improvement of environmental management.
 - Prepares, edits and disseminates sustainability support material.
 - Coordinates awareness programs and campaigns directed at the university community and society in general.
 - Coordinates environmental education actions promoted by other entities and social agents.
- Development of the Sustainability Communication Plan.
- Implement a Web Platform for Interaction and Communication on Sustainability in order to respond to the university community.
- Presentation of the first Sustainability Report.
- Calls for providing grants for sustainability innovation.
- Active participation in the sustainability curriculum group of the Sectoral Commission of Sustainability of the Conference of Rectors of Spanish Universities.

Most significant results:

- Improvement in the number of centres that include improvement processes in their environmental management, rising from 40% to 100%
- Greater awareness within the university community.
- Greater communication and awareness by the university community of the environment impact
 of their activities, through the exchange of lessons learnt in Sustainability (in teaching, research
 and management).

International projection:

- Participation in the <u>Copernicus Alliance</u>, a European Higher Education network for sustainable development. This network promotes the role of Sustainable Development in European Higher Education to improve education and research in sustainability in collaboration with wider society.
- Participation in the <u>Erasmus Project University Network called University Educators for</u> <u>Sustainable Development</u>. This has a duration of 3 years and includes the participation of 54 European upper education institutions. . Its aim is to train academic staff in matters of Sustainability Education.

81. SUSTAINABLE MOBILITY

Objectives:

To enhance the mobility patterns of the university community by opting for more efficient, equitable, sustainable and safer means of transport.

Summary of the work done and the role of the aggregation:

- Diagnosis of mobility and accessibility around the campuses in order to foster public transport and rationalize the use of private vehicles by means of fostering *car pooling* and restrictive policies regarding the parking of private vehicles.
- Encourage the use of more sustainable travel solutions to and from the three campuses of the university, by means of collective, particularly public transport.
- Promoting the soft modes of transport (cycling + walking) for the journeys between the campus and its urban environment and for within the campus.
- Development of the project "Car Share" in the 3 UPV/EHU campuses, helping people get in touch with each other to share private vehicles for access to the campuses. The aims of the project are:
 - To provide the university community with another travel alternative, taking into account the mobility and sustainability actions.
 - To reduce the pollution and energy consumption caused by private vehicle use.
 - To improve the use of public space.

Most significant results:

- Collaboration with the City councils of Bilbao, San Sebastián and Vitoria-Gasteiz as well as with the Provincial Councils, to favour mobility using public transport for the university community.
- Promotion of the cycle routes for access to the campuses and associated elements like the improvement, adaptation and enlargement of cycle parks in the three UPV/EHU campuses.
- Consolidation of the "Car share" program, giving priority to High Occupation Vehicles in parking within the university.
- Implementation, development and improvement of the "Sustainable Campus" website.

International projection:

The UPV/EHU policy of sustainable mobility, in collaboration with the City councils and the Provincial Councils in which the campuses are located, improves international projection as an example of best practice and a distinguishing feature of the institutional collaboration between the UPV/EHU and the administrations to create more sustainable and healthy urban surroundings and work practices.

82. OCCUPATIONAL HEALTH AND SAFETY PLAN

Objectives:

Deploy in its entirety the concept of Healthy University, incorporating the promotion of the health and the prevention of labour risks in its educational and social project, in order to improve the quality of life of the university community and to project to both the region and internationally a reference model.

Summary of the work done:

- Deployment of the health and safety plan.
- Preparing Prevention Management System processes.
- Monitoring the correction actions and improvement actions for each of the spheres of prevention and integration within the general management system of the University:
 - Risk assessment;
 - Personal protection equipment and work clothes;
 - Safety Inspections;
 - Follow-up of preventive actions;
 - Emergency Management;
 - Investigation of accidents, incidents and workplace illnesses;
 - Grave and imminent risk;
 - Monitoring the health of the workforce:
 - Product acquisition:
 - o Training;
 - Coordination of business activities;
 - Health and safety in design and construction projects:
 - Risk prevention in research activities and teaching; Communication and information.

Most significant results:

- Extending the training in prevention, mediation and cutting psycho-social risks to the whole university community.
- Contributing to the comprehensive training of the students, opening up the possibility of generating new teaching activities under the Healthy University concept.
- Improvement of non face-to-face training and information systems in regard to risk prevention (Videos and on-line courses).
- Expanding the campaigns which raise awareness and communicate the culture of risk prevention, to the whole university community, particularly students, with the collaboration of the Prevention Service.
- Producing a prevention training route for each type of workplace, with an emphasis on doing risk assessments for activities.
- Installation of semi-automatic defibrillators in all UPV/EHU buildings, and training research, training and technical staff allowing the creation of a healthy heart space in the surroundings of the university.

International projection:

The occupational health and safety plan is also incorporated in the Induction Process for international researchers arriving at the UPV/EHU, as a best practice of internationalization.

83. NEW SPORTING FACILITIES

Objectives:

Enlargement of the sporting facilities on the UPV/EHU Gipuzkoa Campus as part of its strategy to offer the university community a set of physical and training activities that help improve quality of life, health, relationships and experiences for the training and the development of people, with the desire to offer a quality service.

Summary of the work done:

Construction and adaptation of the sporting facilities on the Gipuzkoa Campus of incorporating a multipurpose track, tennis courts and paddle tennis courts as well as a changing area.

Most significant results:

- The new Gipuzkoa Campus sports facilities came into operation in December 2012.
- Access control and its dynamic function is the responsibility of an external company, contracted to run this function after a competitive bidding process.
- The cost for university personnel to use the facilities is nominal.
- Funding for the new facilities has been carried out by the Social Work of Kutxa KUTXA Foundation. The Kutxa Banking Foundation is linked to KUTXABANK, the financial institution that owns the Euskampus Fundazioa. In consequence, the project is a clear demonstration of the involvement of all the aggregation entities in the CIE Euskampus project.

84. SOCIAL STRUCTURING IN THE URBAN ENVIRONMENT

Objectives:

- To improve accommodation opportunities for the university youth, offering low cost places to live.
- To foster civic culture, by means of the integration and participation of the graduates in the life of the district, by sharing social and eco-sustainable mainstream values and habits of grassroots coexistence.
- The complementary nature of university education with social and community responsibility.
- To enable practical professional experience to be acquired in the field of socio-community mainstreaming and intervention, and citizen participation, in conjunction with municipal neighbourhood regeneration plans.

Summary of the work done:

- Setting up the program <u>"Bilbao Municipal Housing"</u> for the university youth that have more trouble getting somewhere to live in the free market, because of their social or economic situation.
- The program is sponsored by the UPV/EHU and Bilbao Municipal Housing, with the support of the European project <u>REHABITAT</u>, that looks to improve the city, its space and living together, associated with public housing.
- The program is directed at university students doing postgraduate courses that are looking for place to rent, sharing it with other UPV/EHU graduates and who wish to collaborate in community projects and in the support to vulnerable communities in the program's target neighborhoods.
- The basic condition for all participants in this program is the firm commitment to take part in socio-community intervention municipal plans, aimed at bringing life to these neighborhoods.
- The program is for people aged up to 35 years; they must be enrolled on a UPV/EHU postgraduate course. If this is a second postgraduate course, they must gain at least 80% of the credits of the first course.

Most significant results:

- In academic year 2013-14 a total of 14 flats were allocated to the Program at a symbolic price of 50 euros per person per month. A total of 38 students would benefit from this initiative.
- In academic year 2014-15 the number of students increased to 45, and the monthly rent to 55 euros.
- The project shows, once again, the involvement of the City councils in the CIE Euskampus project.
85. UNIVERSITY ACCOMMODATIONS

Objectives:

To develop an accommodation policy in order to achieve the following objectives:

- Increase the percentage of accommodation provided by the University itself.
- Improve existing housing conditions in terms of quality, services and price.
- Attract a greater number of students that currently travel in daily so that they can live within the campus and avoid too much low sustainable mobility.
- Make use of the time spent travelling to do academic activities or improve social relationships.
- Improve university life in the Campus and in the city.
- Help research staff attached to UPV/EHU R&D groups (IkerBasque, RyC, or similar) to find accommodation.

Summary of the work done:

- An analysis-based diagnosis of accommodation needs for the students and researchers attached to the UPV/EHU.
- Definition of the Action Plan.
- An increased number of university residences, achieved by constructing and operating new residences.
- Preparation of a Program for students to live together with older people.

Most significant results:

- Enlargement of the university residence of Donostia-San Sebastián that has provided 130 new places to live, both in individual self-contained units and in individual units with shared kitchen.
- Construction of a new university residence for researchers by the City council of Donostia-San Sebastián:
 - The residence has 80 apartments ranging in size from 52 to 65 square metres².
 - The residence has allowed the city to re-position itself within the scientific world as an attractive place for talented researchers.
 - This is more than just a residence, as it offers a comprehensive reception service that could also act proactively to find new ways to attract research talent and to help people get used to the area, mix with the community, work efficiently and link up with other researchers within the city.
 - To achieve this, the Donostia-San Sebastián Research Reception Project (Talent House) is being developed in collaboration with the three entities of the Euskampus aggregation. The main aim of the project is the creation of a "one-stop shop" that welcomes researchers arriving in the city, does all the processing and meets all their needs.
- The co-existence program is about students living with old people, whether single or with a
 partner, with the aim of keeping to these older people in their own homes and surroundings for
 as long as possible in the best possible conditions. The program is run in collaboration with the
 city councils of Donostia-San Sebastián and Vitoria-Gasteiz and could be extended to other
 municipalities.
- The project shows, once again, the involvement of the City councils in the CIE Euskampus project.

International projection:

The university accommodation policy aims, inter alia, to attract and welcome international researchers to work in R&D groups belonging to UPV/EHU, DIPC and Tecnalia.

86. DEVELOPMENT COOPERATION

Objectives:

To consolidate Development Cooperation as part of the UPV/EHU comprehensive social model in an international context.

Summary of the work done:

- Consolidation of the UPV/EHU Office of Development Cooperation.
- Signing of Agreements to promote Development Cooperation in the international field in collaboration mainly with Universities and Cooperation Foundations.
- Signing of agreements with regional institutions and social entities, to promote collaboration in programs of knowledge transfer, exchange and cooperation in the educational and research field.
- Calls for Subsidies for University Development Cooperation Projects and Activities in the international field and for University Education Development Projects for University Associations.
- Organization of Day events for the university community relating to Cooperation and Education for Development.
- Calls for grants for University Placements and Bachelor Thesis in international Development Cooperation.
- Enlargement of the program of university placements and Bachelor Thesis in Development Cooperation.
- Foster active solidarity and volunteering between people within the university community, especially between students.
- Improve the IT tools aimed at Development Cooperation as an information exchange system, and a forum to raise awareness and for discussion.

Most significant results:

- 12 full years of Practicals and Theses in Development Cooperation, involving 848 students doing placements in 23 different countries in Latin America, Africa and Asia.
- 45% of UPV/EHU centres took part in development cooperation projects in their formal training in academic year 2014/15.
- The number of students that devote 0.7% additional of their registration fees to university development cooperation multiplied by 2.5 between the years 2010 and 2015: from 2,367 to 5,994 students.

International projection:

Development Cooperation is a clear component of internationalization in a variety of fields:

- Through the international projection of the Euskampus Social Model.
- Through the internationalization of placements and theses in Development Cooperation.
- Through University Development Cooperation Projects and Activities that are themselves projects in the international field.

87. EURO-REGIONAL CAMPUS AND TRANSFORMATION OF THE CAMPUS TO DEVELOP A COMPREHENSIVE SOCIAL MODEL

Objectives:

- To develop a Sustainability Policy for the Euro-regional Campus.
- To assume university social responsibility as a Euro-regional Campus that engages within its area of influence.
- To improve student participation in the clear-cut boundaries of the Euro-regional Campus.

Summary of the work done and the role of the aggregation:

- Work sessions to design a "sustainable" campus to the scale of the Euro-regional Campus based on the University of Bordeaux "Green Campus" project and the UPV/EHU's Social Responsibility Policy.
- Organization of a session entitled "University Social Responsibility and Initiative and university life of students" in the framework of the first Bordeaux-Euskampus Symposium (see detail in file 19) with the two universities' managerial and technical teams from this field of work:
 - Presentation of the institutional organization and projects under way in order to look for synergies.
 - Presentation of the UPV/EHU's IKD GAZtE experience and how it might be possible to share lessons learnt in the field of the initiative and the university life of the students
 - Meetings discussing the organization of student governance and its implications for participation in the university life.
 - Discussion around promoting another type of participation that rests on techniques of design for users.

Most significant results:

- Exchange of experiences in the field of student participation
- Promotion of collaboration between student associations and forums for doing joint projects.
- Exchange of knowledge and experiences between directors of the two campuses of University of Bordeaux and the UPV/EHU, specifically on implementing quality systems, buildings improvement, waste management, awareness campaigns, etc.

International projection:

Development of a social model with relevance throughout the Aquitaine-Euskadi Euro-region by the Euro-regional Campus, that can be transferred and exported to other geographic areas (Europe, Latin America, East Asia and North America) with which both universities collaborate.