1. INTRODUCTION

0. Project presentation: theoretical framework, mission and objectives

Because the CEI UPF-Icària project was presented at a time when the university was also working on its institutional strategy (UPF25 Years strategy), it encouraged links and convergence between the two strategic programmes. The UPF25 Years strategy thus provided the theoretical framework for the CEI project, with both programmes focusing on the same four areas of action in a context of good governance and efficient management:

- Knowledge transmission: teaching
- Internationalization
- Knowledge creation: research
- Knowledge transfer

Additionally, the CEI's specific mission was to supplement and accelerate the process of achieving excellence and enhancing the campus's international profile through the participation of the various strategic partners (aggregation) highlighted in the original proposal, which have gradually been expanded over the last five years.

In this regard, the CEI project has been key to strengthening and consolidating UPF's ties with these strategic partners, which, in turn, has expedited the successful completion of the joint initiatives, ultimately enhancing the positioning of the group as a whole.

1. Main actions: description, impact and outcomes

The CEI has undertaken 22 actions, the outcomes and assessments of which are shown below.

1.1. Improvements in teaching and adaptation to the European Higher Education Area The twelve actions proposed in this area encompass four lines of action:

Actions for improvements in teaching and adaptation to the EHEA

Action line 1: Teaching quality and improvements in learning

- A1: Teaching quality and improvements in learning
- A2: Tutorial Plan of Action and continuous assessment
- A3: Promotion of external and internal internships
- A4: Modernization of the services and facilities of the Library/CRAI

Action line 2: Internationalization

- A5: Plan of Action for Multilingualism
- A6: UPF International Experience project
- A7: UPF Global Network Initiative
- A8: A-4U International project

Action line 3: Promotion of postgraduate studies

A9: Promotion of postgraduate studies and creation of the Postgraduate and Doctoral Studies Office

A10: Plan to promote the UPF Group's postgraduate programmes

Action line 4: Cooperation projects with other universities

A11: Implementation of cross-disciplinary bachelor's degree programmes

A12: Bimodal teaching cooperation projects (UPF-UOC)

Highlights under the first line of action, aimed at improving teaching quality and learning, include the CEI's positioning with regard to what may be the new teaching paradigm (MOOCs), in close collaboration with the project's strategic teaching partners (aggregation) (A1); the implementation of a personalized tutoring programme for all years of the degree programmes (A2); the new agreements signed with companies and the development of a centralized internship management system, which has led to exponential growth in the number and quality of the internships offered (A3); and the enhanced resources and skills in the spheres of IT and the library through new cooperation arrangements (REBIUN) (A4). Notwithstanding these achievements, as a result of the economic crisis, certain actions had to be reoriented, and it was not possible to renovate some of the Library/CRAI's facilities as envisaged in the original project report (A4).

Under the second line of action, the CEI's **international dimension** was strengthened through a three-pronged strategy consisting in: fostering mobility throughout the entire university community (A6); forging new alliances with strategic partners to undertake joint projects (e.g. by joining the Europaeum network, helping to found the Young European Research University Network (YERUN), or consolidating the UPF-UCLA Summer School programme) (A7); and boosting the CEI's international profile via a strategy, coordinated by the A-4U partnership, that initially targeted the BRICS countries (Brazil, Russia, India, China and South Africa) and has been expanded over the years to include Turkey and Iran (A8).

The third line of action addresses two areas aimed at establishing the CEI UPF-Icària as a project centred on its **international postgraduate programme**. First, the university founded the Doctoral School, tasked with achieving three main objectives: to enhance the research dimension of postgraduate programmes, to make them more international, and to cultivate ties with the business community. Second, it sought to increase the visibility of the master's degree programmes offered by all of the strategic partners (aggregation), through joint participation in postgraduate fairs and the creation of joint promotional material (websites and brochures) (A10).

Finally, highlights in the area of **teaching cooperation** include the development of cross-disciplinary programmes, such as the bachelor's degree programme in Philosophy, Politics and Economics offered by the Alianza 4 Universidades (4 Universities Alliance, A-4U), and the preparation of two new bachelor's degree programmes, to be launched in the 2016/17 academic year: the bachelor's degree programme in Bioinformatics (a joint initiative by UPF and Barcelona Bioinformatics, an institution backed by the Autonomous University of Barcelona (UAB), the Polytechnic University of Catalonia (UPC), UPF, and 11 research institutes) and the interdisciplinary bachelor's degree programme in Global Studies (A11). With regard to the teaching cooperation with UOC, the joint programme offer was expanded and now includes four master's degree programmes (A11).

1.2. Scientific improvement and knowledge transfer

The university's designation as a CEI in 2010 and its success under the Innocampus subprogramme were critical to **strengthening the ties between the coordinating university**

(UPF) and its strategic partners (aggregation). By rendering the relationships with these institutions more fluid, the CEI UPF-Icària has expedited the achievement of joint initiatives. The six proposed actions in this area encompass three lines of action and are shown below.

Actions for scientific improvement and knowledge transfer

Action line 1: Research infrastructure

B1: UPF Research Park

B2: Creation of the UPF-UOC interuniversity research centre on moral and political theory

Action line 2: Talent recruitment and promotion

B3: Talent recruitment and transnational mobility project

B4: Mobility programme for young PhDs within the framework of the A-4U

Action line 3: Research and transfer support structures

B5: A-4U European Office in Brussels (OPERA)

B6: Strategic Knowledge Transfer Plan

The **consolidation of the UPF Research Park** has been one of the CEI project's flagship actions (B1). In July 2014, the CEI inaugurated a new building for social science and humanities research. Known as Wellington II, the building has a built-up area of 8,685 m² and required an outlay of 15.2 million euros, for which funding was received from the Catalonia Competitiveness programme (FEDER 2007-2013) and through ACTEPARQ and Innocampus grants from the former Spanish ministries of Science and Innovation and of Education. The park also has another building (Wellington I), with a built-up area of 3,550 m², which was brought online in July 2008 and whose construction was unrelated to the CEI project. Additionally, work is currently underway on a third building (Wellington III), to have a built-up area of 4,268 m² and host the new head offices of the Pasqual Maragall Foundation for Research on Alzheimer's. The foundation has invested 14 million euros in the building, which is expected to open its doors in July 2016.

At the same time, intense efforts have been made to attract important institutions in the fields of social sciences and humanities to the park. Today, more than 300 researchers (50% of whom are international) are working in the shared space. The park's current inhabitants include, among others, the following strategic research partners (aggregation): the Research Centre for International Economics (CREI); the Centre for Research in Health and Economics (CRES); the Center for Research on the Economies of the Mediterranean (CREMed); the Barcelona Institute for International Studies (IBEI); the Barcelona Graduate School of Economics (GSE); the Barcelona School of Management (BSM); the Institute of Political Economy and Governance (IPEG); and the aforementioned Pasqual Maragall Foundation. Recently, the Johns Hopkins-UPF Public Policy Center also opened its doors at the park.

With regard to the second action line, of particular interest are the actions aimed at **promoting and recruiting international talent**, including those undertaken by the university itself (e.g. the UPFellows programme, which has enabled the engagement of 24 postdoctoral fellows and, with a total budget of 5.4 million euros, receives funding under the European Commission's FP7's COFUND programme (B3)) and the mobility grants for young PhDs, essentially among the A-4U member universities (B4). Additionally, the actions undertaken

within the framework of OPERA, the A-4U's international office in Brussels, have enhanced the campus's positioning within the FP7 and Horizon 2020 programmes.

In the area of research and **knowledge transfer** to society, the CEI has promoted collaborative work and networking by cooperating on joint projects with benchmark institutions, such as the Marcelino Botín Foundation, the Catalonia Network of Science and Technology Parks (XPCat) and Barcelona Activa (B6).

Finally, the CEI UPF-Icària achieved excellent results in the EU's 7th Framework Programme (FP7) and under the new Horizon 2020 programme (see section 3, 'Results of the CEI').

1.3. Comprehensive social model

The CEI UPF-Icària project has also strengthened **the university's relationship with its various stakeholders**. The university has continued to improve the services offered to the university community as a whole – such as the e-administration project (C2) – and has launched two initiatives to enhance its relationship with students (C3) and alumni (C1). All three actions are proceeding according to plan. Moreover, over the 2014/15 academic year, UPF signed agreements with various institutions to achieve them, including: the Spanish Ministry of Foreign Affairs, the project's contact for Spanish embassies and consulates; the Network of Spanish University Libraries (REBIUN); more than 2,000 university-industry framework agreements to make it easier for graduates to enter the labour market; and leading civic and cultural institutions in Barcelona, such as Teatre Lliure, the Vila-Casas Foundation, Mercat del Born, the Vives University Network or the Gran Teatre del Liceu.

Actions to transform the campus to develop a comprehensive social model

C1: UPF Alumni programme

C2: E-administration implementation project

C3: Plan of Action for a Comprehensive Model of Student Participation

1.4. Local, business, and social community outreach

Finally, it is worth noting that the CEI is an **essentially urban project inextricably linked to the city of Barcelona**. With a view to further strengthening its relationship with its local community, the CEI UPF-Icària has undertaken a series of actions aimed at enhancing **the campus's ties with local businesses and institutions**.

The guidelines for the 2013 progress report were the first to request the information contained in the 'Local, business and social community outreach' section here. In the 2010 project report, community outreach actions were discussed in the section 'Comprehensive social model'. Consequently, this section contains no specific action proposals. However, it does list the initiatives undertaken by the CEI to strengthen the campus's ties with its community. These actions fall under three main action lines: the consolidation of the UPF Business Shuttle Incubation Spaces (currently fully occupied); the initiatives to facilitate graduate employment; and the activities carried out in the 22@ district to strengthen its positioning as a knowledge cluster. All these activities were carried out in close collaboration with local institutions and businesses.

2. Main initiatives with strategic partners (aggregation)

The joint projects have been carried out in all four areas of action and at all levels of the CEI project: within the university, in terms of teaching, with regard to research and knowledge transfer, and with companies and institutions (a full list of the strategic partners is provided in Chapter 3. Project Management).

Highlights of the initiatives carried out with other universities include the **teaching cooperation projects**, such as the A-4U's joint bachelor's degree programme in Philosophy, Politics and Economics (A11), an international, interdisciplinary, interuniversity, and intercity programme partially sponsored by Obra Social "la Caixa", which has provided a total of 600,000 euros in funding for grants over the first four years of the programme. At the postgraduate level, UPF has partnered on more than twenty interuniversity master's degree programmes, including a joint master's degree in teaching with the CEI's partner university, UOC (A12). Likewise at the teaching level, **joint communication strategies** have been established with the strategic partners (aggregation) in order to raise the profile of the undergraduate and postgraduate programmes offered by the group as a whole (A10). The cooperation between the **A-4U member universities** can also be seen in the various initiatives to boost the members' profile abroad (specifically, in the BRICS countries, Iran and Turkey (A8)), as well as in the actions to promote research at the European level, by opening a joint office in Brussels (B5) and fostering mobility among the member universities' researchers (B4).

UPF has also worked tirelessly with its **strategic partners** (**aggregation**) in the area of **research and knowledge transfer**. In keeping with the international committee's recommendations, this report includes the aggregate data for the project with regard to activities and funding. Likewise, agreements have been signed with benchmark institutions (e.g. Johns Hopkins University) to host research groups at the Research Park (B1) and the university has launched new spin-offs, headquartered at the UPF Business Shuttle Incubation Spaces, which it co-manages with the Barcelona City Council (B6).

Finally, UPF has lent its support to various initiatives undertaken with both national and international players. It has expanded its network of strategic relationships by joining Europaeum, a network of elite European universities, and it helped to found the Young European Research University Network (YERUN). Outside of Europe, it has sought to deepen its relationship with American universities, among other things, by increasing its cooperation with Brown University and Johns Hopkins University and consolidating its international summer school programme with UCLA. Likewise, it has broadened and deepened its relationship with Asian institutions by participating each year in the Asia Pacific Association for International Education (APAIE) conference. Highlights in Spain include its participation in the Spanish Foreign Ministry's twice-yearly call for applications for internships at Spanish embassies and consulates (A3) and the agreements signed with other financial and/or cultural institutions to enhance the services provided by its Alumni programme (C1); its cooperation and resource-sharing with the Network of Spanish University Libraries (REBIUN), considered key to promoting certification of information and computer literacy skills at the national level (A4); and the agreements signed with non-profit organizations (Teatre Lliure, the Vila-Casas Foundation, Mercat del Born, the Spanish Association of Artists and Performers (AIE), Gran Teatre del Liceu, etc.) to improve the services offered to the university community in general and to students in particular (C3).

3. Results of the CEI

Participation in the CEI has strengthened the ties between the project's coordinating university and its strategic partners (aggregation), thereby enhancing the positioning of the group as a whole. In conclusion, the main milestones achieved since the campus was first designated a CEI in 2010 are listed below:

3.1.Excellent outcomes in the area of improvements in teaching and adaptation to the EHEA

- ✓ Design of new **cross- and interdisciplinary curricula**, such as the A-4U's joint bachelor's degree programme in Philosophy, Politics and Economics (2013/14 academic year) or the bachelor's degree programme in Bioinformatics (with the BIB association) and interdisciplinary bachelor's degree programme in Global Studies, both of which are on track to be launched in the 2016/17 academic year.
- ✓ Positioning in the field of MOOCs, in close collaboration with the project's strategic teaching partners (aggregation). By way of example, of the nine new MOOCs to be launched in September 2015, six have been awarded funding by the Catalan Agency for Management of University and Research Grants (AGAUR), accounting for 19% of all courses to receive such funding. Likewise, the CEI has increased its participation in leading international platforms: MiríadaX, P2P, Coursera and, since March 2015, FutureLearn.
- ✓ The university's growing participation in **competitive grant programmes for teaching** and mobility cooperation, especially at the European level, submitting an average of 14 proposals a year since 2011.
- ✓ UPF is the **top-ranked Spanish university with regard to international reputation** (according to several international rankings, such as QS and THE, 2014) and several other indicators (e.g. percentage of international students and teaching staff).
- ✓ **Highly international programmes** at both the postgraduate level, in which 36% of master's students and 52% of doctoral students are international and more than two thirds of all theses are defended in English (2014/15 academic year), and undergraduate level, where one third of all graduates have studied abroad (2013/14 academic year).

3.2. Excellent outcomes in the area of scientific improvement and knowledge transfer

- ✓ Outstanding performance by the CEI in the FP7: 284 projects awarded for a total sum of 173 million euros (December 2014). UPF receives 10% of all European funds awarded to the Spanish university system, despite having only 1% of the system's teaching staff.
- ✓ Within the FP7, special attention should be called to the CEI's success in the Ideas programme (Starting, Advanced and Consolidator grants awarded by the European Research Council (ERC)), where it has received 19% of all the grants awarded in Spain. In the field of social sciences and humanities, this share is even higher (40%); moreover, at the university level, UPF has received more ERC grants than any other Spanish university.
- ✓ Excellent initial results by the CEI in the Horizon 2020 programme. As of April 2015, the CEI had been awarded 42 projects and more than 19 million euros. Additionally, UPF is now the third-ranked institution in Spain in terms of funding obtained in the period (trailing only the Spanish National Research Council (CSIC) and the Tecnalia Foundation).

- ✓ Two of the strategic partners (aggregation), the Barcelona Graduate School of Economics (Barcelona GSE) and the Centre for Genomic Regulation (CRG), have been named Severo Ochoa centres of excellence (2012), and the UPF Department of Experimental and Health Sciences has been designated a María de Maeztu unit of excellence (2015).
- ✓ CEI researchers had the highest scientific productivity according to various rankings (Scimago, U-Ranking, IUNE, Granada) (2014 and 2015) and topped the rankings for various other indicators, including publications in first-quartile journals, internationally co-authored papers, citations received, etc. By way of example, U-Ranking, a new classification jointly published by the BBVA Foundation and the Valencian Institute of Economic Research (IVIE), recently named UPF the most productive Spanish university. All of this information is provided in detail in the Rankings section of the CEI website.
- ✓ Improved knowledge transfer outcomes for the CEI UPF-Icària: 6 spin-offs and 18 start-ups launched since the campus's designation as a CEI, and more than 17.4 million euros obtained in R&D and innovation contracts in 2014.

3.3.Actions promoted by the CEI

- Consolidation of the UPF Research Park. Completion of the Wellington II building. The funding obtained under the various calls for the CEI grant programme played a decisive role in enabling this action. The building's construction was key to attracting benchmark international centres, multiplying the critical mass in terms of research in the social sciences and humanities (more than 300 researchers, 50% of whom are international). To cite only a few examples, the Johns Hopkins-UPF Public Policy Center was founded and, more recently, centres such as the Institute for Political Economy and Governance (IPEG) and the Barcelona Institute for International Studies (IBEI) have relocated to the park. Additionally, a new building, scheduled to be brought online in 2016, will house both the Pasqual Maragall Foundation for Research on Alzheimer's, one of the campus's strategic partners (aggregation), and the future Barcelonaβeta Research Centre on neurodegenerative diseases.
- ✓ **Key talent recruitment programmes**: UPFellows has a total budget of 5.4 million euros and is co-funded by the European Union. This programme would not have been proposed had it not been for the initial funding received under the CEI-Fortalecimiento (Strengthening) grant programme.
- ✓ Creation of the **UPF Business Shuttle Incubation Spaces** for start-ups resulting from research conducted by the university or its strategic partners (aggregation). It is presently fully occupied. The initial funding under the CEI-Fortalecimiento grant programme was key to enabling this action, which was launched jointly with Barcelona Activa (Barcelona City Council).
- ✓ Founding of the **Doctoral School** with a strategic focus on programme quality and specialization. Some 89% of the doctoral programmes have received the Spanish Ministry of Education's 'Pathway to Excellence' award. In 2014, 63% of all thesis defences were conducted in English. Moreover, all ten of the grants applied for under the Catalan government's Industrial Doctoral Studies programme were awarded (100% success rate). The participating companies were: Laboratoris Dr. Esteve (two projects), Lead Molecular Design, Alma IT System, Crisalix Labs, Galgo Medical, the law firm Pareja y Asociados, Quantitative Genome Medicine Laboratories, Editorial Barcino, and Euvitro SL. In terms of knowledge areas, five projects are related to biomedicine, three to ICT, and two to law.
- ✓ Promotion of **joint programmes with leading universities**, such as: the UPF-UCLA Summer School (the fourth edition of which was held in the summer of 2015); membership in Europaeum, a network of elite European universities (Oxford, Leiden,

Bologna, Bonn, Paris 1 Panthéon-Sorbonne, Karlova (Prague), Helsinki, and Jagiellonian (Krakow)); or the founding of the Young European Research University Network (YERUN), which, in addition to the A-4U member universities (UAB, the Autonomous University of Madrid (UAM), Carlos III University of Madrid (UC3M), and UPF), includes the universities of Konstanz and Ulm (Germany), Antwerp (Belgium), Southern Denmark (Denmark), Eastern Finland (Finland), Paris Dauphine (France), Dublin City (Ireland), Rome Tor Vergata (Italy), Maastricht (Netherlands), Nova de Lisboa (Portugal), Brunel and Essex (United Kingdom), and Linköping (Sweden).

- ✓ Entrance into the BRICS countries (through the A-4U partnership and alone) and academic and institutional cooperation missions to Turkey and Iran. Initial funding from the CEI-Fortalecimiento grant programme.
- ✓ Implementation in recent years of **e-administration**, which has improved administrative procedures, reducing processing times and associated costs and streamlining internal management.

Finally, the project has played a vital role in strengthening and reaffirming the ties between the coordinating university (UPF) and its strategic partners (aggregation). The campus's designation as a CEI and the actions undertaken by the CEI as a whole have rendered the relationships between the various institutions that have partnered on the project more fluid, thereby facilitating the achievement of joint initiatives.