

Official Statistics in the era of Ubiquitous connectivity and Pervasive Technologies

Michail Skaliotis, Eurostat

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Scenarios about future developments in ICT (information and communication technologies) and the internet in particular are becoming more and more precise, at least as far as the near future direction of technical developments is concerned. Ideas which seemed to be science fiction some time ago, are now taking the form of tangible research projects and it is certain that a number of these ideas will end up in real life applications. Ubiquitous connectivity and context aware technologies (or pervasive technologies) are at the centre of ICT 2.0¹ scenarios. A predominant characteristic of future ICT will be that data and metadata storage and exchange, information processing / computation, censoring, data linking and reporting will become standard, embedded features in thousands of devices (fixed and mobile) used in everyday life.

Internet itself becomes a rich data source which can reduce remarkably the response burden on individuals and businesses. The ESS should undertake the challenge of developing an appropriate quality framework for the measurement of internet traffic flows (ITF) for statistical purposes. Actions in this area will require synergies between official statistics and private source data as well as co-ordination within the international statistical community².

There is no doubt that official statistics have made significant progress over time in providing a trustworthy evidence-based platform for policy making, as well as a living mirror of the society and economy. Technology however, is advancing and entering into our daily environment at an unprecedented speed and scale. I believe that despite a number of obvious good examples of progress (e.g. automated data capture, data linking from different sources, Bayesian methods, multiple and multi-level modelling, etc), official statistics remain largely at their original version 1.0.

The aim of this paper is to raise awareness amongst official statisticians of the necessity to move towards official statistics 2.0. A profound technology shift is happening now that requires changes into our professional paradigm and our business model. The issues involved in this process are many and complex; however, the most critical ones are not technical but rather social, legal and ...above all 'it is a matter of trust in digital life'. I do not think it is only a *challenge* for official statistics to act now, but also a *responsibility* towards the society. It is very encouraging that the current policy context, visionary leadership and collaborative structures in the wider European Statistical System are very propitious for making 'official statistics 2.0' a reality.

¹ The next generation of ICT in a ubiquitous context: information and communication will be enabled (and embedded by default) in numerous devices of everyday life (not only in phones, PCs, and PDAs, but actually in almost everything, everywhere at any time).

² OECD has recently initiated a debate on this issue; see for example WPIIS doc. DSTI/ICCP/IIS/RD(2009)2, Paris, 21.4.2009, 'Building synergies between official statistics and private source data.'