

## **Big data coming soon ..... to an NSI near you**

John Dunne

Central Statistics Office (CSO), Ireland [John.Dunne@csso.ie](mailto:John.Dunne@csso.ie)

Big data is beginning to be explored and exploited to inform policy making. However these new data sources provide significant challenges for the traditional data collection and processing environments of the typical National Statistical Institute. This paper considers mobile phone, electronic payments and energy utility data to explore new methods and solutions to the challenges faced. Among the solutions and methods considered are enhancements to the existing technical infrastructure, outsourcing (where the data processing requirement is large), downsampling and other data reduction techniques to make Big data small enough to manage. The focus of the paper is on those data sources that are highly structured and typically standardised across borders as these are the sources that will provide the more immediate benefits to NSIs in informing policy – with mobile phone and credit card data informing tourism policy being the obvious example.

Key Words: data collection and processing, outsourcing, downsampling, data reduction