Proposal to Supply Independent Advice on the Future of ICT Provision in the Public Sector

Expertise of the Partners

Dr Gerard Briscoe is a Research Officer at the Department of Media and Communications at the London School of Economics (LSE). His PhD, in Electrical and Electronic Engineering, was gained at Imperial College London (ICL).

Prior to this he was a Research Fellow at the MIT Media Lab Europe, which post followed his completion of his B/MEng in Computing also from ICL.

His research interests include Digital Ecosystems and the societal impact of emerging technologies, and therefore alternative forms of Cloud Computing, including paradigms for dynamic, personal, mobile and Community Clouds.

Jerome Josephraj is the owner of *Bind Technology Limited*, a company which specialises in implementing Open Source Software for Charities, Membership organisations and SMEs.

Prior to this he was Head of IT for Cantor Index, London and prior to that he worked in management positions and as technical consultant for large organisations implementing complex applications using Open Source and Proprietary software.

He has also published articles related to Service Oriented Architecture and is coauthoring a book on Web Services.

Dr Jo Stanley is currently a Research Fellow at Lucy Cavendish College Cambridge, working in the OPAALS project (Digital Ecosystems) funded by the EC 6th Framework Programme.

Prior to this she developed specialist knowledge in the field of Intellectual Property Rights (IPRs) in new technologies (Computer Science and Biotechnology). She has taught advanced database courses, with a particular interest in Genome databases.

She has taught ICT-related law to European LLM students, and IT Law to Computer Science students. She has a special interest in the history of copyright and the relationship between copyright law and software licenses. She is completing a book on value of IPRs in the software field: *Invention and Representation*.

She holds an Honours degree in Natural Science from London University.

Stimulus for this Proposal

We write this proposal to express our concern over the *sustainability* of current ICT provision in central and local government organisations and their agencies¹.

Even had the global financial shocks of 2008-2009 not augured a need for public sector budgetary restraint from 2010-2011 onwards, our view is that current software licensing arrangements would still have been unsustainable.

Within the UK a series of BECTA reports express similar concerns in the schools sector

Substantiation and Alternatives

¹ References to papers we have written over the last decade supplied on request.

Our work in the UK commercial sector, and across Europe in the DBE and OPAALS projects and associated EC-funded efforts has identified issues with proprietary provision, and noted that many European municipalities now reject costly and repeat licensing agreements for software, ICT support and upgrade.

Our work with the OPAALS international teams in the BRIC countries indicate that they are adopting policies that leapfrog the UK in terms of sustainable ICT commitments in the public sector, using strategies which do not jeopardise their social objectives.

The advent of Cloud Computing makes it imperative that we decide whether the current centralised and de-centralised models should persist into the new paradigm, or should be replaced by *fully* distributed networks, which would avoid problems of *single points or control and of failure*.

For these and other reasons we now believe that financial constraints must precipitate an urgent revision of mid- to long-term ICT policy in the public sector.

Public Sector Digital Networks are not Socially Neutral

In addition to the fears express above, two other factors accelerate the need to address a more holistic view of the role of digital provision in the public sector at the earliest opportunity:

- ➤ Anticipation of an increase in economically inactive citizens who will need support and inclusion²
- > The aging profile of the UK population means that awareness of the need to support elderly citizens is more urgent, and this support must include a powerful digital element.

In addition we have found from research projects conducted across Western and Eastern Europe that the public sector needs to take a lead if the SMEs are to arrive at digital provision with the properties of *interoperability*, *affordability* and *sustainability* which at the moment seems to be lacking³.

The Four Accounts

For these reasons the economic studies in OPAALS advocate that the success of ICT provision be measured under four metrics:

- > The Financial Account: net return or cost to 'investors'
- The User/Consumer Account: net benefit to users as consumers of services provided
- > The Economic Development Account: micro- and macro-economic net benefits to productivity, growth and employment
- The Social Account: social/community impact, net benefits in terms of social well-being.

² Sociological studies published by the LSE.

³ Reports supplied by one of us to EEDA.