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Uachtarán: Aodh Ó Brádaigh MB BCh BAO BSc PhD MD FRCPI MRIA

9 March 2012

Professors Steven Bishop and Dirk Helbing Room 304, Kathleen Lonsdale Building Department of Mathematics University College London Gower Street London WC1E 6BT

RE: FutureICT- FET Flagship

Dear Steve,

I write in support of the proposed FutureICT FET Flagship project. Its focus on society, analytics of big data and interdisciplinary approach match our own ambitions and the national investments in relevant areas. Europe remains the community that leads the world in establishing innovative social systems for common good. Hence, I believe FutureICT is an excellent fit for a shared European endeavour and for this reason is the one Flagship to which we are committing.

FutureICT's goal of using information technology to understand and manage complex, global and socially interactive systems is closely aligned with the strategies and goals of UCD. We are developing the UCD Science Centre, a €350m facility to enable interdisciplinary 'science exchange' beyond the scientific disciplines to include the cultural disciplines, social sciences, business and engineering.

At the heart of the UCD Science Centre is the UCD Complex and Adaptive Systems
Laboratory, an interdisciplinary computational and informatics programme of 175
researchers with a range of backgrounds, including business, computer science, engineering, informatics, medicine and social sciences. CASL is home to several large-scale programmes funded by Science Foundation Ireland (SFI) and the EU, amongst others, including financial mathematics (Financial Mathematics Cluster), social networking (CLIQUE Cluster), bioinformatics (the CASL hosts the national graduate programme), and Clarity (UCD's sensor programme including Smart Cities). CASL is also home to two social science programmes, the Innovation Research Unit (IRU), which explores networking in innovation systems, and the Simulation in the Social Sciences graduate programme. UCD's School of Computer Science and Informatics hosts the national Cybersecurity Training Programme and partners with the SFI CSET LERO in developing cloud computing.

Data analytics and modeling of large-scale problems is also at the heart of several other programmes in the university. The Applied Research Centre for the Social Sciences (ARCHSS) is a joint programme with Research Triangle Institute in North Carolina, which is exploring new methodologies, including the application of social networking. Systems Biology Ireland,

one of the largest programmes funded by SFI, is a collaboration between two universities and several industry partners focused on modeling cell signalling pathways in stem cells. The SFI-funded Electricity Research Centre is developing the national energy grid, in partnership with 2 other academic centres, a national policy research centre and 25+ industry partners. A major focus of the programme is developing systems that will integrate the systems to enable the use of sustainable energy sources across hundreds of thousands of homes. The Earth Institute focuses on some of the major challenges to our environment, such as climate modeling, and the impact of climate change on biodiversity.

These are all substantially funded programmes and will have substantial impact in their own right. FutureICT adds a global dimension to this work in terms of scale and the central challenge that is being tackled, as well as in the capability that the network of institutions will contribute.

In line with the goals of FutureICT, we are making a number of strategic appointments in the areas of semantic web and financial mathematics, equivalent to €420, 400 annually. UCD is also making two strategic appointments in energy, equivalent to €140,000 per year. These appointments alone contribute almost €3m annually to activities relevant to the FutureICT themes. We are investing €400,000 in creating the ARCHSS and the IRU over 2012-2014. We are building new facilities for the CASL and Clarity, providing 1,500 sq m of dedicated space that will become available in the beginning of 2014, at a cost of €6,000,000. This is in additional to the funding that we receive for these programmes from exchequer and non-exchequer sources. UCD is also hosting a number of national structured postgraduate training programmes relevant to the FutureICT, for example programmes in simulation in the social sciences, bioinformatics & systems biology, the built environment and earth & natural sciences.

UCD leads several industry and national academic partnerships that are relevant to the FutureICT. In total, UCD leads 8 of the national centres funded by SFI and participates in an additional 10. It has partnerships with a number of industry networks, particularly in energy and ICT. In total, UCD has contracts with over 300 multinational companies and SMEs, including major companies relevant to the objectives FutureICT. UCD also hosts Ireland's leading Campus Company Development Programme and has incubator facilities in Nova UCD on campus for 30+ start-up companies. Recently, UCD has developed off-site facilities to cope with the demand for large facilities for more developed companies. UCD has developed a unique programme, the Innovation Academy, in partnership with Trinity College Dublin to promote creativity and entrepreneurship in our postgraduate students and early-stage researchers.

In conclusion, as President of UCD I wish to affirm our commitment to this ground-breaking and timely initiative, one that will have a transforming effect on the future social and economic development of Europe and that will bring a much needed interdisciplinary approach to a critical area.

Yours sincerely,

President