

IL RETTORE

To: Wolfgang Boch European Commission DG-INFSO FET-Proactive

Cc: Prof. Steve Bishop UCL London

Prof. Dirk Helbing ETH Zurich Università degli Studi di Roma
"LA SAPIENZA"
Amministrazione Centrale

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As legal representative of the Università di Roma "La Sapienza", I hereby confirm our interest and willingness and strongly support the candidate flagship "FuturlCT", co-ordinated by Prof. Dirk Helbing, ETH Zurich

I believe that among the six candidate flagship projects, FuturICT has a distinctive inclusive breadth in terms of both disciplinary areas and national research communities. It also has the greatest certainty of significant societal benefit, as neither reliant on a single family of technologies that may be superseded by alternatives nor directed towards a narrow cluster of social drivers for which requirements may change. Whilst other areas of the world may be able to focus greater investment and cheaper labour into the development of single families of technology, such as robotics or electronic materials, Europe remains the community that leads the world in establishing innovative social systems for common good. Hence, I believe FuturICT is a far better fit for a shared European endeavour than some of the alternative candidate flagships.

I believe that in many ways FuturICT's goal of using information technology to understand and manage complex, global, socially interactive systems perfectly fits with the research interests of a large, general, university such as "La Sapienza", where all major involved areas, i.e., physics, ICT, sociology, economics, are well represented. Hence, it is no surprise that a cluster of "La Sapienza" departments (Physics, Communication and Social Science, Computer Science, Computer and System Engineering) is already deeply involved in the flagship preparation and in the Pilot CA, collaborating with Prof. Helbing, Prof. Bishop, and the other partners.

"La Sapienza" is ready to actively participate in FuturICT through its most talented researchers and students. The number of researchers who can be involved in the project is of the order of 100, for an equivalent in-kind contribution to the flagship activities of approximately 5 million euro per year.

Furthermore, "La Sapienza" organizes and delivers a number of graduate education curricula (at the PhD and Master level) that are aligned with the main themes of FuturICT in many areas of Complexity Science, ICT, Social Sciences, Smart Cities and Transport. As a specific contribution to FuturICT, "La Sapienza" proposes to activate an interdisciplinary new Master curriculum oriented to the FuturICT goals with 30 potential students, consisting in a contribution of about 0,3 million euro per year. The students will exploit existing and forthcoming joint-labs, realized in collaboration with various companies, to develop ideas and prototypes in the FuturICT core themes. In particular, an interdisciplinary research center would be created, focusing on Global Nervous Systems, Living Earth Simulator, Global Participatory Platform, with a specific contribution of about 0,2 million euro per year.

Luigi Frati



Sapienza is the first University in Rome and the largest University in Europe, with over 700 years of history, 145,000 students, over 4,000 professors and almost 4,500 people in the administrative and technical staff.

Sapienza plans and carries out important scientific investigations in almost all disciplines, achieving high-standard results both on a national and on an international level, thanks to the work of its 63 departments and 30 centres devoted to scientific research.

Besides being an excellence in teaching and research, Sapienza has developed extensive experience in dealing with businesses through a considerable annual volume of contract research commissioned by Industry and has achieved many results in Technology and Knowledge Transfers. In 2011, for example, the volume of research contracts commissioned by companies to the research groups of the University was more than €30ML. In addition to research contracts, Sapienza is constantly working to achieve partnerships and collaborations with industries structured to promote a stable relationship between research and industry.

In particular, in the last years Sapienza has entered into agreements with various industrial associations, such as FederLazio (the association of the 4,000 SMEs in Lazio) and UnIndustria (the Lazio Confindustria). These agreements provide, among other things, regular meetings between business groups and teams of researchers concerning related subject areas. Specifically, industrial representatives regularly visit the Sapienza research laboratories highlighting their technology needs, "talking" directly with researchers and establishing possible joint developments, in order to perform research projects that serve specific needs coming from the market.

With regard to academic entrepreneurship Sapienza participates in 15 spin offs, which comprise the results of internal research developed in different fields such as, e.g., Cultural Heritage, ICT, Environmental Sustainability, Biotechnology, Medical Device, Civil Engineering. These companies produce an average of more than € 200,000.00 annual revenue.

Sapienza projected the formation of joint-Labs. These are interdisciplinary laboratories able to answer the demand for innovation, promoting collaboration with actors in the industry to implement measures to promote scientific and technical assistance. Joint-labs also enable innovative start-ups



able to operate in sectors with high technological impact. The project provides the creation of 17 technological structures in the fields: Aerospace, Security, Cultural Heritage, Industrial Design; Biotec health, genomics and regenerative medicine; Maritime vehicles; Drugs delivery; Environmental quality and protection of land; Micro-cogeneration; Micro-nano technologies for industrial applications (Nanolab), Interaction Design and Communication; Nutraceuticals and Nutrigenomics; Soft material science; Optics and Photonics for Energy and Industry; Enhancement of Secondary Raw Materials; Materials and Technologies for Energy.

The Join-Lab Nanolab has been inaugurated last week in the presence of all stakeholders.

Sapienza patent portfolio has 220 national and international patents. In the last 4 years the exploitation of the patent achieved contracts for a total of about 10ML euros in addition to further subsequent R&D contracts undersigned by the research groups with national and international companies.

However, Sapienza continues to spread the culture of entrepreneurship between its researchers and students.

An advanced education program "Research and Development Enhancement" has been set up beginning with this year. RED is a project aimed at strengthening the link between university research and entrepreneurial world, by providing university researchers with a cultural mindset towards the likely exploitation of their inventions on a commercial scale. RED project is participated by several collaborators, including Inno AG, D Pixel, Eli Lilly Foundation and Telecom Italia.

At the same time Sapienza is continuing with great success the project financed by the Ministry of Labor and Social Policy called "Formation and Innovation for Job Placement" involving all the PhD course participants for the action "Qualification of Services for the Integration of Research, Innovation and Labor Market ".

All the above mentioned activities are coordinated and monitored by a central office dedicated to Technology and Knowledge Transfers as well as to support Sapienza researchers for national and international grants.