

phase of implementation of the IDEX, we therefore plan to:

- Increase the number of students in a targeted manner and in disciplinary fields identified as having a good potential for growth, such as computer science (where numbers will be more than doubled), engineering and economy (c. 50 students).
- Increase the educative offer in disciplinary fields with a high research output (certain domains of physics, geosciences, biology) and especially in emerging interdisciplinary fields (c. 50 students).
- Increase the educative offer at the interface of medicine and translational research, the number of students in medicine and doctoral students (c. 8 students)
- Other actions described below will secure the recruitment of c. 100 foreign students (mainly at doctorate level).

Depending on the success of these measures, the perimeter of excellence will be stabilised at around c. 9 000 students, maintaining the professor/student ratio at a level that guarantees the quality of the educative process. These measures entail an increase in the number of grants and an increase in the admission flux (notably for foreign students). In no case will they imply a lowering of our standards in terms of education.

Project 2. Creating a common pluridisciplinary undergraduate cycle

Ambition:

To create an undergraduate curriculum will enable PSL★ (1) to offer a complete university cycle, from first year through to PhD; (2) to test pilot programmes; (3) to develop equal opportunity initiatives with high schools throughout France.

This new undergraduate course, based on a comprehensive approach, will offer an alternative to the classical training by universities or “*classes préparatoires*”. It will be perfectly adapted to students who do not want to specialize too rapidly, or enter the “*classes préparatoires*”.

Aimed at a true *éducation de l'esprit*, this undergraduate cycle will be available in different modalities. It will rely on the same principles as the graduate cycles of PSL★ institution: the combination of disciplinary excellence, multidisciplinary approaches, and an education geared towards producing innovative specialists with critical mindsets. It will adapt the open pedagogical model of programmes such as the “Core Curriculum” at Columbia University to French higher education and will profit from the experience acquired by the UPD, thanks to their pluridisciplinary Licence “Sciences de la Société”.

At the end of the cycle, students will obtain the PSL undergraduate diploma, one or two “Licence” in specific disciplinary fields and will be able to apply for admission to PSL★ institutions and affiliated schools. Besides, at each stage of the programme, bridges will be established to and from *classes préparatoires*.

Pluridisciplinary Degree

The main project will combine an education in human and social sciences with one in natural and formal sciences. It will allow students to acquire key skills thanks to original and individualized pedagogical methods relying on tutoring and the acquisition of a good general knowledge.

The curriculum will be basically structured as following:

- 2 semesters of foundation courses in sciences, humanities and foreign languages,
- 4 semesters of progressive specialization, organised around various curricula: (a) Life Sciences; (b) Mathematics and Computer Science; (c) Sciences of Matter; (d) Humanities and Social Sciences; (e) Management and Economy.

The student selection process will be based both on academic results in high school, and on

motivation and ambition. This requires working continuously with high school principals for a better screening of students, along with an equal opportunity concern.

The first year of implementation will function as a pilot phase and develop the project with a limited number of students. It will rely on professors of PSL★ institutions in the various disciplinary fields, as well as on graduate and postgraduate students for tutoring. During this first stage, the offer will be refined according to the needs and results.

During the second stage, after 3 years, the project will be enlarged, so as to reach several hundred students per year after 10 years. Branches will be developed in other cities such as Toulouse.

The principle of pluridisciplinary training will be reinforced at the L3 level of PSL★ institutions by (a) including other complementary disciplinary fields into the traditional curricula and in particular encouraging the extension of the interdisciplinary principle to the *Classes Préparatoires* (b) offering various double Licence diplomas between partner institutions, by pooling courses, for example with the licence cycle of the UPD on social sciences and management.

ESPCI and ENSCP students will be able to complement their education by following a secondary specialisation within their undergraduate cycle in one of the domains offered by the pluridisciplinary degree course.

Project 3. Research Education for Executives

Ambition:

To promote education by research not only for the academic world but for managers and administrators, with an emphasis on promoting the interaction between the business world, academic research, high level executives and students.

In France, Leading Executives, Managers and Decision Makers are traditionally trained by the “*écoles d’application*”, such as the ENA or Polytechnique, which promote expertise in law, public finances, applied economy and engineering as well as public management. This educative programme has demonstrated its value. But the emergence of a knowledge-based economy, emphasising creativity and innovation also requires a new type of executive manager and decision-maker. This need is not yet met and PSL★ members considers that this is one of the reasons for the competitive disadvantage of France compared to the USA, where the best students are trained for innovation and a research PhD is a highly valued diploma in both the business world and public administration. PSL★ will therefore promote three major actions, which will be applied both in initial and continuing education. These actions will profit from the clear synergy between the research excellence of PSL institutions and the experience of the UPD, which trains every year 1300 executives in 12 different countries.

Intensive courses and Research for Executives

Highly selective intensive courses on specific topics will be offered to both PSL★ students and leading decision makers, managers and executives. These courses will change on a yearly basis depending on the rapidly evolving demand, and take advantage of the different fields of expertise of the PSL★ institutions. The programmes will enable the acquisition of precise thematic skills (for instance in chemistry, or energy); or the acquisition of methods (management). They will last from two days to one week and will cover topics such as:

- Challenges of environment and climate change
- Corporate responsibility (with theoretical courses in history, social sciences, management and moral philosophy along with practical modules and case studies)
- Research management (with courses on methodologies of research and management)

Course on “Corporate Responsibility”

The first decade of the 21st century revealed a gap in the training of elite managers and decision-makers, namely a training on responsibility. This programme will combine theoretical courses in history, social sciences, management and moral philosophy with practical modules and case-studies.

The courses will take place in PSL★ buildings and participants will be invited to observe the ongoing research conducted in the laboratories of the different institutions, thus fortifying the relations between research and the corporate world.

An office for relations with the business world will be created, so as to ensure that executives and managers can contact PSL★ institutions to answer specific requirements. This office will also serve to further develop relations with the private sector.

Specific Modules and courses

PSL★ members are convinced that the best students in the country should be more active in the economy. To encourage them to move from research towards the corporate world, PSL★ will offer course modules on management and administrative skills for all students.

PSL★ will thus propose a specific Master level course based on the UPD's Masters for continuing education in Management and Finance but oriented specifically to train creative minds and leading scholars (c. year 3 or 4).

PSL★ will also build on their expertise in continuing education to develop this offer. This will be possible notably thanks to the experience of the Collège de France for which it is a fundamental mission, but also the Université Paris-Dauphine, along with the Observatoire which has always been active towards high school teachers and students (for instance, internships in the framework of “Plans académiques de formations”, or “Sciences à l'école” programmes).

Knowledge validation

Numerous former students and doctors from PSL★ institutions have a long experience in public administration, through internships or work experience. But they are too frequently limited in their career opportunities because they are not *alumni* of the “écoles d'application”. PSL★ wants to challenge this state of affairs by validating their knowledge and competences acquired through experience, and thus showing that they are perfectly apt for all kinds of position in public administration or the business world, with the incomparable advantage of also holding a PhD.

A highly-qualified committee will be set up, with over half its members from outside PSL★. It will deliver both a validation of knowledge acquired and recommendations for short- or long-term courses to complement this knowledge.

Project 4. Experimental Centre “Science-Art-Création-REcherche” (SACRE)

Ambition:

To create a new transversal doctoral research curriculum at the intersection between the Creative Arts and Science.

Context: Over the past 15 years, the most important French schools of creative and performing art and design (ENSAD, ENSBA, CNSMDP, CNSAD) have developed ambitious research programs and a fruitful cooperation with the ENS, involving common projects, seminars and exchanges. Three of these schools (ENSAD, ENSBA, CNSMDP) have integrated the European “LMD” system (Bachelor-Master-Doctorate). The four schools want to deliver doctoral diplomas comparable to the PhD's in Creative and Performing Arts of Northern European and American institutions such as Saint Martins College in London, Berkeley or Stanford.

Project: PSL and the four major schools of creative and performing arts have decided to reinforce their cooperation within PSL★ by creating a new experimental Centre “*Science-Art-Création-REcherche*” (SACRE). SACRE will create a research program which will deliver a Diploma in Creative Art/Science, equivalent to a PhD. It will thus bring together French and international doctoral students, post-docs, professors and highly qualified persons in Creative, Performing Arts, Design and Science. It will be based on interactions between creative practices and theoretical reflection, and will cover all artistic fields (intermediality) as well as their interactions not only with the humanities and social sciences but also with natural, formal and cognitive sciences. The Centre’s objective is therefore to develop a new kind of research at the interface between Art and Science.

Implementation

- Development of cooperation and bilateral programs between PSL★ and the 4 major schools of Creative Arts located in Paris; preparation of a common transdisciplinary project (theme for June 2011: “Acceleration”);
- Creation of an experimental Centre “*Science-Art-Création-REcherche*” (SACRE) for research in creative fields. Different possible locations have been considered in or around Paris.
- Common conceptualization of a Doctoral Research Diploma in Creative Art/Science equivalent to the PhD. Through this program, PSL★ will fund:
 - 27 doctoral contracts within 3 years: 8 to 10 each year;
 - 4 to 6 one-year contracts for French and international post-docs and highly qualified creative and performing artists in residence and scientists;
 - Conferences, seminars and workshops, necessary for fostering a common culture between creative artists and researchers in science.

The geographical proximity of PSL and the ENSAD will also contribute to the dynamics of the PSL★ Campus (see below).

PSL★ TRANSVERSAL PRINCIPLES

Each of the above described projects will be implemented in accordance with the highest international standards. However the real test for the success of PSL★ will be the development of a true educative spirit, geared by transversal principles which will ensure that all educative programmes are evaluated, equal opportunity access is reinforced, international visibility is optimized, that an integrated campus is created and online teaching is developed. As such, these principles will have an impact on the perimeter of excellence and beyond this perimeter, on the entirety of each institution.

Transversal Principle 1: Reinforcing Quality Evaluation

A common practice in major universities worldwide, the evaluation of teaching is too often a weakness in French Education. PSL★ will develop a common evaluation process improving on the already existing ones. This assessment policy will apply to all courses who are part of the Perimeter of Excellence. This will imply traditional tools such as standardised questionnaires but also more innovative ones for a French setting such as offering future students access to comments by previous students and implementing a systematic process of outside evaluation to supplement that already undertaken by AERES. It will take into account not only the educative programmes but also their value to society and their professional perspectives.

Transversal Principle 2: Strengthening equal opportunity.

Despite being highly selective, PSL★ institutions are strongly involved in programmes such as “Cordées de la réussite” (for instance TALENS at the ENS) and “Sciences à l’école”, with numerous students implicated in tutoring high school students. They also organise summer schools so as to

promote contacts between less privileged students and institutions of higher education ("Paris Montagne") and work with high schools throughout France to promote equal opportunity of access.

PSL★ will reinforce these initiatives by pooling them at the level of PSL★, thus offering potential students a much wider range of educative programmes.

Transversal Principle 3: Developing International Relations

The promotion of PSL★ on a world level is essential for being recognized as a leading international institution. Even if a specific chapter on International Relations is included hereunder, it is important to recall briefly the two main projects, which will affect Education:

1. To teach courses in English from the Master level up.
2. To create privileged partnerships with a limited number of clearly identified major research universities such as MIT, Princeton, Imperial College, New York University, Cambridge UK, Oxford, Northwestern, U Penn, Beida, Doshisha, Kyoto, IIS Bangalore, etc.

Transversal Principle 4: Promoting Campus Life

The creation of an integrated campus is an important aim of PSL★ and is described hereunder in the chapter on Campus Life.

Transversal Principle 5: Creating Online Educative Programmes

The development of Online Educative programmes is an important PSL★ project. In the mid term, all teachers will be required to propose an online version of their lessons in English for all courses relevant to PSL★. This topic is described hereunder in the chapter on LiberLabo.

3.3 KNOWLEDGE DISSEMINATION: CONNECTING KNOWLEDGE, RESOURCES AND SOCIETY

AMBITION

The individual institutions of PSL★ have all had a long standing role in the process of Knowledge Creation (as leading Research Institutions), Preservation (in their archives and libraries) and Transfer (both between scholars and between the academia and society), but have so far followed individual policies of Knowledge Dissemination.

As part of PSL★ they will pool their resources and projects in order to implement three initiatives, which will increase knowledge dissemination: 1) a common network, the "LiberLabo", which will provide multi-support resources and innovative services, 2) a common exhibition and valorization space, the "FaberLabo" and 3) a shared web portal.

These three initiatives are based both on a number of shared concepts such as the existence of an essential *continuum* between academic research activity, reading, writing, prescription and assessment and the importance of taking into account all possible uses of knowledge from the conceptual (new perspectives or attitudes) to the instrumental (new or modified practices).

They will enable a better connection between the institutions and the research community and ensure an optimal data, information and knowledge. They will also provide researchers and students with resources to face the rapid evolution of scientific publication forms and outcomes (such as open access initiative, metadata and hypertext quality, assessment process, etc.).

DETAILED PROJECTS

The "LiberLabo"

The libraries and archives of PSL★ are extremely rich (more than 2 million books, over 3km of archives and 30 000 numerical resources) but their use needs to be optimized by reinforcing the link

between users and staff, between scholars and the general public and by offering state of the art services and technologies.

The first aim of the LiberLabo is to implement well-established interoperability standards for catalogues, which will enable the creation of meta-catalogues encompassing the holdings of all institutions and enable published information to be linked with archival material and with research data produced by PSL★.

This will make it possible to provide unified virtual access to all resources of PSL★ (see below) and to ensure a much wider access for the scientific community and the general public. These initiatives will logically be based on international standards so as to fully integrate the libraries of PSL★ into common European initiatives such as OPENAIRE (Open Access Infrastructure for research in Europe), LIBER (Association of European Research Libraries) and the digital platform Europeana. Archives of all digital material will be preserved through collaborations with large scale initiatives such as the TGE Adonis and Cap Digital initiatives

The LiberLabo will also promote a common corporate image for the libraries and archives of PSL★, such as a materialized path in the Quartier Latin to guide users within the documentation corpus of the PSL Research University.

Within the libraries themselves, spaces will be open to encourage the read-write-select-diffuse process amongst users, by adapting and developing the well established Anglo-Saxon model of Writing Centres. New services based on “just-in-time and just for you assistance” will be provided both *in situ* and on line.

The “FaberLabo”

In order to capitalize on its heritage and research activity, PSL★ will create an exhibition space, open to the General Public. This new space will fulfill the following objectives:

- Present the rich heritage (35 000 objects) of the different institutions (in particular the unique historical astronomical instruments of the Observatoire).
- Host temporary exhibitions (2 to 4 per year) linked to the scientific activity of PSL★.
- Develop research projects with the Schools of Creative Art.
- Host events and conferences to promote scientific culture and research.
- Undertake education actions with primary and secondary schools, in collaboration with the local authorities.

Common Web Portal

The Web Portal of PSL★ will provide a platform for knowledge dissemination by providing a unified virtual access to all numerical resources, institutional information and news and a selected description of cutting-edge research projects.

It will also promote the definition of quality standards for on-line knowledge (scientific guarantee for digitisation processes, indexation and new editorial contents) in order to consolidate the reputation of PSL★ and establish a coherent editorial policy.

The Web Portal will maintain relations with the Cap Digital initiative, in terms of content production/broadcasting standards and archiving issues and CLEO (Centre pour l'édition électronique).

3.4 VALORIZATION AND SOCIO-ECONOMIC PARTNERSHIPS

GOAL

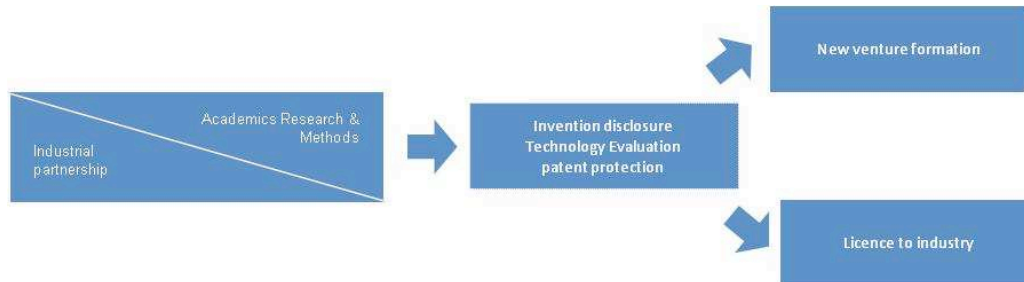
PSL★ will have an aggressive attitude in the domains of industrial property production and management, and value creation through ventures. Our scientific research has an enormous potential economic value and our current achievements give us confidence that we can successfully increase our results in this field:

- PSL and Institut Curie are at the origin of a start-up company quarterly and one patent per week.
- Fondation Pierre-Gilles de Gennes (FPGG) fosters public-and-private research projects in physics, chemistry, and biology, for the Institut Curie, ESPCI, ENS, and ENSCP. FPGG has validated this business model through the marketing of a contract R&D offer that generated €3.1 million of sales within the first 2 years of operation.
- ILB, the European center for research and development in Finance, has launched 22 chairs and research initiatives over the last 2 years for a total of €6 million/year, from private donors and government (through the philanthropy fiscal regime). 72 labels have been awarded to innovative start-ups and an accommodation program has been started.
- UPD has set up several labs in cooperation with major private companies, broadly dedicated to economics:
 - Institut pour le management de la recherche et de l'innovation (IMRI), a joint laboratory created by UPD and the Commissariat à l'énergie atomique et aux énergies alternatives (CEA) along with private partners such as Sanofi and Thales, studies research and innovation viewed as processes. This encompasses the economics and management of intellectual property rights, incentives, public policies, and venture capital.
 - Institut de Finance Dauphine (IFD) includes two chairs in finance and FiME (Finance et marchés de l'énergie), a joint laboratory of UPD - Electricité de France (EDF) – Ecole nationale supérieure de la statistique et de l'administration économique (ENSAE). FiME organises research on long lasting industrial investment in the context of changing market structure and regulation.
- Collège de France and ENS have respectively five and two sponsored chairs. These chairs are supported by socio-economic actors such Total, EADS, France Telecom, Fondation Liliane Bettencourt and Agence française de développement.
- PSL participates in the Agoranov public venture fund.

However, when compared with our potential, the level of achievement remains very uneven between different members of PSL★ and overall unsatisfactory. Our aim is to match within 10 years our capacity for scientific innovation with the creation of economic wealth, in order to reach world class level (the benchmark will be defined in the first year of the IDEX and will be based on the achievements of leading Anglo-Saxon research universities). We therefore intend to leverage the experience of the more advanced PSL★ members (e.g. ESPCI) so as to dramatically increase our global performance.

TECHNOLOGY TRANSFER VALUE CHAIN REPRESENTATION

PSL★ considers that public-and-private partnerships facilitate the transformation of discoveries into innovative applications.



A core aim of PSL IDEX is thus to induce its researchers to develop their links with private companies, from sponsored research to venture incorporation and/or licensing to industry.

This model was first promoted by some of the most prominent scientists of PSL★ such as P.G. de Gennes and G. Charpak, who both emphasised not only fundamental science but also industrial innovation. In recent years researchers such as J. Lewiner, M. Fink, J. Bibette, L. Leibler, M. Dutreix, J.L. Viovy and P. Marcus have followed their lead, thus paving the way for future expansion. This demonstrates that a true cultural change is currently underway and provides a strong incentive to younger researchers to be active in both aspects of research.

In the framework of the IDEX, PSL★ will implement this model thanks to an ambitious and dynamic policy aimed at strengthening the bonds between research and the economic world.

ONGOING ACTIONS TO FULFIL THIS OBJECTIVE

First, PSL★ will amplify existing initiatives:

- Strengthen the development of ILB: ILB's unique experience within the banking and finance arena will be leveraged by proposing sponsored research programs that will include PSL IDEX research chairs in collaboration with other PSL IDEX members.
- Capitalise on IMRI's experience: PSL★ intends to create a complete training offer in entrepreneurship for its students, teachers, and researchers. The laboratory's scope will also be expanded to include new scientific fields, for example on intellectual property in the life sciences, open source technologies, and public research policy.
- Scale up IFD's public-and-private research: IFD's research field is seen as experimental and knowledge will be extended and shared with other domains. IFD needs €300 000/year to scale up its public-and-private research, through the transformation of an existing 3-year chair into a senior chair and two additional post-doctoral positions.

NEW ACTIONS IN THE IDEX ENVIRONMENT

A number of ambitious initiatives will be launched by PSL★, or by its members in association with the IDEX. These actions will have a twofold integrative effect. First, they will integrate PSL★'s technology transfer value chain, from upstream public-and-private collaborative projects to start-up creation / IP licensing. Second, they will create synergies and/or pool resources between PSL★ members. This will leverage the experience of certain PSL★ partners and thus increase the capacity of the other partners.

- "Carnot Institutes": PSL★ is involved in two networks of laboratories that are applying for the "Carnot Institute" label from the Agence nationale de la recherche. Obtaining the label would make these networks eligible for extra government funding, based on industrial contracts, and have a transforming effect by speeding up their professionalization. The structures of both

“Carnot Institutes” are currently under study. In its minimal version, the first network will be formed by PSL IDEX labs active in chemistry – the Moisan Pole in ENSCP, and nearly all the labs of ESPCI – and will be strongly associated with the LABEX Chemvivo, Metacen and Institut Langevin. The second one will regroup PSL★’s research activities in the economy and finance fields – mostly at the ENS, ILB and UPD – along with that of other social sciences and humanities.

- Actively interact with the “Institut de recherche technologique” (IRT), Finance et Croissance Durable. This IRT is coordinated by UPD and ILB. Together with the innovation potential of PSL★, it will catalyze public-and-private initiatives and start-up creation by:
 - rethinking the way financial institutions account for the risk of scientific innovation, which is behind the current flat state of the venture capital market,
 - generating and reinforcing the ways scientists meet or become business savvy entrepreneurs,
 - supporting research and development start-ups in the field of finance, offering accommodation (nursery) and organizing or participating in fundraising.
- Setup three incubators: Three incubators will be created in the PSL IDEX environment, at the heart of its research laboratories. The Pierre-Gilles de Gennes Institute for Microfluidics will include a 1000 m² incubator. The Institute for Environment, to be set up in a future building in the Boulevard Jourdan site, will also include a significant share dedicated to start-up incubation. Dauphine also intends, through its own foundation, to create an incubator. These three projects will complement the existing Parisian incubator network, such as Agoranov.
- On top of these actions, PSL and Institut Curie will participate in the creation of a Parisian “Société d’accélération du transfert de technologie” (SATT). PSL actively supports the creation of a single joint venture of major universities in and around Paris aimed at managing and promoting intellectual property as well as maturing projects to give them a better chance of obtaining industrial licenses. PSL would play a major role in this joint venture.

The IDEX, catalyst of a new initiative

In addition to existing actions PSL★ will strongly reinforce its upstream public-and-private collaborative projects, by building on the FPGG and ILB models. This action will complement the creation of the two Instituts Carnot.

PSL★ will replicate FPGG’s and ILB’s experience in marketing industry-academia contract research towards the business world in new fields (e.g. Humanities, Mathematics, Computer Science), and extend it to all PSL★. It will similarly extend ILB’s experience on building privately funded chairs to all its members. It will also coordinate the structures dedicated to this activity that already exist within PSL★ (e.g. at Institut Curie, Observatoire de Paris, ENS, UPD, ILB).

PSL★ will allocate €700 000/year from its IDEX funding to catalyze public-and-private research projects. A reasonable leverage target of public funds to the amount of private sponsored research would be a factor of 10.

Indicators of performance and objectives at four years:

- Stabilize the number of patents in a range of 80 to 100 per year for the PSL★ perimeter
- Reach the objective of 10 start ups and social ventures created per year within PSL★
- Increase the value of sponsored research to 3 % for the consolidated research perimeter

3.5 INTERNATIONAL

The institutions of PSL★ are well aware that the best international strategy relies in continuous improvement of their performances, which is the key of their international attractiveness and visibility.

As a result of their constant effort towards excellence, all institutions of PSL★ already have a strong international presence thanks to 1) numerous relations between research teams on specific research topics, 2) exchange programmes for students and 3) numerous invited fellowships and professorships. This international network finds its expression in agreements and memorandums of understanding with the most prestigious universities such as Harvard, Oxford, Cambridge, Nankin, Fudan, Waseda and many more. Besides, each of the institutions of PSL★ has developed a number of more formal projects, including numerous joint degrees.

PSL★ can thus capitalize on dynamic international activities, a clear capacity of attraction and numerous research and educative agreements with institutions worldwide. In spite of these existing assets, there is a strong need to develop a coherent and truly ambitious international strategy at the level of PSL★ itself. The IDEX offers the possibility of changing scale and thus acquiring a visibility amongst the general public comparable to that of other prominent Research Universities.

In general, this overall strategy will profit from the bottom-up dynamic characteristic of current international relations which are the base of all successful initiatives of this type.

This explains why PSL★ considers International Relations as an area where the IDEX can have a strong impact.

- Almost 200 foreign professors invited each year on annual and short-term positions
- Almost 500 foreign students admitted each year including more than 120 doctoral students
- Almost 400 foreign post-doctoral fellows integrated each year in the laboratories
- Many European (ERC and others) and international research contracts active on PSL★ Campus
- International summer schools for senior undergraduate students
- Extensive exchange program (All the students of ENS, ESPCI, ENSCP and ENSAD make an internship abroad during their scholarship (ERASMUS, exchange programs 'Athens' and 'Idea League') and similar numbers of foreign students spend time at PSL★ institutions.
- Several international diplomas (Erasmus programs, Master "Europhilosophie" Erasmus Mundus...)
- Graduating programs abroad such as the European Master of ENS or Masters with China for ENSCP and ESPCI
- Participation in European and international research programs (PCRD, TGIR, LEA, LIA)
- Around forty professors on PSL IDEX Campus are members of foreign academies
- Memorandum of understanding with hundreds of institutions in countries worldwide (over 100 for the ENS, 180 for the UPD, etc.)
- Active fieldwork projects on all five continents

OFFICE FOR INTERNATIONAL RELATIONS

The other key project of PSL★ will be to create an **Office for International Relations**. In its initial phase, the unit will mostly draw its resources from the existing Offices for International Relations of the different PSL★ partners. Each of these Offices will remain in charge of specific projects, based on their expertise. The office will however rapidly be enlarged and reinforced, so that by the end of the first four years it will be responsible for PSL★'s international relations and everything connected with them. The office will notably coordinate the following major initiatives:

Partnerships and alliances for increasing international Visibility

- The International Office will coordinate, pool and broaden the existing partnerships with universities and research institutions throughout the world. It will ensure that initiatives are visible (website, network approach, etc.) and promote the PSL★ corporate identity abroad, in particular to potential students

- PSL★ will integrate a major alliance of Research Universities, like IARU, which gathers 10 of the world's leading research universities (ANU, ETH Zurich, National University of Singapore, Peking University, University of Berkeley, University of Cambridge, University of Oxford, University of Tokyo and Yale University).

Support Services Platform

The International Office will advise and mentor both incoming and outgoing students and staff.

- Incoming staff and students. PSL★ partners will aim to provide optimal conditions for living and working (studying or teaching) and a range of services meant to ease researchers and students everyday life. Services will notably include a “help and information unit” dedicated to administrative matters (housing, credits, grants, visas, etc.) and intensive French as a foreign language courses.

Welcome sessions will be organized in July and August for foreign students and post-doctoral researchers offering French language courses, courses of methodology, visits to the campus, introduction to French culture and discovery of Paris

- Outgoing staff and students. The International Office will advise and mentor students on opportunities for study abroad and grants for foreign exchange visits as well as providing first-hand information on partner universities. It will also offer foreign language courses (or orient applicants towards existing ones)

Educative Activity

- PSL★ will increase the educative offer in English at a Master and Doctoral Level so as to be internationally competitive and to be able to attract students who do not speak French.
- Extend the ENS summer school program to the other PSL★ institutions; organize interdisciplinary sessions for undergraduate and graduate students to promote PSL★ masters and doctorate programs (for example, the INRIA-ENS project “Computer Vision and Machine Learning”, in July 2011)

Diffusion of PSL★ Activities

PSL★ will open a worldwide digital campus offering academic contents in English and in other languages to the web community and based on the experience of the Collège de France (9,000,000 items downloaded on the website in 2009). This digital campus will be based on the Liberlabo and will notably offer content about state-of-the-art research and the latest debates in English; enable local and international partners to share their concern on research and education with the global community; display all the classes taught at the Collège de France on the internet within four years and documentation about all the classes taught at other institutions. With the aim of achieving a complete digital archive of all educative activity within 10 years, possibly with real-time screening.

Setting up specific actions abroad

Specific actions will focus on emerging countries and notably on the BRIC countries so as to ensure that PSL★ is optimally placed in what are already and will increasingly be key centres of research and education:

- Allocation of PSL★ funds to create 4 chairs for foreign scholars and lecturers (with a strong equal opportunities policy directed at emerging countries). These positions will be filled on the basis of a common PSL★ procedure.

- Allocation of 10 PSL★ international fellowships to be awarded to outstanding students (pre-doctoral and doctoral) and post-doctoral researchers on the basis of a common PSL★ procedure (with a strong equal opportunities policy directed at emerging countries).
- Open permanent joint-offices in collaboration with partner universities of the International Alliance on the one hand and other leading French Institutions of Higher Education and Research (such as the other recipients of an IDEX award) in key markets such as China, India and North America
- Participate in major international education fairs and annual networking conferences

Increase the presence of PSL★ in the ‘European Research Area’

In the field of European research and education, PSL★ institutions will notably:

- Coordinate their skills and resources devoted to relations with the European Union institutions in Brussels in research, technology, innovation and training.
- Ensure deeper PSL★ integration into the “European Research Area” and systematic application of European recommendations on Higher Education and Research.
- Disseminate information about European programs and calls for proposals, and ensure that all PSL positions are widely advertised within the EU
- Provide help and guidance to potential applicants from PSL★ (this includes expertise in project writing and possible legal and administrative support), and assist applicants from the EU with administrative procedures
- Promote agreements with other EU institutions

PSL★ will also aim to join CLORA (Club of associated research organisations) with the objective of establishing a permanent representation of PSL★ institutions in Brussels.

CENTRE FOR ADVANCED RESEARCH IN PARIS

As a key action for its international strategy, PSL★ will create a Centre for Advanced Research on the highest international standards, whose mission will be to strengthen the links between PSL★ researchers and partner research teams all around the world. The Centre will be dedicated to the organization of intensive workshops, on a yearly basis with scholars and fellows in residence for a semester on a specific topic (e.g. moral realism, Mediterranean globalization, etc.).

3.6 CAMPUS LIFE

CREATING AN URBAN CAMPUS AT THE HEART OF THE LATIN QUARTER

An exceptional centre in the Latin Quarter, and two main extensions in the South and West of Paris

The institutions of the PRES PSL, the ENSAD and the Institut Curie are an essential part of the world-renowned “Latin Quarter” and have always contributed to its academic, social and cultural effervescence.

Beyond this perimeter, several PSL★ institutions also have locations and branches:

1. Southward, (1) on the site of Boulevard Jourdan (Paris 14th) where the Social Sciences and Economics departments of ENS are located, (2) in Meudon, where the Observatory is a major site for scientific culture in the Hauts-de-Seine area, (3) in Montrouge, where important projects are transforming the site into a residential students campus;

2. Westward, the UPD is close to La Defense. The IRT “Finance et Croissance Durable”, will embody the link between both PSL★ locations, since its headquarters will be within the perimeter of headquarters, but most activities will take place at the UPD and La Défense.
3. Finally, the ENSBA, CNSAD and CNSMDP are located in the 6th, 9th and 19th arrondissements of Paris.

PSL★ will initiate a broad reflection on the reorganisation of research locations, in coherence with its research and educational strategy. It will campaign for larger research surfaces for the Institut Curie and Chimie-ParisTech (with the prospective of the AgroParisTech building) and implement strategic projects in order to create common ventures (like the Institute of Environnement on the Jourdan Campus and a Centre for Research in Creative Arts/Science).



Rue d'Ulm

Towards an integrated and highly visible territorial campus

A coherent territorial strategy is a key factor for the implementation and the success of common academic and research ventures. This “campus spirit” will also foster a sense of belonging to the neighbourhood. It will contribute to the economic revitalisation of the district (student-bookshops, cafés, restaurants, theatres) and increase the visibility of the campus. Aware of this fact, the ambition of PSL and its partners is:

- 1) To create an urban campus in the Latin Quarter. Well identified in the Parisian landscape, it will anchor the academic and research campus in the urban fabric, thanks to the following actions:
 - Creating a physical identity with visible marks of affiliation to PSL★ Campus, and beyond, to all cultural activities affiliated to PSL★;
 - Integrating the campus in the city's landscape, in partnership with the City of Paris with pedestrian roads, paths articulating one PSL building to another, identifying signs;
- 2) To relate this campus with the branches in Southern Paris (Jourdan, Montrouge, Meudon) and Western Paris by developing awareness of the activities that take place on them and opening PSL★ partners offices on the main campus.

This double strategy will ensure a close relationship with both the intellectual and scientific heart of Paris and the modern financial and entrepreneurial centres.

ANIMATING THE SCIENTIFIC COMMUNITY WITHIN THE CAMPUS OF PSL★

PSL★ will create a territorial community for students, researchers, staff and alumni of different schools and institutions, by creating shared spaces and activities outside classrooms and laboratories. The main actions will be:

- 1) Creation of a common office for PSL★ campus life, which will serve as a unique “help and information desk” for visitors, students and scholars dealing with administrative matters (housing, credits, grants, etc.) and coordinate campus events.



Place Alfred Kastler

- 2) Organisation of shared living spaces, such as a PSL★ faculty club and sport facilities.
- 3) Structuring of campus e-communication: through an internet website, mailing lists, Intranet, PSL★ newsletter with ongoing campus events, and student publications.
- 4) Organisation of community events, such as a “PSL★ Day” with a presentation of all PSL★

achievements and projects or meetings between doctors and researchers.

5) Creation of a unique ID card for all members of PSL★ giving access to the different services on the campus, so as to reinforce the feeling of belonging to PSL★.

CULTURAL LIFE ON CAMPUS

Culture, a showcase of academic excellence, emphasizing the heritage of centuries-old institutions

PSL★ will encourage and coordinate the various cultural actions developed by its different members, and often led by engaged students thanks to:

- Partnerships with cultural institutions (Théâtre de l'Odéon, Comédie-Française, Musée de l'Homme, Musée du Quai Branly, Cité des Sciences et de l'Industrie, Réunion des Musées Nationaux, and Centre Georges-Pompidou - several projects in discussion with IDEX-partner CNSMDP);
- Thematic workshops and conferences ("Ernest Conferences", "Les Invités d'Ulm", experimental conferences, workshops for the young public);
- Co-organisation of resident exhibitions (e.g. "Histoire scientifique de la Montagne Sainte-Geneviève") and public cultural events and valorisation of scientific patrimony (visits of the Observatoire de Paris' sites and observation of the sky).
- Organisation of a permanent exhibition on the Meudon site (in the castle) that will present the most recent results of astrophysics and other sciences, placed in their historical perspective. PSL★ as such will take part in national and European events like "Journées Européennes du Patrimoine", "Fête de la Science", "Nuit des Chercheurs" or "Nuit blanche", and will create landmark events of its own, like the "Nuit de la philosophie", or the "Nuits des Planètes".

PROMOTING SCIENTIFIC VALUES AND EQUAL ACCESS TO KNOWLEDGE

A tradition of combining opening and excellence

PSL★ will combine social openness and excellence by building on the experience in cultural dissemination of institutions such as the ENS, the Observatoire or the Collège de France in order to: (1) diffuse scientific culture and values; (2) promote equal access to science, culture and research.

- Diffusing scientific culture and values

In a world where information is widely available but unreliable, PSL★ will promote the diffusion of high quality, verifiable knowledge to a large public, thus ensuring a widespread diffusion of its core values, such as team work, scientific rigor, and rational argumentation. Amongst the projects PSL★ will organise "Portes Ouvertes" operations and develop continuous education.

- Promoting equal access to science, culture and research

PSL★ partners will promote a policy of equal opportunity thanks notably to programmes for high-school students from underprivileged backgrounds with tutorials and orientation monitoring, and the participation in programmes such as "Cordées de la réussite" (Talens programme of ENS).

Similarly, the association Paris-Montagne also contributes to the promotion of science and research by putting scientists and young people from underprivileged areas in contact. To do so, it provides high school students with lab internship opportunities, and organises a yearly Festival that gathers 1500 children at the ENS around scientific animations, exhibitions and presentations for a period of four days.

In the framework of the IDEX, this strategy of social promotion will be extended to the whole

perimeter, with specific goals.

Systematising and extending social programmes within the PSL★ perimeter:

- Creating a PSL★ “Office for equal opportunity”, to unify the actions that are currently run by each institution;
- Widening the perimeter of the activities with the enrolment of more students (from 400 students to 1000 students within four years);
- Reinforcing the ongoing evaluation and assessment of equal opportunity programmes of PSL★;
- Developing in a systematic fashion the offer of conferences for a general audience;
- Widening the action of the association “La Main à la pâte” to all the partners of the IDEX.

4. GOVERNANCE, ORGANIZATION AND MANAGEMENT

4.1 GOVERNANCE

PSL★ will implement a sound, independent and efficient governance, so as to guarantee the traceability of IDEX funds, monitor the transformative effect triggered by the Excellence Initiative and an objective arbitration in case of specific disagreements.

One of the characteristics of PSL★ partnership is that it includes seven other partners in addition to the five charter members of the PRES PSL. PSL★ partners therefore propose a dedicated and independent governance structure, which will be composed in equal measure by representatives of the partners of PSL★ and representatives of the business world and society.

The proposed starting governance structure can be implemented immediately and is legally valid. The same is true of the final governance structure and of the proposed transition from one to the other, both of which have been reviewed by lawyers.

A PRAGMATIC GOVERNANCE, TO INITIATE THE IDEX PROGRAMME

During the first phase of the project, the governance will rely on the existing Fondation de Coopération Scientifique (FCS) PSL structure, which will be the administrative and legal bearer of the IDEX programme, since it is a recognized legal structure and has been approved by the Government.

The executive management of the IDEX programme will however immediately be delegated to a dedicated body: the IDEX Executive Committee, fully entitled to take all decisions with regards to the Perimeter of Excellence and its components. Half of this committee will be constituted by external members in order to guarantee an external review of the programme as well as to reinforce relations with the business world and society.

The IDEX Executive Committee will meet quarterly and will be assisted by the IDEX Steering Committee whose members will be chosen from within the Executive Committee. They will meet monthly and will be in charge of monitoring and taking decisions on operational issues.

Each project of the IDEX Programme (including the selected LABEX) will be overseen by an operational committee, which will ensure the operational management of the projects and the mobilisation of the necessary teams.

The management of the IDEX Programme will be ensured by the IDEX Programme Management Office led by an IDEX Programme Manager.

A Scientific and Advisory Board will meet yearly in order to ensure scientific control and assessment of the ongoing projects and formulate recommendations to the IDEX Executive Committee.

AN EVOLUTIVE GOVERNANCE STRUCTURE, AIMING AT REINFORCING THE LINKS BETWEEN PARTNERS

PSL★ members have committed to transform the governance of the IDEX programme during the first two years of implementation of the IDEX. They plan to create a separate structure for the IDEX programme as the sole vehicle and governance body for the perimeter of excellence. The proposed structure will probably take the form of a dedicated “*Fondation Partenariale*”.

The advantage of this separate structure and the Fondation Partenariale model are numerous: it will legally allow a larger participation of representatives of the business world and will enable governance rules and voting to be fine-tuned and adapted. It will also formally guarantee the total independence of the perimeter of excellence from the PSL FCS and avoid any possible confusion between the two structures.

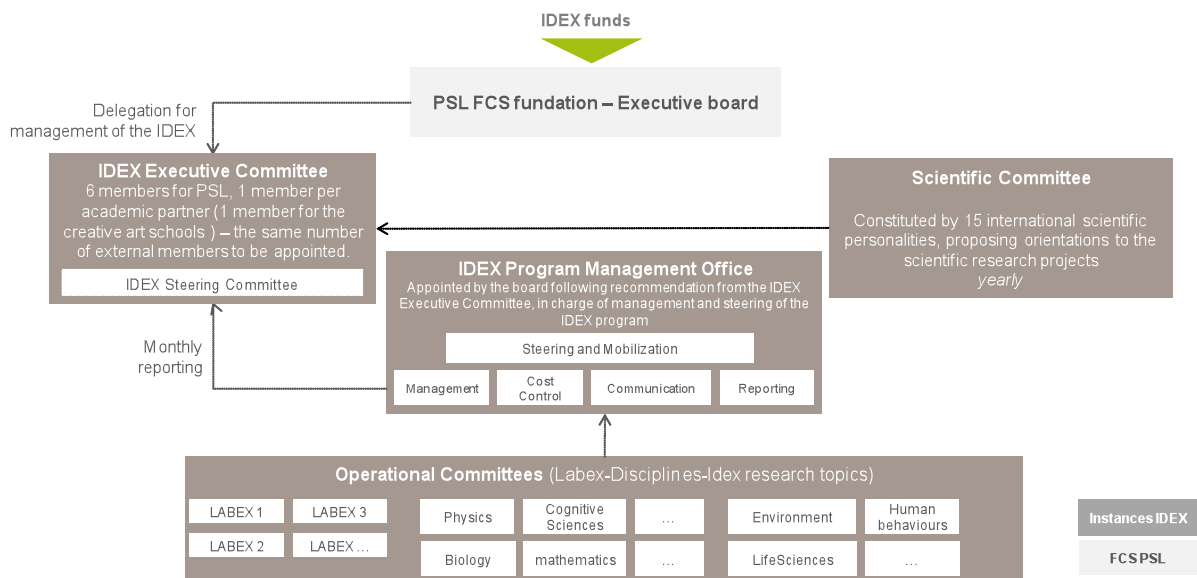
The transition period is planned to take place as follows:

- **PSL★ year one:** Creation of the new legal structure and definition of the transition process by the IDEX Executive Committee. Governance rules defined for the starting structure will apply to the new structure and key principles of representation will be maintained.
- **PSL★ year two:** Shift from the starting structure to the new structure in charge of managing the excellence perimeter. Synergies identified in the first year will be kept and reinforced in the definitive structure. Governance rules defined for the starting structure will apply to the new structure, and key principles of representation will be maintained.

The PSL★ programme thus aims at building a pragmatic and reactive Programme management.

ROLES AND RESPONSIBILITIES OF THE DIFFERENT BODIES

Graphical representation of the governance (initial stage):



FCS PSL “Conseil d’Administration” (CA), legal recipient of the IDEX funds for the transitory period

Composed by the founding members of PSL, the *Conseil d’Administration* will delegate to the IDEX Executive Committee the responsibility and management of the IDEX programme via a change in the foundation’s legal statuses.

The IDEX Executive Committee – quarterly meetings:

This committee is the central body of the IDEX governance. Fully empowered by the CA, it will act as the executive decision making entity of the IDEX. The IDEX Executive Committee will examine and arbitrate proposals made by the operational committees, define priorities in terms of research, formation and other projects of the excellence perimeter, manage the allocation of ressources and vote budgets. The IDEX Executive Committee will be entitled to launch new projects and to close existing ones.

The IDEX Executive Committee is constituted by the following members, each of whom will have one vote. External personalities will be nominated by the internal members

- Representatives of the IDEX partnership:
 - One representative of the FCS PSL (President of the Foundation)
 - One representative for each PSL academic institution
 - One representative for UPD,
 - One representative for Institut Curie
 - One representative for the schools of Creative Arts (ENSAD/ENSBA/ CNSMDP/CNSAD)
- External members (to be confirmed):
 - One scientific personality of international reputation : Pr Robert Darnton or Pr Detlev Ganten
 - Four representatives of the business world: Mme Béatrice Dautresme, M. André Levy Lang, M. Philippe Camus, M. Peter Thiel (tbc) or M. de Chalendar (tbc)
 - One representative of the CNRS
 - One representative of the INSERM
 - One representative of the Conseil Scientifique de Paris
 - One representative of the Conseil Scientifique de la Région Ile-de-France

The IDEX Steering Committee – monthly meetings:

The IDEX Steering Committee will be appointed by the Executive Committee and will be formed by members of this committee, including representatives all the academic partners of the IDEX. It will ensure the proper application of the decisions and guidelines of the Executive Committee.

The IDEX Programme Management Office (PMO)

Placed under the responsibility of the IDEX programme manager, the IDEX PMO will be in charge of overall management and monitoring of the programme. The IDEX programme manager, nominated by the IDEX Executive Committee, will be responsible for the actions of the excellence perimeter and coordinate information and the preparation of reports.

The Programme Management Office will:

- Organise monthly reporting to the IDEX Executive Committee and provide analysis and supporting documents to the Executive Committee.
- Be in charge of day to day management of the programme and of monitoring quality indicators and progress flowcharts of the IDEX projects;
- Attend the IDEX Executive Committee, Steering Committee meetings, and Operational Committees (with no voting rights) so as to ensure optimal overseeing of operations within the IDEX perimeter. On the basis of the budgets approved by the Executive Committee, and with the support of specific processes and tools, the Programme Manager will ensure a tight control of the expenses and the proper use of the allocated funds;
- Implement communication tools both internally and externally. It will also be responsible for the content of the IDEX website

The operational committees – monthly

The operational project committees will include representatives from the different institutions working on common projects. The committee will either correspond to the LABEX committees, or be created ad-hoc for transversal IDEX projects.

The Scientific Committee – yearly meeting

The Scientific Committee will be composed by International scientific personalities. This committee will give orientations and recommendations on scientific programs to the IDEX Executive Committee.

4.2 MANAGEMENT

The management of the IDEX programme will be centralised at the IDEX Programme Management Office. This office will implement project management tools in order to efficiently steer and monitor all actions within the perimeter of excellence.

- The IDEX programme “projects portfolio”

All the projects will be described in the IDEX projects portfolio, according to a common framework. For each project, a road map will be defined, detailing the planning, deliverables, resources and milestones towards achievement. This road map will be binding and approved by all participants. It will focus on the first 4 years of implementation and highlight the 10 years target.

- Performance indicators

The IDEX programme will be managed in function of a series of performance indicators consolidated in a dashboard to be prepared by the IDEX PMO and shared with the IDEX Steering Committee on a monthly basis.

At the operational level, each project will define a set of five performance indicators, adapted to its field of implementation. These indicators will be submitted to the IDEX PMO for approval and reviewed by the IDEX Executive Committee. Indicators will include (non-exhaustive list):

- Budget and cost monitoring: monthly reporting highlighting the expenses, estimated to completion costs, yearly forecast and cost distribution;
- Research programmes: number of high impact factor publications, number of competitive grants (e.g. ERC);
- Education projects: evolution of the percentage of graduate students, number of applications per position, number of student grants, quality evaluation of courses, professor evaluation;
- Economical impact: number of private contracts, number of patents filed, number of sponsored start-ups, number of partnerships with the private sector;
- International: number of international students, number of ERC and other international grants, signed memorandums of agreement with foreign institutions;
- Campus Life and Social actions: number of accommodations offered, number of student and researcher grants, events organised;
- Diffusion of knowledge: number of internet connections; survey of the internet users of the PSL Research University portal, number of library users, exhibitions.

- Programme and projects review

Based on the proposed committees, monthly, quarterly and yearly reviews will be organised, based on a clear escalation process managed by the IDEX PMO. The transparency of the process will be guaranteed by dedicated work flows and tools such as a Balanced Scorecard. The IDEX Executive Committee will be entitled to request external audits of any part of the project.

4.3 ORGANIZATION AND COMMON PROJECTS

Pooling and optimization of resources between the IDEX partners

Pooling of the resources in the fields of research and education, as well as common services are described in the relevant chapters of this documents.

- In Research, these resources optimization actions will occur for all the LABEX, for the structuring transversal programmes (Environment, Life Sciences / Hard Sciences, Rationalities and Human Behaviour) and for specific disciplinary programmes.
- In Education, pooling of the resources will concern the graduate level with the creation of a common Graduate Centre, delivering services to all graduate students of the perimeter and new master courses. At the undergraduate level, a common undergraduate cycle will be implemented. Finally various trans-institutional courses will be directed at the business world and public administration.
- In terms of services, PSL★ will pool documentation resources, international relationships, technology transfer, cultural life and social actions.

Real estate

- A common master plan for real estate will be defined in 2011, in connection with the « Plan Campus » and with major real estate operations such as the rue Claude Bernard project. This master plan, will aim at optimizing surfaces, identifying synergies and opportunities to reinforce optimal use of all available spaces. A preliminary version has already been prepared.

Information Systems

- In order to improve management and control, PSL★ will implement a dedicated Information system for the IDEX programme portfolio management so as to monitor progress and consolidate indicators into dedicated dashboards. This programme management tool will also allow detailed fund tracking.
- In parallel, a broader IT action will be set up in order to define a PSL★ IT master plan capitalizing on existing information systems. The objective is to ensure interoperability and benefit from the scale of the IDEX to implement optimal management software. The IT master plan will be defined in 2011 and implementation of common IT projects will proceed immediately afterwards.

5. MEANS

5.1 FINANCIAL STRATEGY

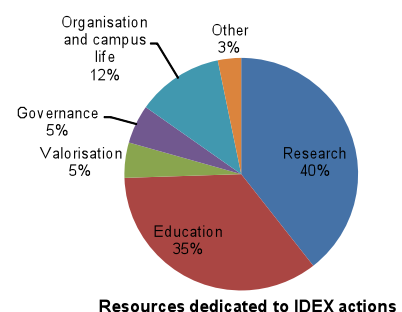
Key figures

- Capital grant requested for **IDEX actions: 263 MEUR** for ten years
- Capital grant requested for **LABEX** contributing to the perimeter of excellence: **136 MEUR** for ten years
- **Total capital grant requested: 399 MEUR**

The great majority of the IDEX budget will be allocated to actions concerning the perimeter of excellence (world-class research and training actions structuring the site).

Research and education form the core of the capital grant requested as shown on the chart. The Executive Committee will be attentive to respect this distribution.

All the projects funded by the IDEX will also benefit from existing resources contributed by the different partners. Indeed, PSL★ partners will provide 40% of the total cost of the projects that will be funded by the IDEX thus demonstrating their financial commitment.



Finally, efforts made in the domain of valorization will enable research teams to increase the part of external resources in the project funding. 168 M€ are expected from external resources,

corresponding to 15% of total resources (CNRS, INSERM and INRIA resources given to partners and dedicated to IDEX actions are considered as part of internal resources).

5.2 TEN-YEAR FINANCIAL PLAN

TABLE 1: PRESENTATION OF THE RESOURCES AND EXPENSES OF THE IDEX EXCELLENCE PERIMETER CUMULATED ON 10 YEARS (IN EUROS)

Action	Ressources				Dépenses		
	Subvention IDEX	Autres subventions Investissements d'Avenir	Apport des établissements partenaires sur leur budget propre	Ressources externes	Investissements dont immobilier	Fonctionnement	Personnel
Research - Mathematics and computer sciences	16 490 000 €	-	27 200 000 €	15 950 000 €			16 490 000 €
Research - Physics and astrophysics	14 200 000 €	-	67 430 000 €	18 000 000 €	1 000 000 €	3 800 000 €	9 400 000 €
Research - Physics - Labex WIFI	-	10 000 000 €	28 640 000 €	41 650 000 €	4 592 200 €	1 157 800 €	4 250 000 €
Research - Physics - Labex ENS-ICFP	-	9 755 142 €	8 148 081 €	- €	1 192 944 €	1 938 198 €	6 624 000 €
Research - Astrophysics - Labex AASG	-	8 646 976 €	- €	-	-	1 970 000 €	6 676 976 €
Research - Chemistry - Paris Institute for Chemical Engineering	11 500 000 €	-	59 855 400 €	16 000 000 €	1 500 000 €	4 000 000 €	6 000 000 €
Research - Chemistry - Labex METACEN	-	7 572 028 €	5 673 200 €	- €	1 150 000 €	1 493 028 €	4 929 000 €
Research - Chemistry - Labex ChemVivo	-	12 864 800 €	56 450 000 €	82 470 000 €	1 122 415 €	2 618 969 €	9 123 415 €
Research - Biology - Labex MEMOLIFE	-	14 411 690 €	91 899 910 €	213 371 457 €	1 461 690 €	3 160 000 €	9 790 000 €
Research - Biology - Equipex PHOBIOL	-	4 640 900 €	7 809 224 €		3 342 000 €	1 005 140 €	293 760 €
Research - Biology - Center of Mesoscopic biology	15 000 000 €	-	14 236 000 €	22 700 000 €	5 000 000 €	3 000 000 €	7 000 000 €
Research - Biology - Bioinformatique DIALOG	-	2 685 717 €	1 792 742 €		11 990 €	2 310 224 €	363 503 €
Research - Earth sciences	5 000 000 €	5 000 000 €	10 520 000 €			1 000 000 €	4 000 000 €
Research - Cognitive sciences	8 000 000 €	9 440 000 €	24 500 000 €	13 200 000 €	1 000 000 €	3 000 000 €	4 000 000 €
Research - Economics finance and management	12 500 000 €	-	34 517 992 €			2 500 000 €	10 000 000 €
Research - Humanities and social sciences	9 600 000 €	-	15 672 656 €			2 000 000 €	7 600 000 €
Research - Humanities and social sciences - Labex TransferS	-	16 190 079 €	129 243 480 €	26 035 680 €	80 000 €	3 248 695 €	12 861 384 €
Research - Humanities and social sciences - Labex Risques	-	14 016 077 €	31 280 300 €		522 240 €	4 345 000 €	9 314 885 €
Research - Humanities and social sciences - Equipex GEOPAST	-	2 455 638 €	5 560 076 €	210 735 €	2 132 138 €	323 500 €	
Research - Humanities and social sciences - Equipex D-FIH	-	3 986 060 €	90 000 €	877 520 €	64 000 €	2 522 060 €	1 400 000 €
Research - Transversal - Institute of environnement	14 000 000 €	-	8 974 440 €	12 700 000 €	1 500 000 €	3 000 000 €	9 500 000 €
Research - Equipex PLANAQUA	-	3 649 570 €	492 567 €	2 425 225 €	2 733 970 €	642 000 €	273 600 €
Research - Hard sciences / Life sciences Interface	9 300 000 €	-	18 830 000 €	5 000 000 €	6 000 000 €		3 300 000 €
Research - Biology - Labex TRANSIC	-	30 437 143 €	74 052 692 €	33 494 928 €	- €	6 002 039 €	24 435 104 €
Research - Equipex PARIS-EN-RESONANCE	-	7 605 986 €	3 900 524 €	7 085 981 €	7 250 000 €	332 240 €	23 746 €
Research - Equipex ULTRABRAIN	-	3 779 600 €	- €	10 302 060 €	2 930 000 €	62 400 €	787 200 €
Research - Labex IPGGM Microfluidique	-	12 317 760 €	21 435 345 €	31 962 034 €	1 033 760 €	2 473 120 €	8 810 880 €
Research - Equipex IPGGM	-	8 216 304 €	7 010 200 €	139 992 €	6 543 304 €	1 514 004 €	158 996 €
Research - Center on Rationalities and Human Behaviour	12 600 000 €	-	8 382 656 €	-	1 500 000 €	1 500 000 €	9 600 000 €
Education - Graduate program	14 240 000 €	-	46 318 600 €			800 000 €	13 440 000 €
Education - Pluridisciplinary undergraduate cycle	32 000 000 €	-	7 702 400 €				32 000 000 €
Education - Undergraduate program	3 000 000 €	-	7 500 000 €			300 000 €	2 700 000 €
Education - Executive education	3 000 000 €	-	5 474 400 €	2 500 000 €			3 000 000 €
Education - SACRE	9 000 000 €	-	13 200 000 €	-		1 000 000 €	8 000 000 €
Total	189 430 000 €	187 671 470 €	843 792 886 €	556 075 612 €	53 662 652 €	63 018 417 €	246 146 449 €

TABLE 2: PRESENTATION OF THE RESOURCES AND EXPENSES OF THE OTHER IDEX ACTIONS CUMULATED ON 10 YEARS (IN EUROS)

Action	Ressources				Dépenses		
	Subvention IDEX	Autres subventions Investissements d'Avenir	Apport des établissements partenaires sur leur budget propre	Ressources externes	Investissements dont immobilier	Fonctionnement	Personnel
Knowledge dissemination - Liberlabo	6 650 000 €	-	15 655 220 €	100 000 €	1 500 000 €	150 000 €	5 000 000 €
Knowledge dissemination - faberLabo	5 000 000 €	-	12 820 400 €	215 000 €	5 000 000 €		
Knowledge dissemination - common portal	7 000 000 €	-	9 483 220 €	-	2 000 000 €	1 000 000 €	4 000 000 €
Knowledge dissemination - Publication "Organization & Decision Sciences"	1 000 000 €	-	2 500 000 €			200 000 €	800 000 €
Valorisation - Valorisation unit	9 700 000 €	-	4 624 000 €	1 000 000 €		2 425 000 €	7 275 000 €
Valorisation - IRT Finance et croissance durable	-	50 000 000 €	- €	60 000 000 €	32 500 000 €	7 500 000 €	10 000 000 €
International	11 800 000 €	-	14 022 880 €	1 000 000 €		3 000 000 €	8 800 000 €
Campus life	8 650 000 €	-	8 055 220 €	60 000 000 €	1 730 000 €	865 000 €	6 055 000 €
IT projects	14 180 000 €	-	7 126 820 €		3 920 000 €	2 360 000 €	7 900 000 €
Governance	2 000 000 €	-	- €	-		1 000 000 €	1 000 000 €
IDEX management (3% management fees)	7 662 300 €	-	- €	-		3 831 150 €	3 831 150 €
Total	73 642 300 €	50 000 000 €	74 287 760 €	122 315 000 €	46 650 000 €	22 331 150 €	54 661 150 €