



October 09, 2012

Subject: Letter of Support for the FuturICT Proposal

To Whom It May Concern,

The University of Trento would like to indicate its support of the FuturICT proposal being submitted to the FP7-ICT-2013-FET-F call by Prof. Dr. Dirk Helbing from the ETH Zurich and by Prof. Steven Bishop from the University College London, together with our Department of Information Engineering and Computer Science (DISI) represented by Prof. Fausto Giunchiglia.

Established in 1962, the University of Trento is nowadays recognized as a leading academic institution in Italy and Europe for its quality of research and international outreach, particularly in ICT, economics and sociology. The DISI was established in January 2002. Since then, it has grown to more than 50 faculty members and has hosted 200 full-time PhD students and 100 research staff, soon becoming recognized as the top computer science department in Italy. The DISI has an outstanding scientific ability to attract R&D funding (22 EC projects in FP6, 22 in FP7) as well as considerable experience of EC project coordination, such as: Living Knowledge (FP7 FET IP, coordinator) LiquidPub (FP7 FET-OPEN STREP, coordinator), Glocal (FP7 IP, coordinator); and EternalS (FP7 FET CSA, coordinator). The University of Trento is part of Trento-RISE (T-RISE) that is the collective Trentino Research, Innovation and Education System, and an associated partner of the EIT-ICTLabs KIC. Its members, in addition to the University of Trento, include among the others CREATE-NET and the Bruno Kessler Foundation (FBK). Over time, the DISI has also consolidated as an international and multi-cultural working environment, hosting an EU Marie Curie Chair in Networking and Security, an EU Erasmus Mundus Masters in Informatics (jointly with the Universities of RWTH Aachen and Edinburgh) and holding a formalized long-term collaboration with Indian Universities and Research Centres.

As we find that the subjects addressed in FuturICT are of extreme interest and importance, and they find a match with our core expertise, the University of Trento is pleased to contribute by taking an active role in the consortium. This in particular for what concerns the ICT area, with the focus on the design of socio-inspired ICT technologies. Our vision here is to leverage principles that have proven effective in human society and build on the heterogeneity of data, knowledge, actions, actors and goals in today's socio-technical systems, to create novel design methodologies, operational principles, models, architectures, frameworks, and libraries for next generation socially aware, socially interactive ICT systems. This will lead to ICT systems fitting more "naturally" within human society, which are more robust, and foster stability, transparency and trust. It will also facilitate more productive and seamless collaboration between humans and ICT leveraging the respective strengths and limitations.

These systems will require the development of novel design principles and methodologies, models, architectures and frameworks, and libraries that leverage principles that lie behind social organisation



(coordination, cooperation, self-regulation, conflict resolution, resilience, reputation, trust, social norms, culture, social capital, values and ethics), understanding and distilling them and then applying them in distributed ICT systems. It also needs a deep understanding of how to complement the computational capabilities of machines with individual and social abilities and skills of humans in a fully ethical and respectful manner.

We expect to actively contribute by:

- defining of novel design principles and methodologies for socio-inspired ICT solutions
- developing of models supporting socially aware actions and interactions
- developing of architectures and frameworks for adaptation, orchestration and composition
- developing of “people oriented” libraries enabling socio-inspired ICT solutions including (a) peer-to-peer search, (b) actionable goals and incentive schemes and (c) handling of ethical and social norms

In turn, the development of socially inspired ICT systems will have huge impact:

- on ICT as it will motivate the development of a new ICT which will radically change how systems will be developed pushing towards a stronger integration of ICT systems within society. This new ICT will be the basis for solving societal challenges now far beyond the state of the art
- on economics as the new systems will allow to open new markets or enlarge existing markets where the solution of societal challenges will enable the creation of economic value
- on society as the socially aware ICT systems will allow for the creation of a better, safer and more inclusive society

In conclusion, I fully support the efforts of the FuturICT Consortium that we believe is in the position to reach significant advances in the way ICT and society can be complemented to face the pressing societal challenges of the next years.

Sincerely,

  
Prof. Davide Bassani

Rector

