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LabEx Sciences Innovations Techniques En Sociétés (SITES)

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1 CONTEXT AND PREVIOUS ACHIEVEMENTS

1.1 CONTEXT AND SCOPE OF THE PROJECT

Context. Since its creation, extending the initial strategic involvement of the *Institut Francilien Recherche Innovation en Société* (IFRIS), the LabEx “Science, Innovations, Technologies in Society” (SITES) has structured a strong research capacity to study different issues related to the relationships between science, technology and society, by connecting two research fields: Science and Technology Studies (STS) and Studies of Policy for Research and Innovation (SPRI). Our activities are fed by the cross-fertilisation of two specific scientific areas. This allows us to be very innovative and to occupy an original international position. More than ten years after grouping approximately 180 French researchers in the Paris Region (ten research units and soon two more to be added), we have made considerable advances in showing that knowledge production in the social sciences can be fruitful for action and policy without having to become an “instrumentalised social science”. We engaged the necessary dialogue between researchers, decision-makers, and advocates and stakeholders of science and innovation.

Objective. Labex SITES aims at sustaining a leading world-class research pole in the cross-disciplinary field of “Studies of Science, Technology and Innovation in Society”, by providing French researchers with high-quality support to foster research capacities in the social sciences. The Labex was instrumental in positioning French research at the international level, creating an attractive structure able to develop an original scientific production, a renewed research agenda and, above all, to nurture the next generation of researchers.

Benchmark. In France, LabEx SMS (Toulouse) tackles issues very close to our own field, but from the perspective of the social structuring rather than working, as we propose, in the interfaces of science and society. But evidently, there are close intellectual and practical connections with our colleagues from Toulouse, as well as in other large regional poles (eg. Grenoble and Bordeaux). Another pole in Paris has been gathering around engineering schools, and in the large composite unit known as I3 (Institut Interdisciplinaire Innovation) that contains five research units, among which the historically most important French research lab, the Centre de Sociologie de l'Innovation. We have close links with these colleagues and many have been very actively engaged in the DIM IS2-IT, a programme managed by IFRIS, supported by the Region Ile-de-France, mostly dedicated to support doctoral scholarships. Our research field is thriving in Europe and has actively contributed to the making of the European Research Area and directly influences research policy in Europe. LabEx SITES has helped to establish French researchers as important partners within this European effort by federating a large number of dispersed researchers in the region of Paris.

Strategic Research Orientations. SITES has produced high impact publications and initiated numerous research projects nationally and at the European level. Its activities are based on a scientific programme defined through four Strategic Research Orientations (SRO), that correspond to the actual interests and capacities of the member units. The first SRO is dedicated to the study of the renewed forms of innovation, in firms, public organisations, as well as in society, by exploring various forms of innovation and engagement with users, beyond the competitiveness framework. The second SRO, Transformation of institutions and regimes of production of knowledge, was to study the management of research institutions and the modes of knowledge production, exploring the emergence of new scientific fields, including their relations to users, the creation of standards, the implementation of regulations, and the management of intellectual property rights. The third SRO focuses on the various forms of global governance of knowledge, including the Global South, the international organizations and the definition of major challenges. Research has been engaged in studying how public problems become worldwide issues and how actors interact internationally. The fourth SRO examines the way science and technology shape the future, and the constitution of an “economy of techno-scientific promises” with the assemblage of new objects, techniques and political orders, for example in biotechnology, nanotechnologies, digitalisation, etc.

1.2 MAIN PREVIOUS ACHIEVEMENTS

The LabEx has been essential on various grounds: 1) the structuring of the scientific field by maintaining an active network of research units and by supporting new research orientations; 2) the training of a new generation of researchers thanks to doctoral and postdoctoral programmes, and the support to international circulation of students and young researchers; 3) the organization of lively and scientifically sound research debates with the organization of an annual Thematic School that includes doctoral students and all post-docs funded by the LabEx; 4), the support given to many scientific events (conferences, meetings, seminars, workshops) with high-level visiting researchers; 5) the creation and development of a digital platform, open to outside users, allowing to perform sophisticated textual data analysis in social sciences and digital sociology; 6) the active engagement in public debates on the value of science, and the creation of a national political platform that allows to organize the science-society linkages, citizen science and participatory research; 7) the support to the creation of a new research unit (LISIS).

Most significant achievements

A structured network of labs

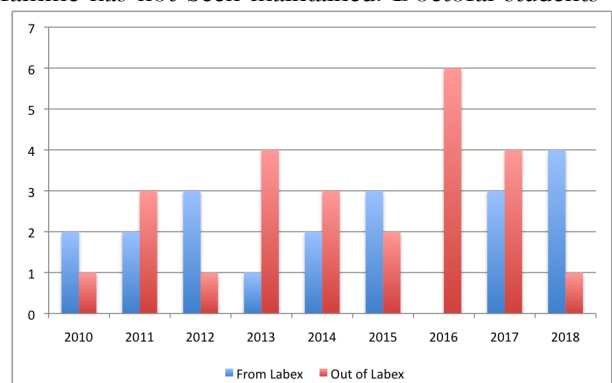
Rather than a "network" of laboratories, LabEx SITES has been designed as an Institute located in various locations with common governance. Within the French institutional framework, it is necessary to connect dispersed research units with a common scientific objective. The large majority of activities are funded mainly through calls for proposals. That is the case for post-doc positions, research projects, organization of international research meetings or seminars, circulation of young scientists and doctoral students in foreign research laboratories, and participation of students to international conferences. Funding is attributed after the examination of proposals by an ad-hoc committee, or by an external peer reviewing, as is the case of the post-doc programme, and according to its contribution to the strategic research orientations (SRO) of the LabEx.

The Scientific Council has been instrumental in defining these strategic research orientations. It allowed defining a common general orientation in selecting among a large variety of topics, application fields, and research interests. Two guidelines were followed for these orientations: they allow to provide support to activities that mix disciplinary communities that are usually distant, and to provide an infrastructure and methodological support to empirical research with mainly fieldwork, by mixing quantitative and qualitative research.

Support for doctoral students and postdoctoral researchers

Activities are all organized in order to join the renewal of the research agenda with the training of a new generation of researchers.

Support to PhD candidates. LabEx SITES has managed a specific fund from the region Ile-de-France that was mainly dedicated to fund doctoral scholarships (26 scholarships distributed in 4 years). The labs of SITES received 14 students, but unfortunately the programme has not been maintained. Doctoral students can present proposals for stays in a foreign laboratory (not for fieldwork) in order to exchange with foreign researchers and other doctoral students abroad. Funding for circulation is also open to "young" researchers (up to 7 years after PhD), already holding a position in one of the LabEx laboratories. Calls are also made for proposals to participate to international conferences (the most important ones in our field). Funding is also attributed for publishing a remarkable thesis.



The post-doctoral programme. The post-doctoral programme occupies a central position in the strategy of the LabEx. It is an open call, and post-doc positions are offered for two years, which makes it a rare and attractive programme. In total (including this year), 45 post-doctorates have been funded since 2010 (the first three ones before the LabEx funding: 25 post-docs have been hired coming from a research university outside the LabEx limits, and 20 post-docs come from our SITES labs). In 2018, 104 proposals were received (65% foreign, and 35% French) and five new positions have been offered. As a whole, 20 female and 25 male candidates have been selected. Of the 30 completed post-docs, five continued with post-doctoral fellowships abroad (Lausanne University, TU Delft, Bonn University, London School of Economics, one Marie Curie post-doc in Barcelona Univ); 19 have obtained track positions: as "Maître de conférence" in university (7 positions), as "Chargé de recherche" in public research organisation (8 at CNRS, 2 at IRD, 2 at INRA) and 2 teaching positions abroad (associate professors in Hamburg, Germany, and Göteborg, Sweden); 2 former post-docs are freelance consultants on environmental and knowledge policy. It is remarkable that all post-doctoral fellows have pursued their careers in research in their STS specialties, and most post-docs keep close contacts with the LabEx SITES after they have finished.

Post-docs are bringing novelty to the research units and they make a considerable contribution to the LabEx as a whole. Individually, the young researchers value the considerable advantage of performing a high-level research project, with a high degree of freedom and in good material conditions. They also consider that the prestige of the "brand" provided by the LabEx enhances their possibility of finding a good research position: "All respondents consider the LabEx as a prestigious institution, competitive, and internationally oriented" (as mentioned by an internal survey report on experiences and career paths of postdocs).

The annual Thematic Schools and the organization of scientific events

The Thematic School, once a year, is the main moment "where the LabEx becomes a social shared reality" as was stated in a survey we did among our postdocs. In effect, each year the Schools gather all the on-going post-docs and around 20 doctorates from the research units who are presenting the advancement of their work. We have mobilized 92 doctoral students since 2011, working on the topics of the LabEx, and 14 of these students were funded by the DIM project IS2-IT managed by the secretariat of the LabEx SITES. Discussions and "Reading workshops" are prepared, organized and moderated by postdocs. The reading workshops help provide a common theoretical background to students. In total, more than 140 doctorates have contributed to the Thematic Schools. At least, one foreign senior researcher is invited to present her/his work and at least one round-table is organized on the Thematic chosen that year.

List of thematic schools and organizers

2010: "International regulation of global risks - geopolitical issues and expertise" (coordinated by Catherine Paradeise, Pierre-Benoit Joly, Amy Dahan)
2011: "Measuring the value of science, scientists and the products of science" (coordinated by Catherine Paradeise and Christine Musselin)
2012: "Biopolitics, Bioknowledge, Biopower" (coordinated by Christophe Bonneuil, Jean-Paul Gaudillière and Pierre-Benoit Joly)
2013: "Globalization as an object of research in the social sciences - the processes of globalisation" (coordinated by Amy Dahan, Stefan Aykut, Jean-Paul Gaudillière, Philippe Larédo, Ashveen Peerbaye)
2014: "Transition as a political issue and research focus for SSH" (coord. by J-P. Gaudillière, P-B. Joly, & D. Pestre)
2015: "Materiality in the social sciences" (coord. by Ashveen Peerbaye), Barcelona, Spain
2016: "Symmetry/Asymmetry: Knowledge and power in the social studies of science" (coord. by R. Arvanitis), Athens, Greece.
2017: "Citizen Sciences? Technologies, policies and practices of participation", Marseille (coord. S. Boudia, A; Peerbaye, D; Demortain).
2017 : "No(s) Futur(s)", Bordeaux. (coord. D. Demortain, H. Guillemot, A. Peerbaye, S. Boudia).

This annual event is completed by regular visits of international researchers that have been intensified after the mid-term evaluation.

List of visiting researchers

2012 : Charles Edquist (Sweden)

2013 : David Vogel (US), Peter Weingart (Germany), Sally Randles (UK)

2014 : Stephen Hilgartner (US)

After the mid-term evaluation:

2015 : David Vogel (US), Peter Weingart (Germany), Geoffrey Bowker (US)

2016 : Alex Faulkner (US), Cecilia Rikap (Argentina), Larry Bush (US) et Stephen Hilgartner (US)

2017 : David Herzberg (US), Lamia Tennci (Algérie), Natewinde Sawadogo (Burkina Faso)

2018 : Sébastien Lanctôt (Canada) et Carsten Reinhardt (Allemagne)

Creation of a digital platform: CorTexT (<http://www.cortext.net>)

The LabEx has investment in a platform of digital studies. The project was carried by the INRA SenS Unit, before the LabEx, and afterwards by the LISIS unit. Engineers, data scientists and researchers have created an instrument for empirical research in our field, based on clustering techniques that permit to parse, analyze and visualize knowledge extracted from small or large textual database. For the study of science and technology, it is now possible to take advantage of a growing number of databases for a large-scale exploration of the scientific literature, or data related to the management of laboratory data, patents, and datasets from social media and the blogosphere. The CorTexT platform is both a space of interactions between social scientists and computer scientists, and a tool freely available on line. This platform is a key asset of the LabEx and an instrument of “open science” for researchers in social sciences who want to use new methods of exploration and corpus analysis combining qualitative and quantitative approaches. With more than 1,000 registered users it is a real proof of the fecundity of interdisciplinary collaborations between social sciences, complex systems theory, and automatic processing methods of language. LabEx SITES played a crucial role in supporting this instrument. Based on this achievement, research members of the LabEx have won a FP7 competitive grant for the European project RISIS (Research Infrastructure for Innovation and Policy Studies: <http://risis.eu/>). The project has been extended for five more years as an e-infrastructure of the European Commission. Hence, the LabEx plays a key role for the methodological developments in its field of research at the European level.

Creation of a multi-actor platform for science and society relations

Researchers in many of the LabEx units have been engaged in thinking on the necessity to enhance productive interactions between research and society. Based on results from our own research projects and observations, it became clear that France experiences strong difficulties in operating this connection. That is why, since the first moment of designing the LabEx, new modes of action were sought, so that the social sciences were to address the societal needs, the needs of citizens, make science more present in the city and the field, address the needs of users of scientific knowledge. Action was taken by actively participating in the political debates, at the European Commission, in the French Parliament, in the relevant Ministries, in public research organizations. Significantly, SITES can be credited with proposing a modification of the 2013 Law on Research and Higher Education, which aims at strengthening interactions between science and society. SITES actively participated to the organization, in 2015, of a very large Conference-forum to debate all these issues. Numerous researchers organized sessions and debates within this Forum, that had the bad fortune of taking place the same day of the killing at *Charlie Hebdo*. A famous economist in France, Bernard Maris, who was to be one of our speakers, was killed that day. The LabEx and friends of the economist created a UNESCO Chair that bears the name “Bernard Maris”. Beyond that, the Forum created a multi-actor platform, called AllISS (www.alliss.org), that is gathering close to 100 NGOs, research and higher education organisations and other actors engaged in the science-society activities. AllISS also has published a White Book on the Science and society relations that results from meetings with hundreds of participants in debates around this theme and presented at the French Parliament in collaboration with the Office for Science and Technology (OPECST). LabEx SITES is a founding member of AllISS and participates to its governing

board. The Labex contributes substantially to several of its thematic working groups (“Third-mission of universities”, “Mediation-Intermediation”, “Participatory governance of research”, etc.). The participation to AlliSS is a coherent outcome of many of our research results, in particular concerning participatory research and citizen science. It will be of great interest for improving interactions between UGE and society at large.

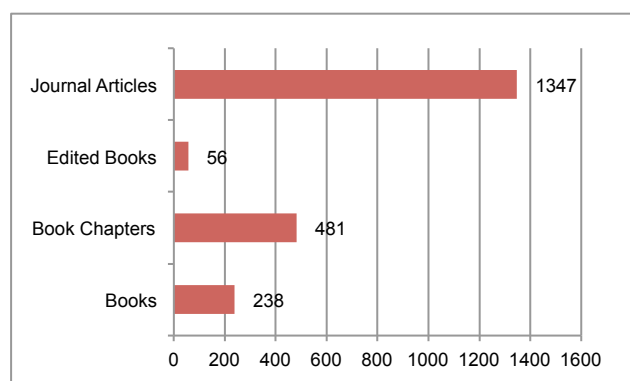
Creation of the Mixed Research Unit LISIS at the heart of the I-SITE

The Laboratoire Interdisciplinaire, Sciences, Innovation en Société (LISIS) is a mixed research unit (UMR) founded by an INRA research unit (SenS) and a team of the LATTS Unit. LabEx SITES has helped the consolidation of the LISIS Unit, now affiliated to CNRS, ESIEE, INRA and UPEM. LISIS is sharing its secretariat and support team with the LabEx SITES. The creation of LISIS is a key institutional achievement. LISIS plays a central role in the network of labs funded by the LabEx, and all of its researchers do relevant research for SITES. Both LISIS and LATTS belong to the Comue UPE, and contribute to the local structuring of the Marne-la-Vallée research activity, in the social sciences and humanities.

An assessment of the scientific production

The production of SITES Researchers

Traditionally, we are asked to identify the scientific production of the LabEx. All LabEx managers know the difficulty in gathering this information, particularly for such a wide network.



In any case, we found 2122 references of journal articles, books, edited books, and chapters in books. That is an average of 192 articles and 69 chapters in edited books, and an average published production of 303 items per year. Given a cumulative quantity of 300 persons (researchers/teachers/post-docs) in the whole period of the LabEx (which produces a cumulative number of 166 full-time equivalent), we can say that the rate of production is 1.2 articles annually and 0.4 chapters in edited books, and a rate of production of 1.9 annual average of documents

per year per researcher/teacher/post-doc. As a comparison, we can use the recent report of LISIS, since this is the only large unit that includes all of its members under LabEx SITES: LISIS reports an average rate of 1.9 articles annually. As compared to the reporting of a research unit, the LabEx reports more completely articles and under-counts other types of productions. We also were surprised to find a reduced proportion of chapters in books. Maybe that indicates that researchers in the social sciences, in our field are changing their mode of production, preferring Journals to edited books and chapters in collective books.

The measurement of scientific production through the Scopus reference database

Articles	Foreign Journals	French Journals	Total
Nb. of Journals	225	62	286
Nb. of Articles	334	264	598

Another way to measure production is to refer to some bibliographic database. We used the Scopus database, knowing it records satisfactorily the disciplines covered by SITES, and records affiliations and citations, necessary information for the evaluative analysis. We gathered the references using a list of names of SITES members (permanent researchers and postdocs) for 2011-2017 publication years (see table), reaching 598 articles (that is 44% of the list of references that we have gathered manually).

Internationalisation. As a whole, the LabEx SITES authors identified in Scopus publish more in foreign journals than in French journals, although the French journals listed in the references are among the best in Social Sciences. 56% of articles are published in foreign journals and 79% of journals are not French (see

below, the list of main foreign journals). A usual measure of internationalisation of research is co-authorships: 25% of the affiliations are located in a foreign country, and this figure has grown regularly over time.

Interdisciplinarity. Researchers in the LabEx typically work in very diverse disciplines, and tend to publish in journals that belong to their own scientific discipline. Around 50% of articles are published in journals chosen only once or twice in that period.

Scientific positioning. LabEx SITES is thus solidly based in the “Science and Technology Studies” (STS) and the “Studies of policy for research and innovation” (SPRI) with 42 articles. Authors also publish in disciplinary journals in the social sciences, mainly sociology (35 articles) and have a propensity to publish in “field journals” or interdisciplinary journals corresponding to objects of research (15 articles).

Journal Title	Occurrence	Type of Work
Technological Forecasting and Social Change	7	STS & SPRI
Research Policy	6	SPRI
PLoS ONE	5	Field journal
Scientometrics	5	SPRI
Technology Analysis and Strategic Management	5	STS & SPRI
History and philosophy of the life sciences	4	STS & History
Anthropology and Medicine	4	Field
Minerva	4	STS & SPRI
Studies in History and Philosophy of Science. Part C: Studies in Hist. and Phil. Biol. and Biomed. Sci	4	STS & History
Science Technology and Human Values	4	STS & SPRI
Science, Technology and Society	4	STS & SPRI
International Journal of Epidemiology	4	Discipline

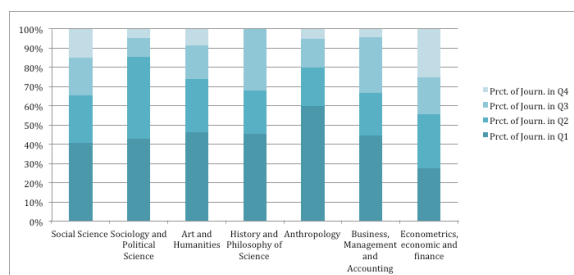
The quality of the LabEx SITES production according to SCOPUS ranking system

We can use the classification of journals by quartiles, proposed by Scopus. In effect, journals are classified in

All publications of LabEx in Scopus	Cites score 2016	SJR 2016
Quartile 1	13,33	18,39
Quartile 2	2,32	1,27
Quartile 3	1,09	0,56
Quartile 4	0,30	0,21

1st, 2nd, 3rd and 4th quartile, according to the value of the “Scopus Rank Journal” indicators, which is more robust than the usual impact factor used by Web of Science, the other large database used in bibliometric analysis. Based on these thresholds, we see that half of the production of the LabEx is published in journals with a SJR score above 0.562 (and Cites score over 1.09) and the top 25% in journals with SJR score above 1.267 and Cite score over 2.315.

Looking at the distribution of the production by sub-disciplines in the social sciences we see that the percentage of journals to be counted in the selective quartile Q1 is around 40% in average for all subject area. The percentage of journals to be counted in Q1 or Q2 of any Subject categories is more than 60% and close to it for Econometrics, Economic and Finance. Sociology and Political Science have a score of 85%.



2. PROJECT DESCRIPTION AND EXPECTED IMPACT

2.1 SCIENTIFIC SCOPE AND CONTENTS OF THE PROJECT FOR THE NEXT FINANCING PERIOD, EXPECTED IMPACT

Continuity and renewal of the scientific objectives of LabEx SITES

The Strategic Research Orientations (SROs) play an instrumental role for the scientific governance of Labex SITES. All the funding instruments are aligned with it. The SROs also adequately complement the interests and orientations of research units of the LabEx. They are particularly relevant in the light of the National Research and Innovation Strategy (of France), H2020 and Horizon Europe.

The mid-term review of LabEx SITES confirmed the originality and the relevance of SROs. Since then the integration of the Labex in the I-SITE FUTURE provides new opportunities for ambitious research orientations. The governance structures of the Labex (Executive committee, Scientific Council, Stakeholders Committee, General Assembly) are currently revisiting the SROs portfolio with the aim to enhance productive interactions.

SROs correspond also to major challenges, such as the governance of knowledge infrastructures, the digital turn and the new regime of open-science, and the renewal of the science-society alliance. The renewed scientific orientations are an evolution from our initial themes. We examine knowledge at large, instead of exclusively focusing on research and innovation, and focus on the current transformations of innovation and innovation policies in the context of deep transitions (climate change, energy, biodiversity...). We extend the scope to the complexity of globalisation processes that include knowledge, norms, and standards. We are interested in the new geopolitics of science, and in the new regime of knowledge production that include larger varieties of actors and modify the science-society linkages. As a follow-up and intensification of our initial choices, we will continue investing on research infrastructures, the development of computational social sciences, encouraging historical and comparative analysis, more comprehensive mode of analysis, based on quali-quantitative approaches. These evolutions are essential for the dynamics of our field and will produce excellent and relevant knowledge in strong interactions with organized stakeholders.

A renewed scientific programme

SRO-1: Knowledge production regimes

The transformations of scientific spaces, regulatory agencies, international institutions and corporate R&D calls for an analysis in terms of regimes of knowledge production, a concept born out of SITES epistemic foundations. Knowledge, both lay and scientific, and expertise play a central role in the regulation of economic activities and this mobilisation of scientific knowledge makes more difficult to identify the boundaries between academic research and regulatory science, open science and scientific expertise, between public and private research. To expand, this SRO requires focusing on the complex interweaving of practices, organizational features and institutionalisation processes.

Topic 1. Reconfigurations of the frontiers of research

The analysis of research activities inside our regime of knowledge production has traditionally included research institutions, firms and industrial R&D. We need to include institutions that have been growing since the 1970s (representatives of corporate industry, regulatory agencies, standard-setting agencies, NGOs, think tanks, international organizations). These knowledge intensive organizations (KIO) need to be studied in order to understand how they articulate knowledge production with the creation of norms and standards in the long run. More research on firms and large corporations is needed to capture their growing influence, as well as the growth of corporate R&D units and public research centres in the world. Moreover, it is important to analyse how firms take part in the framing of regulation through their R&D strategies and out-

sourced research activities, through their setting-up of global value chains, increasing the role of outsourced providers as knowledge producers.

Topic 2. The production of truth in public spaces

The production of scientific and technical knowledge plays a social and political role in areas that reflect important socio-economic stakes (e.g. chemical and pharmaceutical industry, agriculture, manufacturing, construction, or automobile industry). The way new knowledge is produced, the way already existing knowledge can be claimed without producing new knowledge (as can be the case in toxicology) supposes an in-depth understanding of the logic of knowledge production, and its integration into regulatory systems. The same logic produces ignorance since certain actors intend to shape government standards or policy frameworks. Moreover, knowledge production shapes also the environments, the systems, the frameworks within which knowledge is produced, transformation the way science relates to society. Our research needs to focus upon these spaces of intermediation between scientists, experts, NGOs, firms, administrators and politicians, where claims, issues, controversies, and more generally legitimating processes are taking place.

Topic 3. Governing by measurement

The aim of this topic is to examine how measurement, metrics and instruments are used in the valuation, regulation and steering of public action. As was, since long ago, studied in the case of risk assessment, where measurement of risk was an instrument of governance of risk issues in many sectors (insurance, health policy), it would be of interest to examine how metrics are used for sectorial policies (research, health, natural resources, education, etc.). The objective is here to analyse the contribution of the scientific sphere to the construction of these instruments, the use and emergence of new frameworks, and the changing nature of risk-measuring instruments in different institutions, as well as metrics used in monitoring and control of policies (public bodies, regulatory agencies, corporations and private audit companies, International Organisation for Standardisation, NGOs). Metrics (indicators, rankings, management instruments) are particularly active when promoting new research institutions, when modifying management practices, or when participating to struggles for legitimate knowledge production. Science granting councils, foundations, public and private partnerships, universities and research organizations are under the scrutiny imposed by these new metrics, indicators and quantitative objective. Empirical work is needed on the production and uses of these indicators and measures and the way they create or regulate markets, and on how scientific and technical knowledge participates in these economic regulations.

Topics 4. Mobilisations and collective action in knowledge production

Beyond academic knowledge production, this topic intends to address the many forms of knowledge production, in less legitimate spaces of knowledge production, in particularly in relation to the constitution of “commons” (e.g. environmental issues, biodiversity or digital technologies). The focus will be placed on actors that carry claims emanating from what is considered peripheral knowledge, and how these claims enter into the more constituted (scientific) knowledge, or how these claims modify the norms that rule the circulation of products (e.g. pharmaceuticals, plants, etc.). Many areas of interest appear under this topic: the development of participatory research, citizen sciences, crowdsourcing and the role of distributed infrastructures of data collection. Also, experiences of claiming ownership of specific plants, live material, objects used by some industry are common examples in developing countries. This topic covers a massive interrogation for the future as these new forms of collective claims interrogate very deeply the relationships between science and society. It relates to many other topics (e.g. the valuation of common goods or the valuation of environmental resources). The promotion of this topic reflects the consistent involvement of LabEx SITES into the development and improvement of relationships between science and society.

SRO-2: Politics of innovation

While the cross fecundation of Innovation Studies and Science and Technology Studies has been an achievement of LabEx SITES, further research is needed to address the complex issue of re-thinking innovation theories in the context of the Anthropocene. There continues to be a pressing need for research

concerning the knowledge-intensive industries, on learning processes in innovation, on studying the transformation of technologies, the blend of the new and the old technologies. None of this is original, but we do need more case studies and historical analysis. Moreover, the LabEx initiated a series of studies on new socio-technical domains like biotechnologies and nanotechnologies and how actors participate in the definition of the new boundaries of disciplines, norms, practices that are mobilised in construction the new activities, knowledge claims, new technologies and their uses. Additionally, digital technologies pose major challenges on how our analysis can account for distributed and decentralized activities based on social interactivity, networking, but also participation and inclusiveness. The encounter of transformative policies of innovation and of the large array of explorations through “practices-based” and “niches-driven innovation” is a key scientific challenge. The LabEx had previously mentioned “responsible innovation” as a strategic thematic, but was less interested in the scaling-up phase. How is this socio-technical regime institutionalised? What are the policy mechanism and the norms at work? How do market infrastructures, standards and regimes of value adapt to these alternative innovations?

Topic 1. Transformative innovation policies

This topic aims at fostering investigations into the way discourses and practices of actors lead to the renewal and expansion of innovation models, not only from the point of view of emerging collectives but also the practices of dominant actors. Such an account is needed to understand how innovation is matter of sub-politics, in sectors and professions as well as in institutions and governmental bodies. This topic favours research projects that contribute to the frameworks used for the evaluation of these policies, notably by proposing characterisation and steering tools and indicators. The plurality of forms of innovation and of evaluation should be accounted in empirical studies to could contribute to renew the theories of innovation within the sustainable transition analytical framework.

Topic 2. The reconfiguration of socio-technical regimes

The studies of innovation processes have focused either on the long run socio-historical accounts of large socio-technical systems, or on more localized and short-term studies of the emergence of niche technologies, of competitive advantage, and their related success or failure. This topic calls for research that targets mid-range studies of what could be labelled generalisation processes (i.e. all the processes that occurs after the introduction of a new socio-technical system, a regularly unexplained chasm of innovation studies). Empirical studies of these reconfigurations should reveal knowledge infrastructures, management of organizations and professional tensions at work as well as brokerage practices and other intermediation processes.

Topic 3. The discontinuation of socio-technical regimes

This is another field of enquiry to come out of the dialectic approach opposing dominant design and incremental innovation. The way users of innovations are attached to a particular techno-economic regime, and politics involved in detaching from it, is largely under-studied. Market infrastructures and the associated creation of values need to be empirically studied and theorized. This is particularly true of new forms of social and solidarity economy that challenges the usual assumptions in a market economy. In other cases, inside the market economy, discontinuation is part of the changes that innovation is supposed to introduce: this was the case of “responsible innovation” which was supposed to be a political challenge to business management of innovation. Fieldwork is encouraged on the political nature of the innovation process and directionality of innovation policies.

Topic 4. The regime of values of innovation

This topic opens the floor to critical studies of innovation and to broader conceptions of innovation, taking into account social justice, the reduction of inequalities, sustainability and the improvement of democracy. By focusing on innovations that are not only technological but also social, organizational, political; not only exclusive and proprietary but also based on commons and public goods. These processes need to be analysed from different perspectives, beyond the competitive framework. These approaches are essential to understand profound changes when the regimes of value of innovation suppose transformations about the

living (whether it concerns the environment, the biology or the body and health of individuals), with of course the heavy question of property rights and in the grammar of life itself, with philosophical and ethical issues that the LabEx intends to explore.

SRO-3: Governing global issues

This SRO seeks to expand our interests beyond the previous research on the negotiations on Climate Change, to examine how other major global issues will be governed. It is also a domain of great interest, and the LabEx has developed already a wide series of collaborations. The ways these global issues (such as climate change, energy transitions, biodiversity loss and agriculture ecologisation, global health, international migrations, education) are defined and governed is a key issue for the LabEx. Moreover, there is ground for comparative work, between for example the way these processes are taking place in health and environmental issues, or in different countries. Moreover, more theorising is needed about the distribution of knowledge across different countries, in the light of the growth of research organisations in developing countries, the emergence of numerous new national research funding, the appearance of massive philanthropic funds (in particular, but not exclusively, in health), and the active role of international organizations. The interest in the government of global issues concerns also metropolitan areas in their quest for sustainability transitions —a main thematic for the I-SITE FUTURE.

Topics 1. The constitutive heterogeneity of global issues

The production of new knowledge and techniques involved in defining “global issues” is distributed differently in different disciplines or scientific fields. A broad range of actors composes the social world of “global governance”. Similarly, the construction of scientific and instrumental accounts of global issues relies on specific instruments and models shape their systems of accountability: decentralized measurement devices and IoT sensors, local model of resources, aggregative transnational models, indicators, scenarios, forecasting techniques schemes. Policies also are defined globally, and science is strongly mobilised in justifying the policies. In health issues, on education, on managing natural resources, on human migrations, on education, global issues are shaped through these assemblages include regulatory powers, national and international authorities, but also enterprises, stakeholders, funders and researchers. How can these heterogeneous assemblages survive for long periods, and continue to feed the debates about these issues? How do they participate in the public debates, bring the proofs of their claims, choose specific narratives and engage in particular types of activities? This is an important research question, and need to be examined through discursive, ontological and normative constructions that make up these heterogeneous entities.

Topic 2. Down-scaling and up-scaling global issues

What is called a “global issue” has agency and structure at the “local level”. A large variety of social and political processes need to be examined in order to understand how the global is “localized”: the experiences of the populations impacted by these global issues, the tensions and resistance that arise after the implementation of policies led by transnational organisations, NGOs or companies, the competition between governments on environmental issues or other global specific issues, the proliferation of local conflicts and concerns. But globalised issued do not only come from the top, or the international organisation, but also through other mechanisms such as the global circulation of knowledge, of persons and in particular the highly-skilled, and the circulation of products, e.g. pharmaceuticals, mobile devices... Field research at the local level is necessary to understand this complexity due to the variations in scale. What is global might no translate in local social activity, or on the contrary the local can only be legitimised by the global. In any case we always gain to observe, re-build and re-think, “from below”, the causality of the “global level”.

Topic 3. Distributed expertise and the geopolitics of global issues

Expertise on global issues is distributed globally, on different locations, unevenly, organized through large scale international scientific networks and numerous disciplines and interests. Information, data, objects, knowledge, people circulate along these networks in order to accumulate and compare evidence. Moreover, these scientific networks are involved in geopolitical discourses on hegemonies and tensions about resource

management. The way these collaborative networks function is a classic of STS studies, but the way they relate to developmental issues or to the political agenda is a necessity. Moreover, the distribution of knowledge production is strongly unequal worldwide and global networks do need local institutional anchors to work properly. Does the expertise circulate only along these networks? Are these large consortia vulnerable to political action? Do they influence national governments or do they act through other global actors? Among the many new actors acting globally, the large philanthropic foundations, which not only provide funds but also influence governance.

Topic 4. The construction of the publics and their power

The politics of defining *global issues* raises important questions in a democratic order: at what political level are these issues to be defined and by whom? What should be the scale for the data collection? The construction of informed and evidence-based policies relating to global issues consists also in the construction of publics. But alternatively, normative action of public entities, rules, policies and the State about legitimate knowledge are now often challenged by social and organized mobilisations. The constitution of international expertise, policies and the relation they have with the society should be an interesting topic for research. It relates to the definition of research and innovation policies at the global scale, and scientific literacy.

SRO-4: Forecasts, futures and socio-technical promises: back to the future

Since the 19th century, the mode of economic development with its endless quest for growth is rooted in the promise of achieving better futures and greater welfare for nations. The mutually constitutive relationship between current techno-scientific activities and promising futures has thereafter been put into question. Visions of the collapse of civilisations, discourses about the risks and inequalities brought about by sciences and technologies, have all but casted doubt on these promises and expectations. The relationships between science and technology on the one hand, and the construction of futures on the other hand, is thus characterized by its ambivalence, and a mix of trust and contention. SITES intends to support research into the variety of ways in which visions of the future are used to legitimize techno-scientific and economic activities, across time and space.

Topic 1. The futures of the pasts

The construction of futures is not the preserve area of contemporary societies. History is of great use in documenting the relationship of past societies to their futures, and thus enables denaturalizing anticipatory discourses. Such "futures of the past" can first be examined through an investigation of future-claim in expert knowledge (futurology, planning, foresight). A second way is to pay attention to how the environmental, health, social or democratic concerns were raised to oppose technical progress in the past, particularly since the advent of industrial capitalism. Finally, a third approach is to look at the dynamics of renewal or at the locking-in of pathways of technoscientific development. Some promises quickly reveal their perishable character, while others are more durable, resistant to historical and political changes as well as to the production of new knowledge.

Topic 2. Modelling, anticipation, government

A range of anticipatory techniques, involving computational models, numerical simulation technologies, and analysis of big data by algorithms, now enables to foretell events. Prediction has become an area of technological investment and a scientific domain. It is becoming applied to evermore issues and integrated by evermore organizations. This expansion of anticipation through quantification remains to be studied. In particular, it should be contrasted with the decline of collective imagination, and the decreasing recourse to foresight, to the benefits of forecasting. While predictive and anticipatory techniques may be approached as technologies of government, the digitalisation of futures also affects epistemic cultures in many disciplines that are concerned by data sciences. What the open science and open data movements achieve in this regard is also at stake.

Topic 3. The futures: territories of promise and innovation

Promissory discourses surrounding technoscientific developments and emerging technologies seem to enjoy a high level of credibility in current societies, despite the failure to deliver past promises. Under this topic, we suggest investigating the regime of promissory innovation is a useful research line. The concept of technoscientific promise can be applied to new areas of technological development, notably to the “Digital Age”, or to the idea of “Smart Cities” to reveal the history of promises and their mutation. It is worthwhile to investigate the politics of technoscientific promises, namely the unequal distribution of “power to participate”. Finally, the modes of enunciation and enactment of promises pertaining to alternative models of innovation, such as social, interactive or sustainable innovation, including innovation surging from the Do-it-Yourself movement broadly remains to be analyzed, as well as their relationships to industrialisation processes.

Topic 4. Crises, disasters and ruins

Futures also take the form of discourses about crisis, disasters, collapse or ruin. The grammars and knowledge by which dystopic futures take form and are socialized can be studied. The studies of crisis management and of the aftermath of disasters are important entry-points for such investigation. This topic also calls for analyzing the mechanisms by which certain problems get constituted, and then governed as “crises” turning them into political resources for different institutions and interests. Finally, the investigation on dystopic futures take us toward the study of the ways in which we learn to live in the ruins of capitalism, meaning the forms of lives, knowledge and politics that emerge in the midst of yesterday's and today's global damages, as well as on the emerging, material culture of adapting to the worst, or on disasters as life experience involving renunciations, inequalities and pragmatic imperatives.

Expected outcomes of the scientific programme and the strategic orientations

As already stated, this scientific programme is essential in organizing the activities of the LabEx and should help in the following aspects.

- **Articulate LabEx SITES with the I-SITE project.** The scientific programme incorporates a number of approaches, concepts and methods that could fruitfully be applied to the broad issues concerning the transformation of metropolitan areas in the face of sustainable development, open innovation and a more inclusive society. It will be an opportunity to consolidate the scientific linkage between SITES and the future Université Gustave Eiffel, in common with a wide range of groups: LabEx Futurs Urbains with its Cross-cutting groups on “Digital Cities”, “Risks” and the CrisisLab (an I-SITE Tremplin Project); with LabEx Bézout through the Digital infrastructure CorTexT; participate in the deployment and valorisation policy of the University with its stakeholders, through the experience of AlliSS and of projects funded by SITES on science and society; provide inputs to i-SITE project through our international network.
- **The digital infrastructure of SITES.** CorTexT has proved its utility, particularly by training PhD students, SITES postdocs, young researchers, and users of the digital infrastructure. It is increasing the visibility of the LabEx toward institutional partners. The renewal of the RISIS European project becoming a European e-infrastructure stabilizes the structure. It should be completed by developing Digital Studies within the research programme of SITES (see SRO), as well as within the new University (UGE). A highly interesting partner within reach, is LabEx Bézout as well as some other research teams on the Campus that work on data-mining, data-analysis and knowledge visualisation.
- **Scientific production and transfer of knowledge.** The programme should help drafting of projects to be submitted for external support through ANR, European projects, and other international funders. Moreover, we expect that the future EUR funding proposed by PIA3 will allow SITES to participate to the graduate programmes. The transfer of knowledge from research projects to various curricula in graduate schools has to be intensified.

2.2 RESEARCH-LEARNING INTERFACE AND EXPECTED IMPACT

The LabEx SITES is gathering major complementary institutions in the field of science and technology studies. Those institutions belong to different Communities of Universities (COMUE) from its foundation in 2008 under the IFRIS flagship project. Beyond the doctoral and post-doctoral training, a objective jointly supported by the institutions involved in SITES is that of extending the research and training activities to the Master's level by creating a graduate school of excellence.

Graduate level

The graduate programmes of the LabEx.

The training programmes related to the LabEx cover a variety of disciplinary fields and approaches. In 2015, the LISIS opened at Université Paris-Est (UPEM) a new Master programme dedicated to the sociology of, and the innovation in digital worlds with a professional target on the analysis and administration of open data and digital (social web) platforms.

The CAK (EHESS) offers a renowned Master programme at EHESS on “History of sciences, technologies and societies”. The CERMES3 (University Paris Descartes) provides a multidisciplinary Master programme on “risk engineering” with global and multidisciplinary approaches to risks and crises. Additionally, the Ecole des Ponts ParisTech, AgroParisTech with Musuem d’Histoire Naturelle and the Cnam have projects of Master's degree for which units of SITES propose modules in the field of innovation in society with important sciences-studies contributions. This has established pathways to PhD Grant released in SITES Units. Each of the academic institutions involved have developed renowned Master's programmes with different disciplinary orientations. At CEPN (University of Paris 13), a good example is that of the Erasmus Mundus Master programme “European POLicies in the age of Globalisation”. This highly selective programme from the European Commission is aimed to develop joint Master's degree of excellence at EU level and to attract the best students worldwide with a major concern on “knowledge and innovation policies”. It gathers 9 EU and non-EU prestigious institutions. It is one of the only four Master's in economics with the Erasmus Mundus label in Europe.

The objectives for the next 5 years.

Based on these assets, the stakes in the next five years are the following:

- . to propose to SITES Units a permanent programme of granting Master Students that would realize their internship at the heart of research activities (10 grants a year). The aim is to empower the preparation of good PhD candidates and the Direction Committee will select the candidate based on the quality of the project (says of the profile, the subject and the internship supervision);
- . to foster on-line resources with a community-management support to organize the edition of syllabi for MA students and support the transfer of knowledge from research projects to master courses with four main objectives: 1) the continuous development of social and historical studies of science and technology at the graduate level 2) the development of innovation studies and research policy studies in interdisciplinary courses, 3) the support to digital studies courses in relation to the evolution of social and human sciences themselves, 4) the contribution to capacity building in the field of other programmes in France and abroad;
- . to target the creation of an international graduate school that would become the European reference in science and innovation studies in society for graduate and post-graduate students as well as for the whole research community. This will be made possible by developing strong synergies among the Master's programmes related to the LabEx but also by developing joint and double degrees between those Master's programmes and complementary ones in prestigious partner institutions abroad. This initiative will target the establishment of an Erasmus Mundus Joint Master's degree in “Science and Technology Studies, Innovation Studies and Digital Studies” which will bring together the most important European institution in the field.

Post-Graduate level

Sustaining the proven capacity of the LabEx.

One other important achievement of the research units and laboratories of the LabEx has been their contribution to the training of a young generation of doctors in the domain of Innovation and Science Studies through the following assets.

- **The DIM IS2-IT Project.** This project has been inspired and driven by SITES from 2014 to 2017, and among the 26 granted PhD, 14 have realized their doctoral research in units of the LabEx. This massive flux of PhD has also contributed to the dynamics and the visibility of Graduate programmes and many PhD of SITES Units have been taking part to the annual Thematic School.
- **The LabEx training for academic career with the 24 months post-doctoral positions.** Open once a year, the post-doctoral call is open to any candidate with a PhD in the disciplines recognized by the Doctoral Schools of the LabEx. The selection is based on international criteria of excellence and conducted by the LabEx Board under the supervision of members of the Scientific Board and international experts.
- **The LabEx support to PhD candidates and post-doctoral researchers circulation.** Based on a call (open 3 times a year), it allows 2 to 6 months mobility in a foreign institution (European or non-European country) after the evaluation of the project by two independent experts. This action has highly contributed to a personalized training of PhD candidates.

All these actions have contributed to create a worldwide visible community of highly selected outstanding and highly employable young researchers and strengthened the collaborations between Units of the LabEx and the best foreign labs in the field. As an illustration, the outcomes of the LabEx post-doctoral positions confirm the efficiency of this instrument.

The objectives for the 5 next years.

Internationalisation of the training by research. These actions will be pursued. In particular, the budget allocation will be maintained for post-doctoral positions. They will also be developed by looking for complementary funds for doctoral and post-doctoral studies and international collaborations (Marie Skłodowska-Curie Actions, ITN/ETN, COFUND), as complement to the international graduate school of excellence project. One key initiative will be to mobilize the international networks of the research units involved in the LabEx within this perspective.

A Graduate School project within the I-SITE. The project of graduate school has been considered by the LISIS last year through the answer to the call for “Ecoles Universitaires de Recherche” (EUR), but not funded. This project - called NUMIS- was aiming at bridging the gap between the digital turn in areas of society and the attempt to maintain or create valuable, inclusive and responsible innovation. The project of the international graduate school of excellence presented before is envisaged as an extension of a project to be localized at the heart of UGE and benefiting from the other labs and training programmes involved, targeting an international perspective. The contribution of the LabEx Bézout to reinforce the core competencies in data sciences is expected to resubmit the NUMIS project in 2019 taking into account the new emerging context at Marne-La-Vallée.

2.3 VALORISATION STRATEGY OF THE PROJECT AND SOCIO-ECONOMIC IMPACT

The research units of the LabEx SITES have many connections with organizations of the public sectors, professional and non-governmental bodies, and far less with corporate firms. This is constitutive of its scientific positioning and of objective of empowering PhD and postdocs in academic career. Nevertheless the development of the I-SITE represents a new attractor for the LabEx SITES, specifically to nourish new partnerships in relation to the I-Site project.

We will be more attentive to stimulating exchanges between SITES researchers and socio-economic actors, notably in the organization of workshops dedicated to the partners of the I-Site. We expect to organize a series of workshops on the co-construction of “Impacts or research” and on the “sharing of R&D capacities”, thanks to the experience and resources of ASIRPA (e.g. Online Courses, Tools for real time assessment). The aim is to prepare a collaborative research project on Impacts with some of the socioeconomic actors of the I-SITE.

With our partner AlliSS (*Alliance Science Société*) we intend to create the institutional and territorial conditions to stimulate spin-off and useful infrastructures in order to facilitate cooperation between academics and socio-economic actors. Specific efforts will be devoted to the development and experimentations of models for social innovation, including organisational and financial dimensions, together with colleagues of Paris-Est (Chaire ESS, IRG, JEDI Group of Labex Futurs Urbains. This incubation of a so-called ‘service to the community’ could integrate students’ entrepreneurship initiative, students’ mobilization, training programs for partners of research. In light with the Labex Futurs Urbains we expect to foster the organization of an international conference on the 3rd mission of higher education and research, in the perspective of the Unesco 2025 World Summit.

2.4 INTÉGRATION SCIENTIFIQUE ET PÉDAGOGIQUE À LA STRATÉGIE DE L'ÉTABLISSEMENT PORTEUR ET DES ÉTABLISSEMENTS PARTENAIRES

The integration of the LabEx SITES to the I-SITE strategy and the forthcoming creation of the UGE will rely on three key major contributions (see also the Table hereafter).

Strategic orientation of the I-Site FUTURE	Contributive objectives of the LabEx SITES	Recent significant outcomes of SITES
RESEARCH		
Interdisciplinarity thanks to calls for projects	Promote interdisciplinary approaches to ecological transition issues	European Research Projects: ORA-DiscGo, ORA-MDET and RESAGORA
Excellence Fund (recruitment, support)	Maintaining the post-doctoral recruitment programme and opening a new system of "researchers in residence"	All SITES postdoctoral fellows are active in research (50% recruited in PRO)
Digital Infrastructures of urban data	Contribution to the I-SITE's scientific policy and to interdisciplinary projects research teams of the Campus	CorTexT Plateform and European Infrastructure RISIS-2
INTERNATIONAL		
Establishment of structuring international partnerships	Reinvigorating the network of LabEx international partners on the issues of large metropolitan areas sustainability	Organisation of 2 European conferences at Marne-La-Vallée (STI 2017 and EU-SPRI Forum in 2018)
Institut des Hautes Etudes sur la Ville (IHEV)	Contribution to training activities through SITES assets about transitions in research and innovation regimes	INRA Project ASIRPA on « Impacts »
GRADUATE		
International interdisciplinary and research-related training of excellence	Continuation of the IFRIS Thematic School and opening to doctoral students of the OMI Doctoral School	
Professional integration of students	Support for the NUMI Master's degree and the development of training through research	MA students of the NUMI have been all hired after 6 months

Pedagogical innovation	Developing a training capacity on Digitisation and Innovation (following the expected EUR)	CorTexT workshop (twice a year), innovative Sprint of NUMI
VALORISATION		
Action-Research; Innovative Collective Experimentation	Supporting exploratory projects in participatory research on sustainability issues in cities	Capacity to empower science-society through ALLISS partnership

1. Contributing to the establishment of the Université Gustave Eiffel (UGE). An active contribution to the structuration of the scientific project of UGE is to be expected from the active federation of the LabEx strategy and the expected layout of EURs. The scientific visibility of the LabEx on science and innovation policy issue is a resource, as well as its capacity to organize international conference to accompany the ongoing process of research teams federation on the Campus. Moreover, the focus of policy-makers and executive managers of public research organization on “Mission Oriented Policy” and “Transformative Research Policy” supposes to mentor researcher reflexivity and to accompany the production of contents. Researchers of SITES might play a role there.

2. A contribution to manufacture of research strategy of UGE. Through the mobilisation of the CorTexT Facility and the RISIS Infrastructure, we intend to develop field studies with MA and PhD on the research domains at work on the campus and thus to contribute to the development of reflexive account of laboratories achievements and strategies. Thanks to validated methodology already mobilized in expertise reports for ANR, UPE, INRA or EMBRIC project), the LabEx SITES is ready to take part to such an initiative. Moreover, the development of the RISIS infrastructure entails the big issue of Open Science in a pragmatic way while empowering the use of Open Data and Data Analysis. For sure, the experience of developing this Infrastructure will issue a capacity to be shared with other Laboratories and existing structures and services already at work with a pedagogical or a digital humanities perspective.

3. A contribution to the development of the I-SITE research programme. There are already many SITES fieldworks that concern metropolitan areas or sustainability transitions, but a cross cutting review is needed to upgrade this knowledge accumulation within the I-SITE strategy. Collaboration between the LabEx SITES and LabEx Futurs Urbains is to be consolidated, notably on issues they already shared like: risk, infrastructures, preventive security, food circuits in light of sustainability objectives. Another key contribution will be to mobilize our long-run partnership with the ALLISS science-society alliance, to set up participatory research projects and collaborations on issues of urban development with constraints of sustainability and inclusiveness.

These three key contributions will be supported by the existing capacities and resources of LabEx SITES, and accompanied thanks to the advice of its international scientific board. We expect these resources to contribute to the scientific orientations and programming of the I-Site FUTURE.

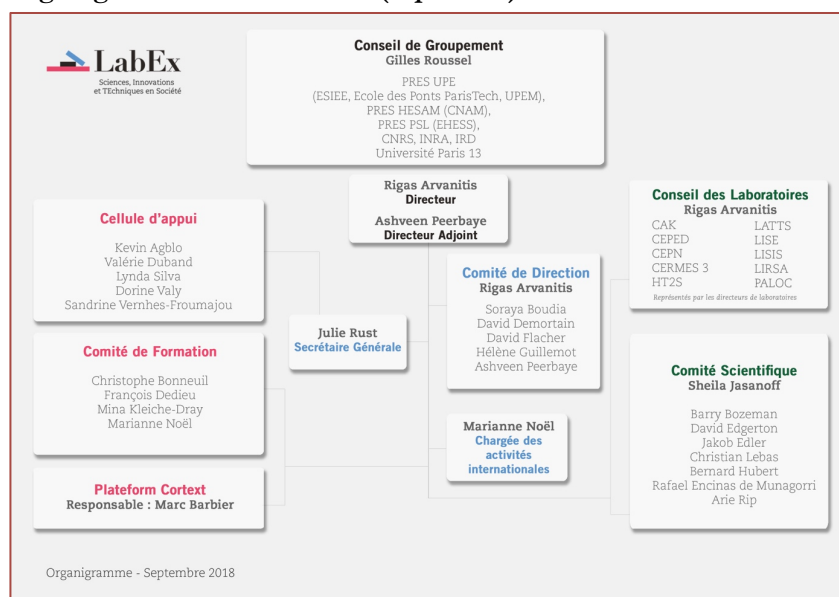
3 PARTNERSHIP

3.1 GOVERNANCE

The governance of the LabEx SITES is based on a functional set of instances:

- The **Council of Stakeholders**, under the chairmanship of Gilles ROUSSEL (President of UPEM). The Board is composed of representatives of partner institutions: CNRS, INRA, IRD, EHESS, Université Paris Est Marne-la-Vallée (UPEM), Université Paris 13, CNAM, ESIEE (Engineering school of the Chambre de Commerce de Paris), Ecole des Ponts ParisTech (engineering school of bridges & roads). The COMUE Université Paris-Est (UPE), is the LabEx coordinating institution. It should be noted that the LabEx participates in five COMUE through its research units (UPE, PSL, USPC, HESAM, and Sorbonne Universités). This apparent complexity has, nonetheless, never been an obstacle in taking decisions. The Council nominates the LabEx Director and the Scientific Council members, approves the activities and budgets, and decides of its evaluation modalities.
- The **Scientific Council**, which examines the call procedures, ensures the scientific soundness of research programmes and provides its opinion on the implementation of on-going activities and objectives. The Council members are well recognized internationally for their scientific expertise in LabEx research fields:
 - o Prof. Sheila Jasanoff, Harvard University, Kennedy School of Government (US) - Chair of the Scientific Council; Prof. Barry Bozeman, Arizona State University (US); Prof. David Edgerton, Imperial College (UK); Prof. Jakob Edler, University of Manchester (UK); Prof. Christian Lebas, University of Lyon (F); Dr Bernard Hubert, INRA and EHESS, President Agropolis (F); Prof. Arie Rip, University of Twente (NL)
- The **Direction Committee**, is the executive committee of LabEx SITES:
 - o Rigas Arvanitis (IFRIS Director, IRD, CEPED); Soraya Boudia (Paris 5 University, CERMES3); David Demortain (INRA, LISIS); David Flacher (Compiègne University of Technology, COSTECH); Hélène Guillemot (CNRS, CAK); Ashveen Peerbaye (UPEM, LISIS). The LabEx was headed by **Pierre-Benoit Joly** (INRA, LISIS) from 2011 to 2015, and by **Rigas Arvanitis** (IRD, CEPED) from 2015 until now.
- The **Laboratory Committee** brings together representatives of laboratories or research groups.
- The **Academic Committee** is an informal committee that reviews the quality of proposals for all internal calls (with the exception of the postdoctoral call).
- **A General Assembly** is gathered annually: it allows all our members to be informed of the scientific activities carried out within the LabEx. Post-doctoral fellows must present their work there.

Organigram of LabEx SITES (sept. 2018)



- The LabEx renewal is an opportunity to propose a **new Direction Committee**:

Marc Barbier (IFRIS director) (INRA LISIS); Sara Aguiton Angeli (CNRS, UMR CAK); Soraya Boudia (University of Paris 5, UMR CERMES3); David Flacher (Compiègne University of Technology, EA COSTECH); Etienne Gérard (IRD, UMR CEPED); Emmanuel Henry (CNRS, IRISSO).

Marc Barbier (INRA, LISIS) will be the new director of LABEX SITES after the presentation of this project. Research director at INRA, he initially graduated from Sup Agro Montpellier as Agroeconomist then received a master's degree in Management Science at Lyon 3 in 1993. He defended his PhD in Management Science in 1996, and was recruited at INRA in 2000 as permanent researcher after a two-year post-doc. He was recently promoted as INRA research director DR.1 (in 2018). He was Director of the INRA SenS unit from 2010 to 2014 and set the possibility of a strong INRA investment at the heart of LabEx SITES. Since his arrival, he has been involved in the direction of the CorTexT Plaform. His themes of research combine organization studies and sciences studies together with digital studies to account for the boundary evolution of agronomic research. His academic activities have led him to introduce Science and Technology Studies in the master courses of engineers and to promote the recognition of the outcomes of this field of research at INRA and in the agricultural, environment and food sector.

Management procedures towards the accountability of SITES activities

Information on the activities of LabEx SITES members is collected regularly. However, the production of annual activity reports requires that this collection of information be further formalized in order to provide data that allow a regular assessment from the administrative team. All laboratories are asked once a year to provide an exhaustive report of their productions (list of publications, list of members involved, highlights, contracts obtained and in progress), with the view to nourish the website and to follow-up the LabEx activities more precisely.

The meeting of the governance bodies of SITES annually, provides an opportunity to use a series of management tools that help follow-up the financial engagements for activities of the LabEx. The website is also regularly updated and can help in providing a fine description of the LabEx membership and activities. Evaluation indicators are being implemented for the most heavily funded programmes on the basis of compulsory deliverables: post-doctoral fellows must present the progress of their research work at a general assembly; young researchers funded as part of the doctoral circulation must submit an activity report at the end of their stay outlining the research carried out and the cooperation planned in the future with the host laboratory. The coordinator of the academic committee also produces an annual report; exploratory research projects: a scientific report and a financial report are requested at the end of the two-year funding period; the CorTexT platform produces an annual report of activities with a financial report.

3.2 CONSORTIUM MODIFICATIONS

LabEx SITES has integrated, beginning of 2018, two new research units after the approval of the Council of Stakeholders, Both units have contributed to the present project for the LabEx and approved the programme and SROs in the same manner as the other ten units.

IRISSO is a research unit based at Université Paris Dauphine with the institutional support of CNRS and INRA. The research programme of this Unit is on public and private regulations, their articulation and transformations, with a focus on the sociology of economics words and the analysis of public action. IRISSO entails a research axis on the government of risk, norms and expertise.

COSTECH is a research unit of the *Université de technologie de Compiègne*. The COSTECH research team is developing an original interdisciplinary research programme at the crossroads between philosophy, social and human sciences, and technology. It aims at understanding, at all levels of complexity, the relationships between technical devices, knowledge and social dynamics; technology in social interactions, transformations in the contemporary world and processes of innovation of products, of services and organisations.

3.3 PARTNERS' DESCRIPTION, RELEVANCE AND COMPLEMENTARITY

The LabEx SITES includes the following research units and institutions:

Centre Alexandre Koyré: the CAK currently contributes to the social and cultural history of science and technology, practised in dialogue with philosophical and sociological approaches (UMR 8560, EHESS, MNHN, CNRS).

Centre d'Economie de Paris Nord: The CEPN is a reference research unit for the study of the evolution of capitalisms, based on a large array of orthodox and heterodox theoretical approaches (UMR7234, CNRS, Université Paris Nord).

Centre de recherche médecine, sciences, santé, santé mentale, société: CERMES3 is a multidisciplinary laboratory dedicated to social analyses of the contemporary transformations of the worlds of science, medicine, and health, and their relationships to society (UMR 8211, CNRS, EHESS, INSERM, Université Paris Descartes).

Centre Population et développement: CEPED is a multidisciplinary centre dedicated to research health, migrations, education and knowledge in the “global South” and academic training in both “global North” and “global South” (UMR 196, IRD, Université Paris Descartes).

Connaissance Organisation et Systèmes Techniques : the COSTECH research team is developing an interdisciplinary research programme at the crossroads of philosophy, social and human sciences and technology on the relations between technical devices, knowledge and social dynamics (EA 2223, UTC).

Histoire des Technosciences en Société: The HT2S conducts interdisciplinary studies on the field of science and technology - knowledge, cultures, heritage, mediation and the logic of participation (EA 3716, CNAM).

Institut de Recherche Interdisciplinaire en Sciences Sociales: the central research focus IRISSO is on public and private regulations, their articulation and transformations. Its work focuses on the sociology of the economic worlds and the analysis of public action (UMR 7170, CNRS, Université Paris-Dauphine).

Laboratoire Interdisciplinaire Sciences Innovations Sociétés: LISIS is an interdisciplinary research unit in human and social sciences dedicated to the study of science, technology and innovation for the analysis of contemporary transformations and of the digitalisation of social and professional worlds (UMR_CNRS, 9003 & INRA 1326, CNRS, ESIEE Paris, INRA, UPEM).

Laboratoire Interdisciplinaire de Recherche en Science de l'Action: The LIRSA covers a wide range of research objects on organised, finalised and evaluated action. It brings together researchers working mainly in management, economics and law (EA 4603, CNAM).

Laboratoire Interdisciplinaire pour la Sociologie Economique: The LISE conducts research in the field of the sociology of solidarity with a non-conventional political sociology of economics (UMR 3320, CNAM, CNRS).

Laboratoire Techniques, Territoires, Sociétés: LATTTS is a multidisciplinary social science laboratory specialised in the challenges of the city, territories, space, production, today and historically (UMR 8134, CNRS, Ecole des Ponts ParisTech, UPEM).

Patrimoines locaux et gouvernance: The PALOC unit is interested in the processes of heritage development in countries of the South and the governance associated with them, by focusing on the logic of local actors, in relation with national or international authorities (UMR 208, MNHN, IRD).

The LabEx is organised around in three scientific poles :

- . a central pole located in Marne-la-Vallée composed LISIS and LATTTS, mainly focusing on regimes of knowledge, research and innovation policy, expertise in organisation, infrastructures, and digital studies;
- . a pole in Paris composed of CAK and PALOC, mainly oriented toward STS and history of sciences and knowledge that has been focusing on global environmental challenges and the anthropocene. CAK, as a laboratory of EHESS, is heading an important Master programme for many doctoral students of SITES.

. a pole, composed of CERMES3, CEPED, and CEPN, mostly on health, Global South, socio-economic analysis of development, circulation of knowledge and people, and property rights.

4 FUNDING JUSTIFICATION

4.1 EXPENSES JUSTIFICATION

The budget is roughly the same as today with a total amount requested being 3,162 k€.

Expenses Budget Lines (in keuros)	Total amount per year	Total for 5 years
WP1. Research Activities	320	1 600
Postdoc Grant (5 grants financed per year)	216	1 080
Postdoctoral Circulation Support	30	150
Research Call (Exploratory; Lab consolidation; International)	74	370
WP2. Training for Research	102	510
Doctoral Circulation	30	150
Master Grant gratification programme (10 grants per year on SROs)	40	200
IFRIS Summer Schools (one per year)	32	160
WP3. Research Capacity	105	525
Digital Initiative and CorTexT Platform	65	325
Conference Support (one per year)	20	100
International Residence and invitation - mission	20	100
WP4. Sciences-in- Society	48	238
Scientific edition	5	25
Partnership and joint activities	25	125
ALLISS membership	8	38
EUSPRI membership	10	50
WP5. Management and Central Support	59	294
Web support - service	5	25
Direction costs - missions	5	25
Small equipment and computers	5	25
Overheads costs	40	193
Total	633	3 162

4.2 PLAN DE FINANCEMENT/ FUNDING PLAN

Three main sources of funding for the LabEx are:

LabEx Instrument	3,162 ke
Partner Institutions through Human resources of participating researchers	3,920 ke
Co-funding	1,726 ke
Total	8,808 ke

. **The LabEx research call** is designed on the basis of 3 types of projects: Exploratory project of 2 years managed by at least 2 SITES Units, laboratories are invited to co-fund these activities: we expect a lever of 25% ; a project realized at the international level between an SITES Unit and a foreign laboratory: we expect a lever of 50% ; projects that have deliberately a joint funding resources (notably within the I-SITE calls): we expect a high lever of 100% at least. (Total of leverage: 156 ke)

. **The support of SITES to the Science-Society initiative** has been key in relation to the spirit of its scientific communities. Knowing the growing recognition of Participatory and Citizen Science, we expect SITES Labs to benefit from this visibility and their connections with NGOs and Agencies to have accepted projects: one within the I-SITE in relation to “sustainable and equitable cities”, one within calls dealing with ecological transition and participation (Total of leverage: 300ke)

. **SITES intends also to be differently involved in the invitation of international researchers.** Therefore, in relation to support of the I-SITE, we will develop « Research Residences » welcoming - for 2 or 3 months period of time during a period of 2 or 3 years- 2 or 3 colleagues that will be acting for the LabEx and for the I-SITE as invited catalyzers on the basis of a programme of activities, particularly in relation to the Thematic School of the LabEx. We expect a co-funding of I-SITE around 80ke to complement the 20ke of the SITES budget.

. **The RISIS European Infrastructure** project managed by P.Laredo (LISIS) has been renewed (global budget 8,500 and 1,490 ke for LISIS). This shows the impact of the LabEx support to the Digital Instrument CorTexT and the support to STI and EUSPRI Conferences and networking.

. This major infrastructure project should be a driver **for other National or EU Projects**, but also to accompany the Strategy of the I-SITE. We expect at least one European project (850 ke) to be connected to RISIS. At the national level, researchers of the LabEx will pursue their regular attempts and 2 ANR research projects are expected, positioned on SROs and explicitly nourished by IFRIS capacity and related on-going activities. (800 Ke).

. **SITES has witnessed the ERC Grant** of J-P. Gaudillère (CERMES3) with a scope initially born in an exploratory project. At least 3 young researchers have already challenged the ERC with significant good evaluation. Young seniors are also in line with this objective. We expect the SITES Units to gain 2 more ERC grants in the next 5 years: one in Starting another in Consolidator (Total of leverage: 3,500 ke).