Progress summary 2012-2013

BKC Barcelona Knowledge Campus
Campus of International Excellence

SEPTEMBER 2013
INTRODUCTION

During the reporting period 2012-2013, the Barcelona Knowledge Campus – a strategic alliance of the Universitat de Barcelona (UB) and the Universitat Politècnica de Catalunya (UPC) supported by the Barcelona City Council, the Spanish National Research Council and the Barcelona Chamber of Commerce, Industry and Navigation – has carried out an intensive programme of actions aimed at consolidating the international presence of the Campus, through the opening of BKCnet sites in China, Brazil and the USA and participation in 39 Erasmus Mundus projects. A broad selection of activities has also been carried out in each of the BKC’s areas of specialization, its priority “Initiatives”.

Progress in the configuration of governance and management structures, with the creation of the Scientific Advisory Committee (CCA) and the Advisory Committee of the International Doctoral School (CAEDI), has fostered greater involvement of the research community in BKC activities, through participation in specific projects related to talent attraction and the promotion of doctoral programmes with particular international relevance.

Actions aimed at improving BKC installations and facilities to ensure full compliance with EHEA requirements have now been completed, and major acquisitions of scientific equipment have also been concluded, with improvements to IT and technology infrastructures and social spaces (virtual classrooms, multipurpose laboratory, collaborative study areas, etc.).

A special focus has been placed on activities with a specific impact on the local surroundings (ERN Natural Resources Centre in Berga, Gaudí-Güell Pavilions, sports facilities, etc.) and those involving closer interaction with centres forming part of the national vocational training system. Efforts to promote knowledge transfer and entrepreneurial activities, in particular the offer of business incubation services at a variety of levels, have led to ground-breaking achievements, including the creation of Dapcom-Data Services SL, the first joint UB-UPC spin-off.

In the area of BKC membership, this reporting period has seen the formal integration into the Campus framework of the Faculty of Mathematics of the UB and the Castelldefels School of Telecommunications and Aerospace Engineering and Barcelona School of Agricultural Engineering of the UPC, the latter two located on the Mediterranean Technology Park in Castelldefels.

There follows a summary of the most important actions carried out in this new reporting period, full details of which can be found in the Progress Report 2012-2013.

A. IMPROVEMENT OF TEACHING ACTIVITIES

- Creation of BKCnet antennae in China, Brazil and the USA.
- Extensive involvement of the BKC in Erasmus Mundus programmes: six new projects selected in 2013, two of them coordinated by the BKC.
- Participation in 8 Erasmus Mundus Joint Doctorates (EMJD) under the Action 1 programme.
- Participation in the organization of over 30 industrial doctorates for the academic year 2013-2014.
- Consolidation of the BKC Initiative on Entrepreneurship: organization of training activities and discussion forums focusing on aspects of entrepreneurship and the valorization of BKC research.
- Provision of funding for the second symposiums on training trainers in the field of entrepreneurship for vocational training teaching staff: participation of 185 lecturers and 71 centres.
- Organization of 15 courses on business creation and two postgraduate programmes, and the annual business idea contest, which identifies and rewards enterprising students with innovative projects.
- Launch of the Campus Bachelor’s Thesis (TFGC-BKC) project, for students in sciences and technologies and those studying economics and business.
B. IMPROVEMENT OF SCIENTIFIC ACTIVITIES

- Completion of the “clustering” of the Campus’s scientific activities through the BKC Initiatives.
- Award of 5 Starting Grants (European Research Council) to BKC researchers.
- Recognition of the work of 3 BKC-affiliated research centres under the Spanish government’s Severo Ochoa Programme: the Barcelona Supercomputing Center, the Institute of Photonic Sciences, and the Institute for Research in Biomedicine.
- Participation in 2 EU FET Flagship projects (Graphene and Human Brain).
- Organization of the first General Assembly Meeting of PERSEUS (Policy-oriented marine Environmental Research in the Southern European Seas).
- Publication of the Handbook of instrumental techniques for materials, chemical and biosciences research by the CCiTUB.
- Contribution to the Field-AC European project, led by the Maritime Engineering Laboratory.
- Purchase of equipment for the CCiTUB, for a total value of more than €540,000.
- Funding of the first call for applications for BKC Visiting Professors of Excellence.
- Co-funding of two of the six places offered to talented postdocs selected through the “Job Market” at the Faculty of Economics and Business.
- Funding of the “Cata de la Investigación” (Research Tasting) initiative, to attract emerging research talent.

C. CAMPUS EVOLUTION TOWARDS A SOCIALLY INTEGRATED MODEL

- Collaboration with the ONCE Foundation to promote the publication of the Journal of Accessibility and Design for All (JACCES).
- Launch of the first postgraduate programme in audiovisual production for students with disabilities.
- Implementation of a joint project on creating technologies that increase the independence of people with disabilities.
- Participation in the universities Mobility Committee, which addresses topics such as urban development, the regulation of traffic, parking and the Campus car share system.
- Signing of the Citizen Commitment to Sustainability with Barcelona City Council.
- Implementation of the Energy Saving Plan: management of energy consumption across Campus facilities and progressive extensive of the SIRENA monitoring system.

D. EHEA ADAPTATION AND IMPLEMENTATION

- Deployment of the desktop virtualization project, which offers students universal access to software for practical sessions and access from outside Campus spaces.
- Acquisition of a system for the recording and live streaming of lectures on the Internet (linked to the massive open online courses initiative).
- Operation of the Multipurpose Laboratory for advanced teaching.
- Renewal of data connections to support speeds of 1 Gbps.
- Purchase of new laboratory material for practical sessions in the Faculty of Physics.
- Presentation of the iLab Talent programme, offering paid work placements and specific training.
- Joint organization of seminars to promote knowledge transfer and business creation among researchers and lecturers (Crea! Oportunidades seminars).
- First Social Start-up Meeting Barcelona.
- Placements for vocational training students in the CCiTUB scientific infrastructure to boost employability.
- Cooperation with secondary schools and vocational training centres focused on talent attraction and interaction with the local environment, through the ERN Natural Resources Centre in Berga.
E. TRANSFER OF RESEARCH-DERIVED KNOWLEDGE AND TECHNOLOGY TO THE BUSINESS SECTOR

- Creation of the spin-off Dapcom-Date Services, SL, a joint initiative of the UB and the UPC.
- Submission of Barcelona’s candidacy to host a business incubator for the European Space Agency.
- Participation in the national Industrial Doctorate programme, a medium-term initiative aimed at improving the employment prospects of new PhD holders.
- Continued efforts to implement and consolidate the UB’s Centre for Innovation and Advanced Technologies (CITA) and the UPC’s Centre for Technological Innovation (CIT) and to generate collaborative projects.
- Launch of business incubation and pre-incubation programmes at a number of levels.
- Development of the PCB Bioincubator: renovation of existing facilities for international firms.

F. INTERACTION BETWEEN THE CAMPUS AND ITS LOCAL ENVIRONMENT

- Beginning of refurbishment work on the Gaudí-Güell Pavilions to foster interaction between the BKC and its local environment. Progress so far has paved the way for institutional uses of the site, under the management of an ad-hoc UB-UPC Coordination Committee.
- Refurbishment of an underground area of 530 m² in Building A4, in adherence to the Campus policy on social learning spaces.
- Renovation and improvements of the Campus’s sports facilities to foster beneficial interaction between Campus facilities and the local area.
- Participation in the first edition of the Barcelona Smartmoto Challenge.
- Collaboration with the Barcelona City Council in the Mobility Committee, to examine and develop strategies for improving university mobility in line with criteria on sustainability.
- Progress with the pedestrianization plan and the development of a sustainable transport system.
- Extension of the Bicicampus project.